

The Myth of OPEC

Summary and Recommendation

It is a myth that the Organization of Petroleum Exporting Countries (OPEC) has abundant supplies of cheap oil. Spare producing capacity has dwindled to near nil during winter months and Saudi Arabia's largest field apparently is producing increasingly copious amounts of water along with oil. As a result, economic forces appear to be building to unleash an order of magnitude increase in oil price in the decade from 2000 to 2010. Recommended natural gas and oil producers with the lowest McDep Ratio in each of four groups are **Encore Acquisition (EAC)**, **Burlington Resources (BR)**, **Norsk Hydro (NHY)** and **ChevronTexaco (CVX)**.

Mr. Petrie, Mr. X and Mr. Simmons

Recent comments from three persons we have long known and respected offer insight on the prospect of a once-in-a-generation change in oil price ahead:

Tom Petrie, eponymous co-founder of the Denver investment bank that built its reputation raising capital for independent oil and gas producers, tells of his visit to the old Soviet Union about two decades ago. As we heard it, our former client and friendly competitor recalled oil managers telling him that Samotlar, the great Russian field, would propel Soviet oil volume upward to some 15 million barrels daily. Sure the production went up a few percent to almost 13 mmbd. Then Russian production cratered to well less than 8 mmbd and only now is climbing back slowly.

An oil analyst/portfolio manager for a leading investment organization, whom we shall call Mr. X., told us of his visit to the Ghawar field in Saudi Arabia, also about two decades ago. Ghawar was and still is the cream of world oil fields. Mr X learned then that cream was flowing strong after 50 years, but it was no longer pure, i.e. the field had just started to make water.

Matt Simmons, eponymous founder of the Houston investment bank that built its reputation raising capital for oil service companies, challenges the sustainability of Saudi Arabian oil production using extensive documentation (see <http://www.simmonsco-intl.com/files/CSIS.pdf>). As reported in the *New York Times* and elsewhere, Mr. Simmon's work prompted a vocal response. The managers of the world's largest oil field, Ghawar, apparently proclaimed that Saudi production could expand more than 50% to reach 15 mmbd or more and last a long time.

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Meter Reader

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April 6, 2004

Mr. Petrie could not help but notice the parallel with Russia. After such a confident statement, production did not go up, it went down. Recommending Russian producer, Lukoil (LUKOY), we like the prospects for making money on Russian oil. That doesn't change the fact that today's annual production in the former Soviet Union is still some 20% below what it was twenty years ago.

Remember the Railroad Commission

It has often been said that OPEC has taken up where the Texas Railroad Commission left off attempting to stabilize price by managing production for the long haul. Outspoken consumers who want a cheap price now, rant against Middle East oil producers as they once did against Austin regulators.

Instead, the classic business cycle is at work, but on a longer time period. Oil price fell to particularly low levels at the beginning and failed to increase enough near the end of the 40-year reign of abundant Texas supply. When Texas reached the limits of its spare producing capacity around 1970 it set in motion an increase in oil price of ten-fold, an order of magnitude, over the next decade. In classic form the higher price level was more than enough to rebalance supply and demand. While producers saw rising price for ten years, consumers then saw declining real price for the following twenty years.

OPEC Spare Capacity Disappearing

The days of cheap, spare capacity at OPEC now seem numbered as well. Already in the new decade and new century oil price is increasing steadily. With continued steady progression, it need not overshoot on the upside. As the price goes higher gradually there would be plenty of time for consumers to use energy more efficiently and for suppliers to develop cost-effective solutions. Excess pressure from consumers for short-term price concessions can only be destabilizing.

Expect Big Ups and Moderate Downs

Oil price during the 1970s made two big moves, in 1973-1974 and 1979-1980. While there were occasional downs during the interim 1975 to 1978, they were moderate. Investors who accumulated oil and gas stocks in 1975 to 1978 even after the first big move in oil price had the opportunity to make a lot of money in the final move. Today oil price has not yet moved as much as it did in 1973-1974. Let us hope for the sake of steady economic progress that the remaining move is gradual rather than explosive. In any event the opportunities for making money in oil stocks for the rest of the decade seem high. If oil is rewarding, natural gas investment should be more rewarding.

