

What Oil Price in Stock Price?

Summary and Recommendation

Current market price of buy-recommended stocks appears to relate to a constant real oil price of \$27 a barrel compared to the current spot price for the commodity near \$44. That is the median interpolated price derived from present value sensitivity analyses published separately for 23 stocks in the past seven weeks. It seems like common sense that as investors gradually realize that some portion of recent oil price increase is likely to be permanent, oil and gas stocks should logically gain as well. We think that process has further to go. Among stocks with the most to gain are **PetroChina (PTR)**, **Canadian Oil Sands Trust (COSWF)**, **Devon Energy (DVN)**, **Energy Partners (EPL)** and **ChevronTexaco (CVX)**.

Oil Price in Stock Price

There is no way to say definitively what stock price should be for a given oil price. There are ways to illustrate the connection as we have tried to do. Yet practically every element of any calculation is subject to interpretation. The best we can say for our approach is that we have been doing a variation of it and publishing the results for investors since before the Arab Oil Embargo in 1973. Today is reminiscent of that era as we sense that we are still in the early stages of a powerful advance in stock price to reflect higher value for future oil and natural gas.

In our most recent attempt to relate stock price to oil price we have been constructing discounted cash flow calculations that attempt to capture the characteristics of the production operations of whole companies. In each case we calculated several cases of stock price corresponding to oil price. Because stock prices are always changing we took the latest price and interpolated to approximate the corresponding oil price (see table [Oil Price Related to Stock Price](#)).

Not surprisingly there appears to be a correlation with our primary valuation measure, the McDep Ratio. The declining trend of oil price in the column headed "Implied Oil Price" proceeds almost step by step with McDep Ratio.

A Lot of Room for Stock Price Appreciation

The intent of the comparison is to show that oil price expectations built into stock price are low compared to the oil price that seems likely to materialize. Moreover there are

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A Weekly Analysis of Energy Stocks Using the McDep Ratio

September 14, 2004

conservative elements in the oil valuation including real rate of return and proven reserves.

Rated Oil and Gas Producers Oil Price Related to Stock Price

	Symbol/ Rating		Price (\$/sh) 13-Sep 2004	Implied Oil Price (\$/bbl)	Net Present Value (\$/sh)	Stock Price/ NPV	Debt/ Present Value	McDep Ratio
Mega Cap								
Exxon Mobil Corporation	XOM	B3	47.50	39	43	1.10	0.08	1.10
BP plc	BP	B3	54.89	32	60	0.91	0.13	0.93
Total S.A.	TOT	B3	100.70	31	113	0.89	0.16	0.91
Shell Transport and Trading Co. plc	SC	B3	44.97		51	0.88	0.17	0.90
Royal Dutch Petroleum	RD	B1	51.75		60	0.86	0.17	0.89
ChevronTexaco Corporation	CVX	B1	50.94	27	63	0.82	0.14	0.84
		<i>Median</i>		32				
Producer/Refiners - Large Cap and Mid Cap								
Kinder Morgan, Inc.	KMI	S2	61.94		20	3.10	0.73	1.56
Marathon Oil Corporation	MRO	B3	37.70	33	41	0.92	0.30	0.94
Imperial Oil Limited (30%)	IMO	B3	47.69	32	52	0.92	0.10	0.93
Suncor Energy	SU	B3	29.37	31	38	0.77	0.13	0.80
ConocoPhillips	COP	B1	77.72	26	110	0.71	0.25	0.78
Norsk Hydro ASA	NHY	B1	65.77	27	90	0.73	0.16	0.77
Petro-Canada	PCZ	B3	48.55	22	68	0.71	0.14	0.75
PetroChina Company Ltd (10%)	PTR	B2	49.80	22	82	0.61	0.06	0.63
Lukoil Oil Company	LUKOY	B2	118.25		208	0.57	0.05	0.59
		<i>Median</i>		27				
Independent Natural Gas and Oil - Large Cap and Mid Cap								
XTO Energy Inc.	XTO	B1	29.42	29	38	0.77	0.21	0.82
CNOOC Limited (19%)	CEO	B2	46.95	28	59	0.80	-	0.80
Unocal Corporation	UCL	B3	39.33	28	54	0.73	0.25	0.79
Occidental Petroleum Corp.	OXY	B3	53.48	26	75	0.71	0.19	0.77
Encana Corporation	ECA	B1	42.38	24	63	0.67	0.25	0.75
Anadarko Petroleum Corp.	APC	B1	61.92	27	94	0.66	0.21	0.73
Devon Energy Corporation	DVN	B3	69.30	26	110	0.63	0.24	0.72
Burlington Resources	BR	B1	38.49		58	0.66	0.14	0.71
		<i>Median</i>		27				
Independent Natural Gas and Oil - Small Cap								
Cimarex Energy Company	XEC	B2	33.25	30	38	0.88	0.00	0.88
Berry Petroleum Company	BRY	B2	32.34	29	43	0.75	0.06	0.76
Energy Partners Ltd.	EPL	B3	15.75	25	22	0.72	0.14	0.75
Encore Acquisition Company	EAC	B2	30.74	26	47	0.65	0.20	0.72
		<i>Median</i>		28				
Income								
Kinder Morgan Energy Partners, L.P.	KMP	S3	45.39		15	3.03	0.49	2.02
Kinder Morgan Management, LLC	KMR	S3	39.64		15	2.64	0.49	1.83
San Juan Basin Royalty Trust	SJT	H	28.24	36	22	1.28	-	1.29
Canadian Oil Sands Trust (US\$)	COSWF	B1	38.81	26	62	0.63	0.19	0.70
		<i>Median</i>		31				

