

## Value Growth

### Summary and Recommendation

Noting little volume growth recorded by large producers in the latest quarter, we reemphasize that value growth is the true underlying expectation. While surprise volume growth is usually positive for a particular company, the sluggish supply growth for the industry fits our expectation that oil and especially natural gas prices are too low. It is little surprise that the five largest producers in our coverage that reported second quarter operations disclosed a volume decline of 3% for the past year (see table Large Producer Volume Growth and Value Growth). Venezuelan nationalization and a warm winter in Europe for natural gas contributed to the declines. It is a nice positive result that the five producers scored a median value growth measured in total return to the end of the quarter of 35% for the same period. Profit gains in the year ahead may shift to production as a drop of \$3 a barrel in one-year refining margin from the second quarter average is exceeded by a gain of \$5 a barrel in one-year crude oil price from the second quarter average (see charts One-Year Refining Crack Meter, Six-Year and One-Year Natural Gas and Oil Futures).

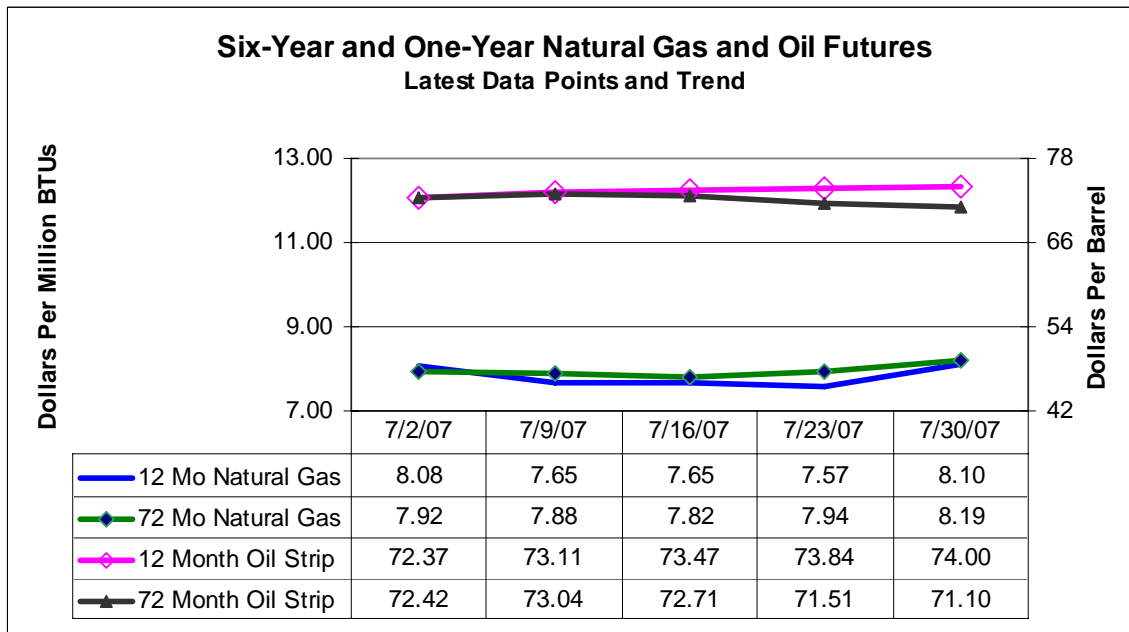
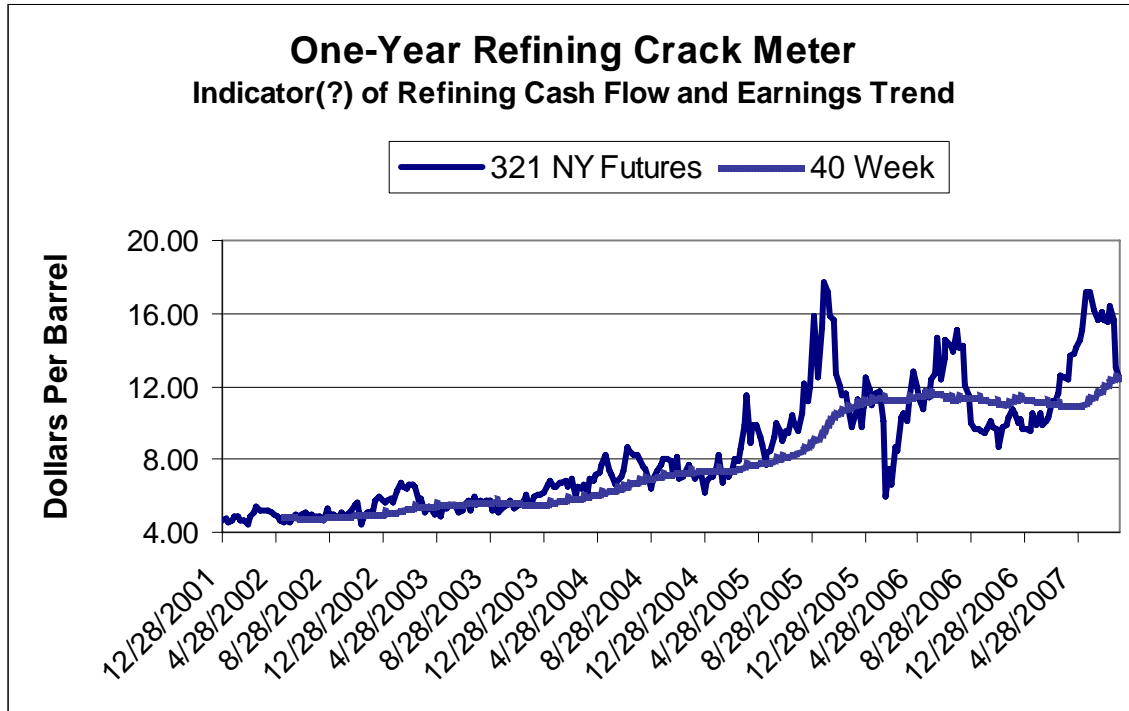
Kurt H. Wulff, CFA