Kurt H. Wulff, CFA

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Table 1-1
Energy Producers
Rank by McDep Ratio: Market Cap and Debt to Present Value

	Symbol/ Rating	Price (\$/sh) 5-Apr 2004	Shares (mm)	Market Cap (\$mm)	Net Present Value (\$/sh)	Debt/ Present Value	McDep Ratio
Mega Cap							
Exxon Mobil Corporation	XOM	42.29	6,612	280,000	43.00	0.09	0.98
BP plc	BP	52.95	3,684	195,000	60.00	0.13	0.90
Total S.A.	TOT	93.86	1,251	117,400	113.00	0.16	0.86
Royal Dutch/Shell	RD B	48.13	3,389	163,000	60.00	0.18	0.84
ChevronTexaco Corporation	CVX B	89.06	1,064	94,800	125.00	0.14	0.75
<i>Total or Median</i>				850,000		0.14	0.86
Producer/Refiners - Large Cap and Mid Cap							
Kinder Morgan, Inc.	KMI s	63.54	124	7,880	14.00	0.80	1.69
Imperial Oil Limited (30%)	IMO	46.30	110	5,080	44.00	0.12	1.05
Valero Energy Corporation	VLO	57.45	121	6,930	55.00	0.43	1.03
Murphy Oil Corporation	MUR	63.28	93	5,870	62.00	0.20	1.02
Marathon Oil Corporation	MRO	33.12	350	11,590	41.00	0.31	0.87
ConocoPhillips	COP B	69.51	680	47,300	110.00	0.28	0.74
ENI S.p.A.	E	101.90	755	77,000	150.00	0.12	0.72
Petro-Canada	PCZ	44.80	265	11,870	68.00	0.10	0.69
Lukoil Oil Company	LUKOY b	129.00	211	27,000	208.00	0.05	0.64
Petroleo Brasileiro S. A.	PBR	33.85	1,096	37,100	65.00	0.20	0.61
PetroChina Company Ltd (10%)	PTR b	50.90	176	8,950	88.00	0.07	0.61
Norsk Hydro ASA	NHY B	65.39	257	16,790	120.00	0.12	0.60
Suncor Energy	SU	26.40	475	12,540	48.00	0.08	0.59
<i>Total or Median</i>				276,000		0.12	0.72
Independent Natural Gas and Oil							
CNOOC Limited (19%)	CEO b	42.10	78	3,290	55.00	-	0.77
Canadian Natural Resources Limited	CNQ	58.04	137	7,950	88.00	0.29	0.76
Encana Corporation	ECA B	43.94	472	20,700	63.00	0.18	0.75
XTO Energy Inc.	XTO B	25.24	225	5,690	38.00	0.15	0.71
Apache Corporation	APA	42.20	324	13,700	64.00	0.15	0.71
Unocal Corporation	UCL	37.25	274	10,200	60.00	0.22	0.71
Occidental Petroleum Corp.	OXY	46.30	396	18,300	75.00	0.19	0.69
Pogo Producing Company	PPP	45.53	64	2,910	70.00	0.07	0.68
Pioneer Natural Resources Company	PXD	31.82	119	3,790	57.00	0.22	0.66
Anadarko Petroleum Corp.	APC B	51.85	252	13,100	94.00	0.21	0.65
Devon Energy	DVN	59.89	242	14,500	120.00	0.24	0.62
Burlington Resources	BR B	63.27	198	12,500	115.00	0.15	0.62
<i>Total or Median</i>				127,000		0.18	0.70
Service							
Baker Hughes Inc.	BHI	35.69	336	12,000	30.00	0.07	1.18
Halliburton Company	HAL	29.38	435	12,800	28.00	0.28	1.04
Schlumberger Ltd.	SLB	61.60	585	36,000	60.00	0.17	1.02
<i>Total or Median</i>				61,000		0.17	1.04

Buy/Sell rating after symbol: B - Buy full position, b - buy half position, s - short half position

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

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Meter Reader

A Weekly Analysis of Energy Stocks Using the McDep Ratio

April 6, 2004

Table 1-2
Energy Producers
Rank by EV/Ebitda: Enterprise Value to Earnings Before Interest, Tax, Deprec.