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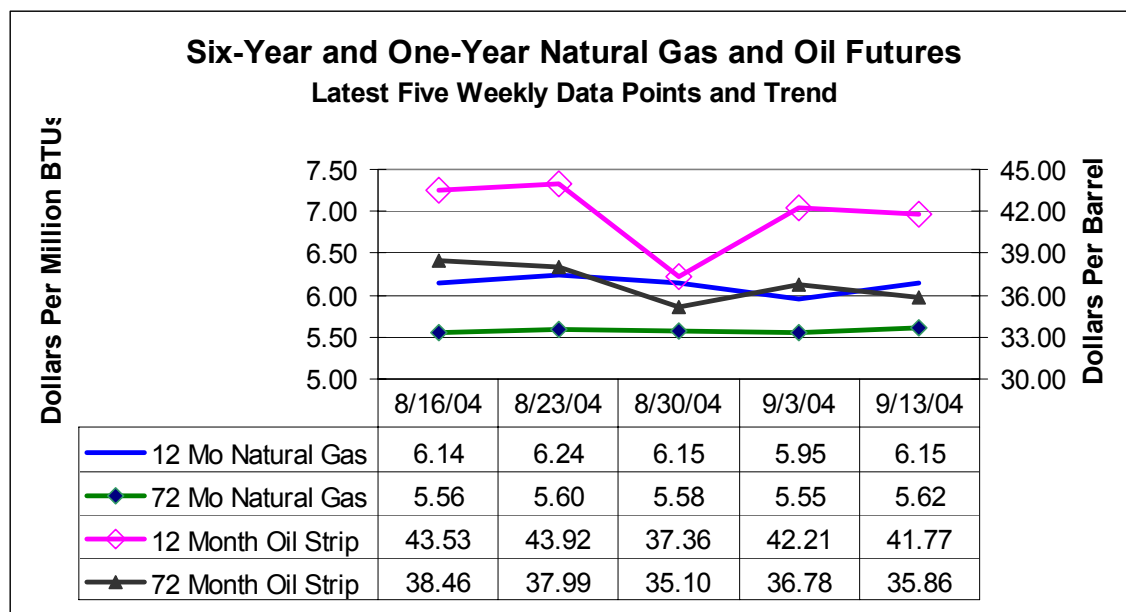
A Weekly Analysis of Energy Stocks Using the McDep Ratio

September 14, 2004

Our comparisons presume that an investor wants a real return of 7% annually from oil and gas. Assuming a rate of inflation of 3% per year the nominal return becomes 10%. While that has been a standard in mandated present value calculations disclosed by companies for decades, it is high especially in today's low interest rate environment. A more realistic long-term real rate would be 5% per year. That is still quite favorable compared to the real return of less than 2% per year on Ten-Year Treasury Inflation Protected Securities.