### Large Producer Volume Growth and Value Growth

	<i>Second Quarter Volume</i>			<i>Annual Total Return</i>
	<i>(million barrels equivalent daily)</i>			
	<i>2006</i>	<i>2007</i>	<i>Change</i>	
ExxonMobil	4.2	4.1	-1%	40%
BP	4.0	3.8	-5%	10%
Royal Dutch Shell	3.2	3.1	-2%	30%
PetroChina Company	2.9	3.0	4%	49%
Chevron	2.7	2.6	-1%	41%
ConocoPhillips	2.5	2.4	-6%	25%
Total or median	19.5	19.0	-3%	35%

*Source: Company Disclosures, Bloomberg*

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**Oil and Gas Producers - Rank by McDep Ratio**

	Symbol/ Rating		Price (US\$/sh) 30-Jul 2007	Shares (mm)	Market Cap (US\$m)	Net Present Value (US\$/sh)	Debt/ Present Value	McDep Ratio
<b>Mega Cap</b>								
Exxon Mobil Corporation	XOM	B	86.01	5,620	483,000	92.00	0.05	0.94
Total S.A.	TOT	B	78.95	2,281	180,000	89.00	0.13	0.90
Royal Dutch Shell plc	RDS-A	B	77.94	3,152	246,000	94.00	0.10	0.85
Chevron Corporation	CVX	B	86.43	2,206	191,000	105.00	0.09	0.84
BP plc	BP	B	69.91	3,198	224,000	87.00	0.16	0.84
ConocoPhillips	COP	B	81.39	1,658	135,000	112.00	0.18	0.77
Gazprom (50%)	OGZPY	B	42.50	2,855	121,300	62.00	0.07	0.71
<i>Total or Median</i>					<i>1,580,000</i>		<i>0.10</i>	<i>0.84</i>
<b>Producer/Refiners - Large Cap</b>								
Imperial Oil Limited (30%)	IMO	B	46.71	287	13,420	42.00	0.07	1.10
Norsk Hydro ASA (post Oct 1)	NHY	H	12.62	1,241	15,660	13.00	0.11	0.97
Marathon Oil Corporation	MRO	H	57.00	694	39,560	62.00	0.13	0.93
PetroChina Company Ltd (10%)	PTR	B	146.50	181	26,520	166.00	0.05	0.89
Statoil ASA (29%)	STO	B	29.44	928	27,320	35.00	0.14	0.86
Suncor Energy	SU	B	88.71	472	41,870	105.00	0.08	0.86
Petro-Canada	PCZ	B	53.64	498	26,710	65.00	0.15	0.85
Lukoil Oil Company	LUKOY	B	80.00	831	66,000	121.00	0.02	0.67
<i>Total or Median</i>					<i>257,000</i>		<i>0.10</i>	<i>0.88</i>
<b>Independent Natural Gas and Oil - Large Cap</b>								
CNOOC Limited (34%)	CEO	B	116.75	140	16,320	108.00	-	1.08
Encana Corporation	ECA	B	60.33	765	46,200	72.00	0.14	0.86
XTO Energy Inc.	XTO	B	54.98	390	21,440	70.00	0.17	0.82
Anadarko Petroleum Corp.	APC	B	50.10	465	23,300	74.00	0.38	0.80