	Symbol/ Rating	Price (\$/sh) 5-Apr 2004	EV/ Sales NTM	EV/ Ebitda NTM	P/E NTM	Divd or Distrib NTM (%)	PV/ Ebitda NTM	
Mega Cap								
Exxon Mobil Corporation	XOM	42.29	1.2	7.9	15	2.4	8.0	
Total S.A.	TOT	93.86	1.0	6.6	12	4.7	7.7	
BP plc	BP	52.95	0.9	6.6	14	3.1	7.3	
ChevronTexaco Corporation	CVX	B	89.06	0.9	5.8	10	3.3	7.7
Royal Dutch/Shell	RD	B	48.13	1.0	5.7	12	4.5	6.8
	<i>Median</i>		<i>1.0</i>	<i>6.6</i>	<i>12</i>	<i>3.3</i>	<i>7.7</i>	
Producer/Refiners - Large Cap and Mid Cap								
Kinder Morgan, Inc.	KMI	s	63.54	3.0	13.3	19	2.5	7.8
Imperial Oil Limited (30%)	IMO		46.30	1.4	8.2	16	1.4	7.9
Murphy Oil Corporation	MUR		63.28	1.5	7.1	15	1.3	7.0
Suncor Energy	SU		26.40	2.7	6.8	12	0.6	11.6
Valero Energy Corporation	VLO		57.45	0.3	6.4	9	0.8	6.3
ConocoPhillips	COP	B	69.51	0.7	5.9	9	2.5	8.0
ENI S.p.A.	E		101.90	1.6	5.4	10	4.5	7.4
Marathon Oil Corporation	MRO		33.12	0.4	5.2	10	3.0	6.0
PetroChina Company Ltd (10%)	PTR	b	50.90	2.6	4.7	9	4.2	7.8
Petro-Canada	PCZ		44.80	1.4	4.2	11	1.0	6.1
Norsk Hydro ASA	NHY	B	65.39	0.8	4.2	12	2.4	7.0
Lukoil Oil Company	LUKOY	b	129.00	1.1	4.1	6	2.0	6.4
Petroleo Brasileiro S. A.	PBR		33.85	1.7	3.9	5	3.0	6.4
	<i>Median</i>		<i>1.4</i>	<i>5.4</i>	<i>10</i>	<i>2.4</i>	<i>7.0</i>	
Independent Natural Gas and Oil								
CNOOC Limited (19%)	CEO	b	42.10	4.9	6.5	14	3.8	8.5
XTO Energy Inc.	XTO	B	25.24	4.5	6.1	11	0.2	8.6
Occidental Petroleum Corp.	OXY		46.30	2.5	5.5	10	2.4	7.9
Anadarko Petroleum Corp.	APC	B	51.85	3.6	5.2	10	1.1	8.0
Pioneer Natural Resources Company	PXD		31.82	3.7	5.2	19	-	7.9
Burlington Resources	BR	B	63.27	3.5	4.8	10	0.9	7.8
Unocal Corporation	UCL		37.25	2.2	4.8	11	2.1	6.8
Apache Corporation	APA		42.20	3.4	4.7	9	0.6	6.7
Canadian Natural Resources Limited	CNQ		58.04	3.2	4.6	10	0.8	6.1
Encana Corporation	ECA	B	43.94	2.2	4.6	12	0.9	6.2
Devon Energy	DVN		59.89	3.1	3.6	7	0.3	5.8
Pogo Producing Company	PPP		45.53	2.5	3.6	8	0.4	5.3
	<i>Median</i>		<i>3.3</i>	<i>4.8</i>	<i>10</i>	<i>0.8</i>	<i>7.3</i>	
Service								
Baker Hughes Inc.	BHI		35.69	2.4	12.9	33	1.3	11.0
Halliburton Company	HAL		29.38	1.1	12.6	27	1.7	12.1
Schlumberger Ltd.	SLB		61.60	3.1	10.9	38	1.2	10.7
	<i>Median</i>		<i>2.4</i>	<i>12.6</i>	<i>33</i>	<i>1.3</i>	<i>11.0</i>	

