

Meter Reader

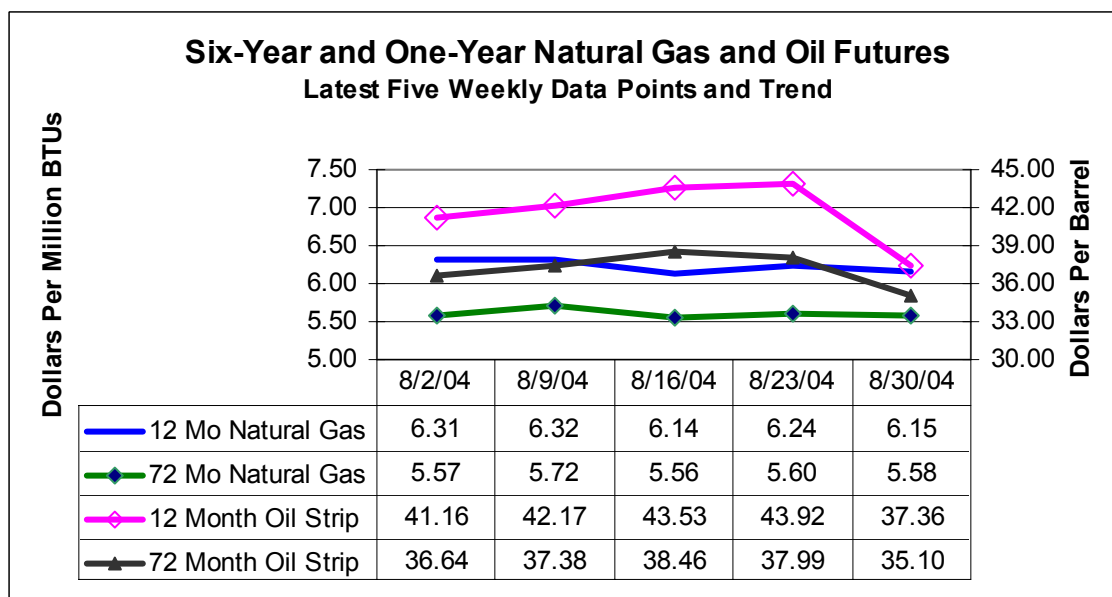
A Weekly Analysis of Energy Stocks Using the McDep Ratio

August 31, 2004

Natural Gas Arbitrage

Summary and Recommendation

Natural gas price has underperformed relative to oil for most of the past year. The long term trend is for natural gas price to gain relative to oil because it is a cleaner fuel among other factors. A temporarily low spot price for natural gas reflects in part a cool summer with less gas-generated electricity for air conditioning. Our buy recommendations most sensitive to natural gas include **XTO Energy (XTO)**, **Cimarex (XEC)**, **Encana (ECA)** and **Burlington Resources (BR)**. Oil and gas quotes for delivery over the next six years and one-year remain well above the 40-week average. The one-year refining crack has lost much of its meaning because we lack public gasoline quotes beyond March 2005.



Question: Is the large discount of oil equivalency for natural gas reflected in your numbers for Burlington Resources, or should one attach a lower McDep ratio than you present to allow for this? It appears that natural gas sells at about a 30% discount as an equivalent, if my calculation is correct.

Answer: Yes, but maybe it could be worth more. In my BR analysis of July 23 I say that present value reflects a rising price of natural gas relative to oil, but I do not show much detail for the calculation. I also say that present value corresponds to \$35 oil. As I complete more updated analyses of other companies I widen that range to \$30 to \$35.