The calculation is also limited to proven reserves generally. Those are the quantities to be produced assuming minimal uncertainty. That is an appropriate standard for lenders who do not participate in appreciation. A more realistic standard for equity holders would be "expected reserves" that gives equal recognition to the likelihood that actual production would be greater than estimated as it would be less than estimated.

Kurt H. Wulff, CFA

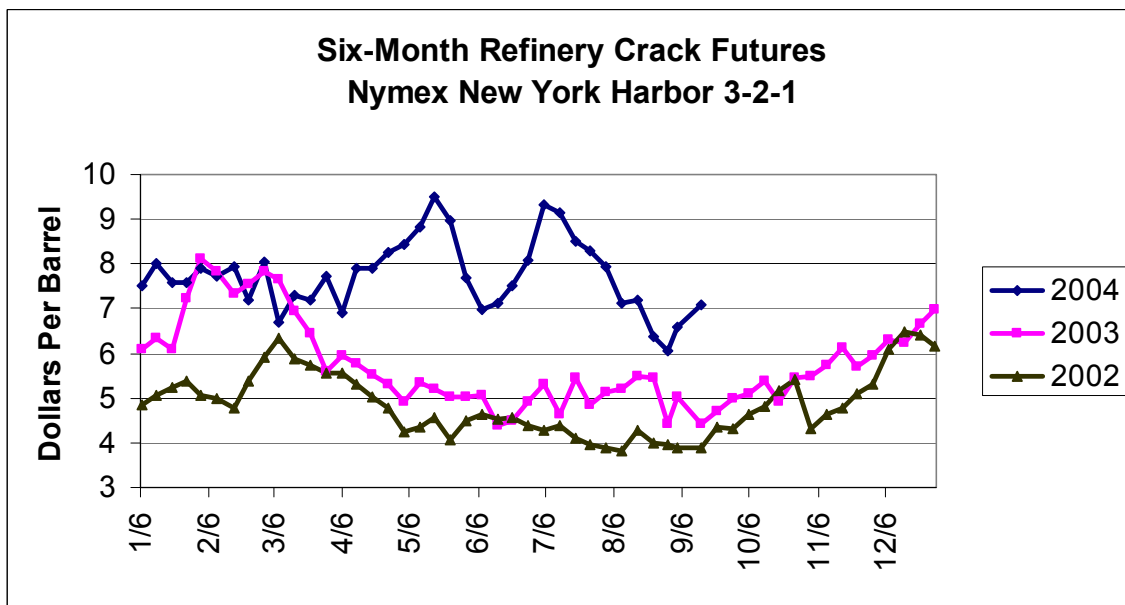
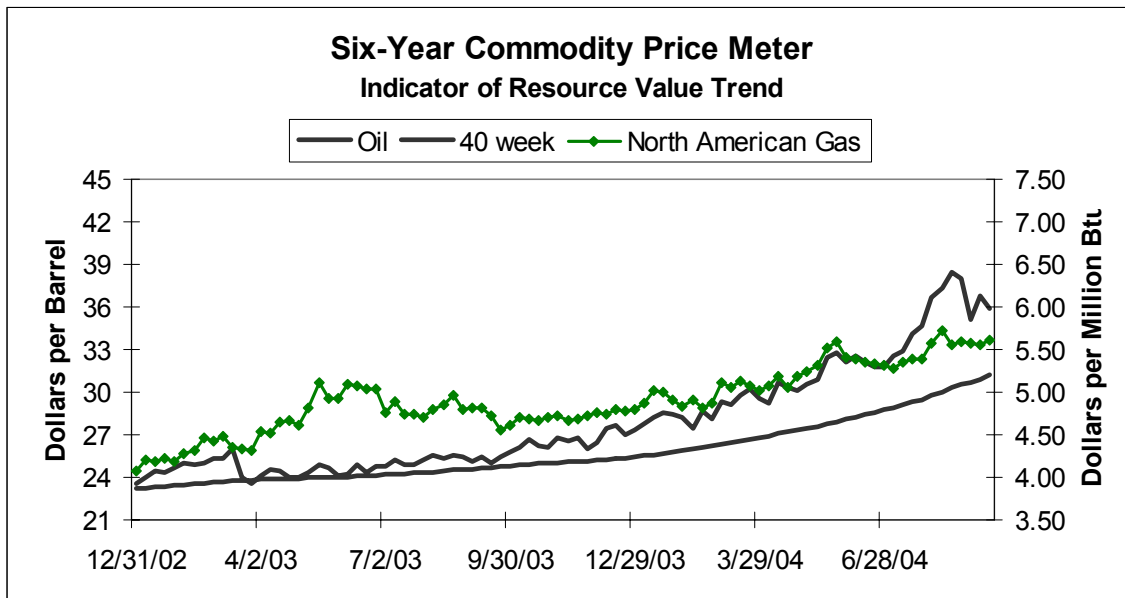