EV = Enterprise Value = Market Cap and Debt; Ebitda = Earnings before interest, tax, depreciation and amortization; NTM = Next Twelve Months Ended March 31, 2005; P/E = Stock Price to Earnings; PV = Present Value of oil and gas and other businesses

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A Weekly Analysis of Energy Stocks Using the McDep Ratio

April 6, 2004

Table 2-1
Independent Natural Gas and Oil Producers - Small Cap
Rank by McDep Ratio: Market Cap and Debt to Present Value

	<i>Symbol/ Rating</i>	<i>Price (\$/sh) 5-Apr 2004</i>	<i>Shares (mm)</i>	<i>Market Cap (\$mm)</i>	<i>Net Present Value (\$/sh)</i>	<i>Debt/ Present Value</i>	<i>McDep Ratio</i>
Short Life							
Spinnaker Exploration Company	SKE	35.15	34.2	1,200	28.00	0.11	1.23
Western Gas Resources	WGR	50.74	37.0	1,880	50.00	0.17	1.01
Southwestern Energy Company	SWN	24.29	36.0	870	29.00	0.22	0.87
The Houston Exploraton Company	THX	44.76	31.0	1,390	55.00	0.20	0.85
Newfield Exploration Company	NFX	48.37	56.0	2,710	67.00	0.20	0.78
Cimarex Energy Company	XEC	b	42.7	1,230	38.00	0.00	0.75
Denbury Resources Inc.	DNR	17.05	55.7	950	25.00	0.21	0.75
Stone Energy Company	SGY	48.40	26.6	1,290	72.00	0.20	0.74
PetroKazakhstan Inc.	PKZ	29.37	81.0	2,380	42.00	0.03	0.71
St. Mary Land and Exploration Company	SM	33.75	29.0	980	50.00	0.10	0.71
Chesapeake Energy Corporation	CHK	13.46	220	2,960	24.00	0.29	0.69
Westport Resources Corporation	WRC	33.45	68.0	2,280	57.00	0.17	0.66
Energy Partners Ltd.	EPL	12.90	37.4	482	22.00	0.14	0.64
Range Resources Corporation	RRC	12.22	57.0	700	24.00	0.22	0.62
Forest Oil Corporation	FST	25.21	49.0	1,240	53.00	0.26	0.61
		<i>Total or Median</i>		<i>22,500</i>		<i>0.20</i>	<i>0.74</i>
Long Life							
Ultra Petroleum Corp.	UPL	32.01	78.0	2,500	25.00	0.05	1.27
Unit Corporation	UNT	27.43	44.1	1,210	25.00	0.01	1.10
Penn Virginia Corporation	PVA	62.69	9.1	570	72.00	0.14	0.89
Quicksilver Resources Inc.	KWK	38.04	25.2	960	50.00	0.19	0.81
Swift Energy Company	SFY	18.77	27.4	510	32.00	0.29	0.71
Berry Petroleum Company	BRY	b	22.1	625	43.00	0.07	0.68
Encore Acquisition Corp.	EAC	b	30.5	857	47.00	0.18	0.67
Magnum Hunter Resources, Inc.	MHR	10.13	68.0	690	20.00	0.32	0.66
Whiting Petroleum Corporation	WLL	23.30	18.7	440	40.00	0.19	0.66
Evergreen Resources, Inc.	EVG	33.98	44.0	1,500	59.00	0.10	0.62
Vintage Petroleum, Inc.	VPI	14.51	63.0	910	33.00	0.28	0.59
		<i>Total or Median</i>		<i>10,800</i>		<i>0.18</i>	<i>0.68</i>
Micro Cap							
Abraxas Petroleum Corporation	ABP	2.55	35.8	91	1.50	0.77	1.16
Purcell Energy, Ltd. (US\$)	PEL.TO	1.62	48.0	78	2.80	0.27	0.69

Buy/Sell rating after symbol: b - buy half unlevered position in diversified energy portfolio

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Table 2-2
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Rank by EV/Ebitda: Enterprise Value to Earnings Before Interest, Tax, Deprec.