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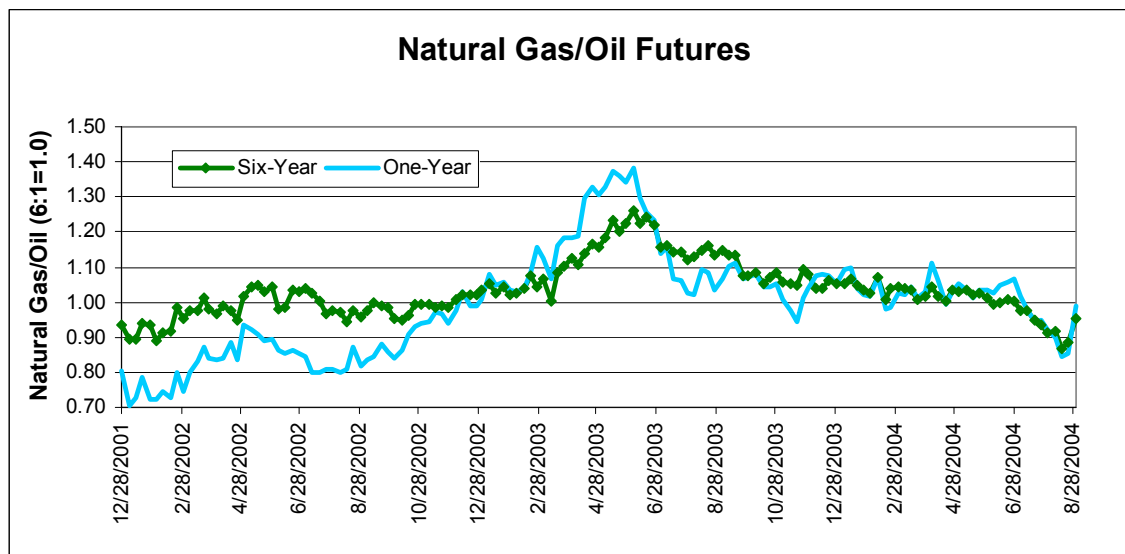
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Equivalence can be in the eye of the beholder depending on location and alternative fuel. I consider the latest spot price near \$5 for natural gas at the Henry Hub in Louisiana to be equivalent to \$30 oil. Compared to a spot oil quote of \$42 the discount is about 30%. The January price for gas is about \$6.80 compared to oil at \$41. That puts natural gas at the oil equivalent in the peak winter month.

The cool summer has allowed utilities to meet their schedule for storing natural gas for peak winter needs. Diminished immediate urgency for natural gas has combined with a strong trend in oil price to depress the ratio of natural gas price to oil price.

Six-year futures recently bounced back from more than a ten percent discount for gas to near par. That shows in a plot of natural gas price compared to oil price (see chart Natural Gas/Oil Futures).



Refining Crack Cracks 40-Week Average

The unusually strong trend in expected future margin, the one-year refining crack, has softened (see chart One-Year Refining Crack Meter). While of little consequence to natural gas producers, the trend is important for Mega Caps and Producer/Refiners. Breaking the 40-week average can be a sign of a change in trend. Yet our indicator is not as complete as we wish. Public quotes of gasoline futures have not been extended yet past March 2005. As a result the indicator may now have a seasonal bias when we estimate the all-important summer gasoline price at the March 2005 futures level. Since U.S. refiners make most of their money in the summer quarters, a bias in the indicator to the winter quarters may understate likely expectations. As a result, we can use the futures as an indicator of margins for the winter quarters, but not for the full year ahead.