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September 14, 2004

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

	Symbol/ Rating		Price (\$/sh) 13-Sep 2004	Shares (mm)	Market Cap (\$mm)	Net Present Value (\$/sh)	Debt/ Present Value	McDep Ratio
Mega Cap								
Exxon Mobil Corporation	XOM	B3	47.50	6,547	311,000	43.00	0.08	1.10
BP plc	BP	B3	54.89	3,651	200,000	60.00	0.13	0.93
Total S.A.	TOT	B3	100.70	1,237	124,600	113.00	0.16	0.91
Shell Transport and Trading Co. plc	SC	B3	44.97	1,587	71,000	51.20	0.17	0.90
Royal Dutch Petroleum	RD	B1	51.75	2,031	105,000	60.00	0.17	0.89
ChevronTexaco Corporation	CVX	B1	50.94	2,130	108,500	62.50	0.14	0.84
<i>Total or Median</i>					920,000		0.15	0.90
Producer/Refiners - Large Cap and Mid Cap								
Kinder Morgan, Inc.	KMI	S2	61.94	125	7,740	20.00	0.73	1.56
Marathon Oil Corporation	MRO	B3	37.70	346	13,050	41.00	0.30	0.94
Imperial Oil Limited (30%)	IMO	B3	47.69	108	5,140	52.00	0.10	0.93
Suncor Energy	SU	B3	29.37	460	13,510	38.00	0.13	0.80
ConocoPhillips	COP	B1	77.72	699	54,300	110.00	0.25	0.78
Norsk Hydro ASA	NHY	B1	65.77	256	16,800	90.00	0.16	0.77
Petro-Canada	PCZ	B3	48.55	266	12,920	68.00	0.14	0.75
PetroChina Company Ltd (10%)	PTR	B2	49.80	176	8,750	82.00	0.06	0.63
Lukoil Oil Company	LUKOY	B2	118.25	210	25,000	208.00	0.05	0.59
<i>Total or Median</i>					157,000		0.14	0.78
Independent Natural Gas and Oil - Large Cap and Mid Cap								
XTO Energy Inc.	XTO	B1	29.42	271	7,970	38.00	0.21	0.82
CNOOC Limited (19%)	CEO	B2	46.95	78	3,670	59.00	-	0.80
Unocal Corporation	UCL	B3	39.33	278	10,900	54.00	0.25	0.79
Occidental Petroleum Corp.	OXY	B3	53.48	399	21,300	75.00	0.19	0.77
Encana Corporation	ECA	B1	42.38	471	19,900	63.00	0.25	0.75
Anadarko Petroleum Corp.	APC	B1	61.92	254	15,700	94.00	0.21	0.73
Devon Energy Corporation	DVN	B3	69.30	249	17,300	110.00	0.24	0.72
Burlington Resources	BR	B1	38.49	397	15,300	58.00	0.14	0.71
<i>Total or Median</i>					112,000		0.21	0.76
Independent Natural Gas and Oil - Small Cap								
Cimarex Energy Company	XEC	B2	33.25	43	1,420	38.00	0.00	0.88
Berry Petroleum Company	BRY	B2	32.34	22	720	43.00	0.06	0.76
Energy Partners Ltd.	EPL	B3	15.75	38	600	22.00	0.14	0.75
Encore Acquisition Company	EAC	B2	30.74	33	1,000	47.00	0.20	0.72
<i>Total or Median</i>					3,700		0.10	0.76
Income								
Kinder Morgan Energy Partners, L.P.	KMP	S3	45.39	145	6,580	15.00	0.49	2.02
Kinder Morgan Management, LLC	KMR	S3	39.64	53	2,110	15.00	0.49	1.83
San Juan Basin Royalty Trust	SJT	H	28.24	47	1,320	22.00	-	1.29
Canadian Oil Sands Trust (US\$)	COSWF	B1	38.81	92	3,570	62.00	0.19	0.70
<i>Total or Median</i>					13,600		0.34	1.56