		<i>Price</i>	<i>EV/</i>	<i>EV/</i>	<i>Divd or</i>	<i>PV/</i>
	<i>Symbol/</i>	<i>(\$/sh)</i>	<i>Sales</i>	<i>Ebitda</i>	<i>Distrib</i>	<i>Ebitda</i>
	<i>Rating</i>	<i>5-Apr</i>	<i>NTM</i>	<i>NTM</i>	<i>P/E</i>	<i>NTM</i>
		<i>2004</i>			<i>NTM</i>	
					<i>(%)</i>	
Short Life						
Western Gas Resources	WGR	50.74	0.8	9.4	20	- 9.3
Southwestern Energy Company	SWN	24.29	3.4	6.0	11	- 6.9
Spinnaker Exploration Company	SKE	35.15	5.0	5.8	16	- 4.7
Denbury Resources Inc.	DNR	17.05	3.3	4.9	10	- 6.6
Cimarex Energy Company	XEC	b 28.70	3.5	4.7	12	- 6.2
Stone Energy Company	SGY	48.40	3.2	4.4	10	- 6.0
Chesapeake Energy Corporation	CHK	13.46	3.3	4.4	8	0.9 6.4
Range Resources Corporation	RRC	12.22	3.4	4.3	8	0.3 6.9
Westport Resources Corporation	WRC	33.45	3.2	4.2	10	- 6.4
St. Mary Land and Exploration Company	SM	33.75	2.8	4.2	11	0.3 5.9
Newfield Exploration Company	NFX	48.37	2.9	4.0	9	- 5.2
The Houston Exploraton Company	THX	44.76	3.0	3.8	9	- 4.5
Forest Oil Corporation	FST	25.21	2.7	3.6	6	- 5.9
PetroKazakhstan Inc.	PKZ	29.37	1.9	3.6	5	- 5.0
Energy Partners Ltd.	EPL	12.90	2.2	3.3	12	- 5.1
	<i>Median</i>		<i>3.2</i>	<i>4.3</i>	<i>10</i>	<i>- 6.0</i>
Long Life						
Ultra Petroleum Corp.	UPL	32.01	11.7	15.1	25	- 11.9
Quicksilver Resources Inc.	KWK	38.04	6.4	9.7	19	- 12.1
Unit Corporation	UNT	27.43	3.5	8.5	21	- 7.7
Evergreen Resources, Inc.	EVG	33.98	5.3	7.4	12	- 12.0
Berry Petroleum Company	BRY	b 28.27	3.7	6.5	11	1.6 9.6
Penn Virginia Corporation	PVA	62.69	3.7	6.5	14	1.4 7.3
Encore Acquisition Corp.	EAC	b 28.12	4.2	5.8	10	- 8.6
Swift Energy Company	SFY	18.77	3.8	5.7	13	- 8.0
Whiting Petroleum Corporation	WLL	23.30	3.2	5.1	10	- 7.6
Magnum Hunter Resources, Inc.	MHR	10.13	3.2	4.9	9	- 7.4
Vintage Petroleum, Inc.	VPI	14.51	2.3	4.0	8	1.2 6.7
	<i>Median</i>		<i>3.7</i>	<i>6.5</i>	<i>12</i>	<i>- 8.0</i>
Micro Cap						
Abraxas Petroleum Corporation	ABP	2.55	8.2	12.7		- 11.0
Purcell Energy, Ltd. (US\$)	PEL.TO	1.62	3.1	4.1	7	- 5.9

EV = Enterprise Value = Market Cap and Debt; Ebitda = Earnings before interest, tax, depreciation and amortization; NTM = Next Twelve Months Ended March 31, 2005; P/E = Stock Price to Earnings; PV = Present Value of oil and gas and other businesses

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