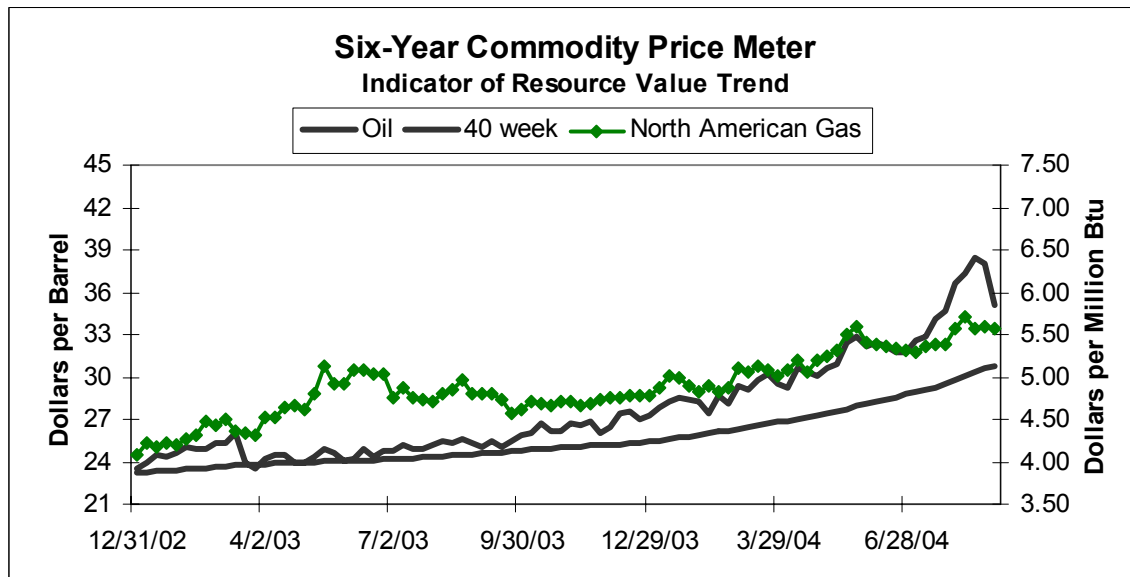
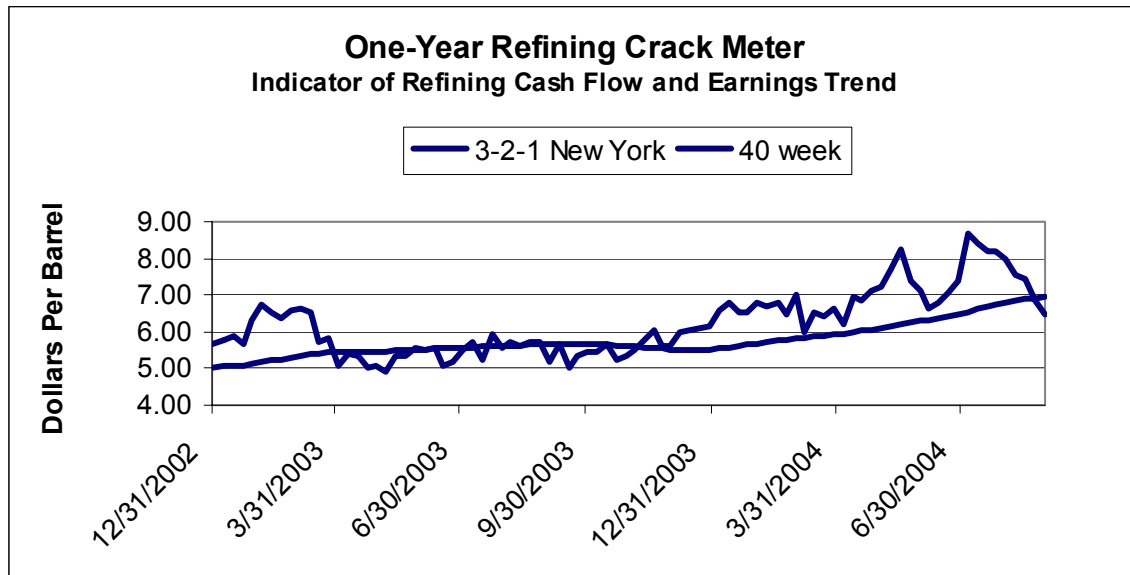
Kurt H. Wulff, CFA

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Rated Oil and Gas Producers Rank by McDep Ratio: Market Cap and Debt to Present Value