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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September 14, 2004

Rated Oil and Gas Producers

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

	Symbol/ Rating		Price (\$/sh) 13-Sep 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	47.50	11.1	6.6	7.2	13	2.3
BP plc	BP	B3	54.89	9.7	6.9	6.4	13	3.1
Total S.A.	TOT	B3	100.70	9.1	7.1	6.4	11	2.8
Shell Transport and Trading Co. plc	SC	B3	44.97	8.2	5.8	5.2	10	4.1
Royal Dutch Petroleum	RD	B1	51.75	8.2	5.8	5.1	10	4.1
ChevronTexaco Corporation	CVX	B1	50.94	10.9	5.8	4.9	8	3.1
	<i>Median</i>			9.4	6.2	5.8	11	3.1
Producer/Refiners - Large Cap and Mid Cap								
Kinder Morgan, Inc.	KMI	S2	61.94		8.0	12.6	15	3.6
Suncor Energy	SU	B3	29.37	18.3	8.7	7.0	16	0.6
Imperial Oil Limited (30%)	IMO	B3	47.69	10.9	6.5	6.1	11	1.4
Marathon Oil Corporation	MRO	B3	37.70	7.3	5.6	5.2	10	2.7
ConocoPhillips	COP	B1	77.72	11.2	6.1	4.8	7	2.2
Norsk Hydro ASA	NHY	B1	65.77	9.4	5.6	4.3	10	2.4
PetroChina Company Ltd (10%)	PTR	B2	49.80	13.5	6.7	4.2	9	4.7
Petro-Canada	PCZ	B3	48.55	7.7	5.6	4.2	8	1.0
Lukoil Oil Company	LUKOY	B2	118.25	20.0	4.1	2.4	4	2.2
	<i>Median</i>			11.0	6.1	4.8	10	2.2
Independent Natural Gas and Oil - Large Cap and Mid Cap								
XTO Energy Inc.	XTO	B1	29.42	11.9	7.8	6.4	13	0.1
CNOOC Limited (19%)	CEO	B2	46.95	10.4	6.3	5.0	10	3.8
Burlington Resources	BR	B1	38.49	10.2	7.0	5.0	11	0.9
Unocal Corporation	UCL	B3	39.33	9.0	6.1	4.8	10	2.0
Occidental Petroleum Corp.	OXY	B3	53.48	11.1	6.3	4.8	8	2.1
Anadarko Petroleum Corp.	APC	B1	61.92	11.4	6.4	4.7	9	0.9
Encana Corporation	ECA	B1	42.38	6.7	6.1	4.6	9	0.9
Devon Energy Corporation	DVN	B3	69.30	6.6	5.6	4.0	8	0.6
	<i>Median</i>			10.3	6.3	4.8	10	0.9
Independent Natural Gas and Oil - Small Cap								
Encore Acquisition Company	EAC	B2	30.74	12.0	7.6	5.5	11	-
Berry Petroleum Company	BRY	B2	32.34	12.8	6.4	4.9	11	1.4
Cimarex Energy Company	XEC	B2	33.25	5.2	4.4	3.8	9	-
Energy Partners Ltd.	EPL	B3	15.75	5.0	4.4	3.3	11	-
	<i>Median</i>			8.6	5.4	4.4	11	-
Income								
Kinder Morgan Energy Partners, L.P.	KMP	S3	45.39	12.0	7.9	16.0	22	6.3
Kinder Morgan Management, LLC	KMR	S3	39.64	12.0	7.9	14.5	19	7.2
San Juan Basin Royalty Trust	SJT	H	28.24	12.5	7.3	9.4	11	9.5
Canadian Oil Sands Trust (US\$)	COSWF	B1	38.81	20.0	8.4	5.9	8	4.0
	<i>Median</i>			12.2	7.9	11.9	15	6.7