	Symbol/ Rating	Price (\$/sh) 30-Aug 2004	Shares (mm)	Market Cap (\$mm)	Net Present Value (\$/sh)	Debt/ Present Value	McDep Ratio
Mega Cap							
Exxon Mobil Corporation	XOM B3	45.13	6,547	296,000	43.00	0.08	1.05
BP plc	BP B3	53.26	3,651	195,000	60.00	0.13	0.90
Total S.A.	TOT B3	96.93	1,237	119,900	113.00	0.16	0.88
Shell Transport and Trading Co. plc	SC B3	43.68	1,587	69,000	51.20	0.17	0.88
Royal Dutch Petroleum	RD B1	50.18	2,031	102,000	60.00	0.17	0.86
ChevronTexaco Corporation	CVX B1	95.50	1,065	101,700	125.00	0.14	0.80
<i>Total or Median</i>				884,000		0.15	0.88
Producer/Refiners - Large Cap and Mid Cap							
Kinder Morgan, Inc.	KMI S2	60.15	125	7,520	20.00	0.73	1.54
Marathon Oil Corporation	MRO B3	35.42	346	12,260	41.00	0.30	0.90
Imperial Oil Limited (30%)	IMO B3	46.28	108	4,980	52.00	0.10	0.90
Suncor Energy	SU B3	27.80	460	12,790	38.00	0.13	0.77
ConocoPhillips	COP B1	73.18	687	50,300	110.00	0.27	0.76
Norsk Hydro ASA	NHY B1	62.84	256	16,060	90.00	0.16	0.75
Petro-Canada	PCZ B3	46.11	266	12,270	68.00	0.14	0.72
PetroChina Company Ltd (10%)	PTR B2	50.23	176	8,830	88.00	0.07	0.60
Lukoil Oil Company	LUKOY B2	117.25	210	25,000	208.00	0.05	0.58
<i>Total or Median</i>				150,000		0.14	0.76
Independent Natural Gas and Oil - Large Cap and Mid Cap							
CNOOC Limited (19%)	CEO B2	46.52	78	3,640	55.00	-	0.85
XTO Energy Inc.	XTO B1	27.53	271	7,460	38.00	0.21	0.78
Unocal Corporation	UCL B3	37.30	278	10,400	54.00	0.25	0.77
Occidental Petroleum Corp.	OXY B3	50.92	399	20,300	75.00	0.19	0.74
Encana Corporation	ECA B1	40.46	471	19,000	63.00	0.25	0.73
Anadarko Petroleum Corp.	APC B1	58.54	254	14,900	94.00	0.21	0.70
Devon Energy Corporation	DVN B3	64.28	249	16,000	110.00	0.24	0.68
Burlington Resources	BR B1	35.80	397	14,200	58.00	0.14	0.67
<i>Total or Median</i>				106,000		0.21	0.74
Independent Natural Gas and Oil - Small Cap							
Cimarex Energy Company	XEC B2	30.15	43	1,290	38.00	0.00	0.80
Energy Partners Ltd.	EPL B3	14.81	38	570	22.00	0.14	0.72
Berry Petroleum Company	BRY B2	29.85	22	670	43.00	0.06	0.71
Encore Acquisition Company	EAC B2	28.02	31	860	47.00	0.18	0.67
<i>Total or Median</i>				3,400		0.10	0.72
Income							
Kinder Morgan Energy Partners, L.P.	KMP S3	43.95	145	6,370	15.00	0.49	1.99
Kinder Morgan Management, LLC	KMR S3	38.33	52	2,010	15.00	0.49	1.79
San Juan Basin Royalty Trust	SJT H	27.13	47	1,260	22.00	-	1.23
Canadian Oil Sands Trust (US\$)	COSWF B1	37.66	92	3,460	62.00	0.19	0.68
<i>Total or Median</i>				13,100		0.34	1.51

B1 = Buy full unlevered position, B2 = Buy half unlevered position, B3 = Alternative buy

S2 = Short half unlevered position, S3 = Short quarter unlevered position

McDep Ratio = Market cap and Debt to present value of oil and gas and other businesses

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Rated Oil and Gas Producers

Rank by EV/Ebitda: Enterprise Value to Earnings Before Interest, Tax, Deprec.