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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September 14, 2004

Index of Stock Ideas Recent Written Analyses

<u>Date</u>	<u>Symbol</u>	<u>Stock</u>	<u>Theme</u>
8-Sep	CEO	CNOOC Ltd ADS	Offshore China Independent Oil Producer
8-Sep	PTR	PetroChina Company Limited	Emerging Mega Cap
8-Sep	XTO	XTO Energy Inc.	Breakthrough Acquisitions
7-Sep	APC	Anadarko Petroleum Corporation	Commodity Alternative
7-Sep	XEC	Cimarex Energy Company	High Present Value per Barrel
3-Sep	EAC	Encore Acquisition Company	Rising Recovery and Leadership
2-Sep	ECA	EnCana Corporation	Encomparable
2-Sep	KMI	Kinder Morgan Inc.	Momentum Challenge
2-Sep	KMP	Kinder Morgan Energy Partners, L.P.	Momentum Challenge
2-Sep	KMR	Kinder Morgan Management, LLC	Momentum Challenge
31-Aug	COP	ConocoPhillips	Lukoil Investor?
27-Aug	EPL	Energy Partners, Ltd.	Volume Acceleration
27-Aug	MRO	Marathon Oil Corporation	Tilting to Refining
26-Aug	BP	BP p.l.c.	Russia Distinction
26-Aug	TOT	Total S.A.	Shell Acquirer?
23-Aug	OXY	Occidental Petroleum Corporation	Oil Rich
23-Aug	UCL	Unocal Corporation	Asian Natural Gas and Oil
16-Aug	IMO	Imperial Oil Limited	Choice Piece of ExxonMobil
16-Aug	PCZ	Petro-Canada	Encana Partner
16-Aug	SU	Suncor Energy Inc.	A Boone and Charlie Favorite
13-Aug	* BRY	Berry Petroleum Company	New Leader, New Prospects
12-Aug	* DVN	Devon Energy Corporation	Capable Leader, Short Reserve Life
10-Aug	* NHY	Norsk Hydro ASA	Tempered by Taxes
6-Aug	* XOM	Exxon Mobil Corporation	Low Risk with Oil Price Upside
4-Aug	* CVX	ChevronTexaco Corporation	Stock Price Lagging Oil Price
2-Aug	* SJT	San Juan Basin Royalty Trust	Change Buy to Hold on Price
29-Jul	* COSWF	Canadian Oil Sands Trust	Great North American Energy Resource
23-Jul	* BR	Burlington Resources, Inc.	Large Cap, Long Life, Low Debt Natural Gas
9-Jul	* RD	Royal Dutch Petroleum	Cloud of Opportunity
9-Jul	SC	Shell Transport & Trading Company, p.l.c.	Cloud of Opportunity
28-Jun	* LUKOY	Lukoil Oil Company	Giant Resources, Modest Value

* Archived on www.mcdep.com

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