	Symbol/ Rating		Price (\$/sh) 30-Aug 2004	Adjstd Resrvs/ Prod NTM	PV/ Ebitda NTM	EV/ Ebitda NTM	P/E NTM	Divd or Distrib NTM (%)
Mega Cap								
Exxon Mobil Corporation	XOM	B3	45.13	11.1	6.7	7.0	13	2.4
BP plc	BP	B3	53.26	9.7	7.2	6.5	13	3.2
Total S.A.	TOT	B3	96.93	9.1	7.2	6.3	11	2.9
Shell Transport and Trading Co. plc	SC	B3	43.68	8.2	6.0	5.2	10	4.2
Royal Dutch Petroleum	RD	B1	50.18	8.2	6.0	5.1	10	4.3
ChevronTexaco Corporation	CVX	B1	95.50	10.9	6.0	4.8	8	3.4
	<i>Median</i>			9.4	6.3	5.8	11	3.3
Producer/Refiners - Large Cap and Mid Cap								
Kinder Morgan, Inc.	KMI	S2	60.15		8.0	12.4	15	3.7
Suncor Energy	SU	B3	27.80	18.3	9.1	7.0	17	0.7
Imperial Oil Limited (30%)	IMO	B3	46.28	10.9	6.7	6.0	11	1.4
Marathon Oil Corporation	MRO	B3	35.42	7.3	5.7	5.2	10	2.8
ConocoPhillips	COP	B1	73.18	11.2	6.3	4.7	7	2.4
Norsk Hydro ASA	NHY	B1	62.84	9.4	5.7	4.3	11	2.5
PetroChina Company Ltd (10%)	PTR	B2	50.23	13.5	6.9	4.2	8	4.3
Petro-Canada	PCZ	B3	46.11	7.7	5.7	4.1	8	1.0
Lukoil Oil Company	LUKOY	B2	117.25	20.0	4.3	2.5	4	2.2
	<i>Median</i>			11.0	6.3	4.7	10	2.4
Independent Natural Gas and Oil - Large Cap and Mid Cap								
XTO Energy Inc.	XTO	B1	27.53	11.9	7.6	5.9	12	0.1
CNOOC Limited (19%)	CEO	B2	46.52	10.4	6.7	5.6	11	3.4
Unocal Corporation	UCL	B3	37.30	9.0	6.2	4.8	9	2.1
Occidental Petroleum Corp.	OXY	B3	50.92	11.1	6.4	4.8	8	2.2
Burlington Resources	BR	B1	35.80	10.2	6.9	4.6	10	0.9
Anadarko Petroleum Corp.	APC	B1	58.54	11.4	6.5	4.5	8	1.0
Encana Corporation	ECA	B1	40.46	6.7	6.0	4.4	9	1.0
Devon Energy Corporation	DVN	B3	64.28	6.6	5.5	3.8	7	0.6
	<i>Median</i>			10.3	6.4	4.7	9	1.0
Independent Natural Gas and Oil - Small Cap								
Encore Acquisition Company	EAC	B2	28.02	13.2	7.3	4.9	10	-
Berry Petroleum Company	BRY	B2	29.85	12.8	6.8	4.8	11	1.5
Cimarex Energy Company	XEC	B2	30.15	5.2	4.3	3.4	8	-
Energy Partners Ltd.	EPL	B3	14.81	5.0	4.3	3.1	10	-
	<i>Median</i>			9.0	5.5	4.1	10	-
Income								
Kinder Morgan Energy Partners, L.P.	KMP	S3	43.95	12.0	8.0	15.8	22	6.5
Kinder Morgan Management, LLC	KMR	S3	38.33	12.0	8.0	14.3	20	7.4
San Juan Basin Royalty Trust	SJT	H	27.13	12.5	7.3	8.9	10	9.9
Canadian Oil Sands Trust (US\$)	COSWF	B1	37.66	20.0	8.6	5.9	8	4.0
	<i>Median</i>			12.2	8.0	11.6	15	6.9

EV = Enterprise Value = Market Cap and Debt; Ebitda = Earnings before interest, tax, depreciation and amortization; NTM = Next Twelve Months Ended June 30, 2005; P/E = Stock Price to Earnings; PV = Present Value of oil and gas and other businesses

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