Occidental Petroleum Corp.	OXY	B	57.41	842	48,300	77.00	0.07	0.76
EOG Resources	EOG	B	71.09	247	17,500	102.00	0.05	0.71
Devon Energy Corporation	DVN	B	75.38	450	33,900	129.00	0.15	0.64
<i>Total or Median</i>					<i>207,000</i>		<i>0.14</i>	<i>0.80</i>
<b>Independent Natural Gas and Oil - Small Cap</b>								
Berry Petroleum Company	BRY	B	37.88	45	1,690	44.00	0.24	0.89
Encore Acquisition Company	EAC	B	26.50	53	1,410	54.00	0.34	0.67
Energy Partners Ltd.	EPL	B	16.01	31	500	38.00	0.35	0.63
Cimarex Energy Company	XEC	B	38.69	84	3,270	76.00	0.09	0.55
<i>Total or Median</i>					<i>6,900</i>		<i>0.29</i>	<i>0.65</i>
<b>Income</b>								
Kinder Morgan Energy Partners, L.P.	KMP	S	52.79	179	9,430	17.00	0.53	2.00
Kinder Morgan Management, LLC	KMR	S	49.54	62	3,060	17.00	0.53	1.91
Pengrowth Energy Trust	PGH		18.03	244	4,400	17.00	0.29	1.04
Penn West Energy Trust	PWE	B	31.09	240	7,450	36.00	0.17	0.89
Enerplus Resources Fund	ERF		43.41	123	5,360	52.00	0.13	0.86
San Juan Basin Royalty Trust	SJT	B	32.41	47	1,510	40.00	-	0.81
Canadian Oil Sands Trust	COSWF	B	30.20	479	14,470	39.00	0.07	0.79
Hugoton Royalty Trust	HGT	B	23.88	40	960	34.00	-	0.71
<i>Total or Median</i>					<i>46,600</i>		<i>0.15</i>	<i>0.87</i>

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

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**Oil and Gas Producers - Rank by EV/Ebitda**

	Symbol/ Rating		Price (US\$/sh) 30-Jul 2007	Adjustd Resrvs/ Prod NTM	PV/ Ebitda NTM	EV/ Ebitda NTM	P/E NTM	Divd or Distrib NTM (%)
<b>Mega Cap</b>								
Gazprom (50%)	OGZPY	B	42.50	24.6	9.4	6.6	10	0.9
Exxon Mobil Corporation	XOM	B	86.01	11.7	6.5	6.1	11	1.6
Total S.A.	TOT	B	78.95	9.4	6.4	5.8	10	1.5
BP plc	BP	B	69.91	9.7	6.8	5.7	9	3.7
Chevron Corporation	CVX	B	86.43	10.1	6.0	5.1	9	2.7
ConocoPhillips	COP	B	81.39	10.3	6.2	4.8	8	2.0
Royal Dutch Shell plc	RDS-A	B	77.94	8.1	5.6	4.7	9	3.7
	<i>Median</i>			<i>10.1</i>	<i>6.4</i>	<i>5.7</i>	<i>9</i>	<i>2.0</i>
<b>Producer/Refiners - Large Cap</b>								
Imperial Oil Limited (30%)	IMO	B	46.71	13.3	8.2	9.1	15	0.6
Suncor Energy	SU	B	88.71	23.8	10.3	8.8	16	0.4
PetroChina Company Ltd (10%)	PTR	B	146.50	15.0	7.6	6.8	14	3.2
Norsk Hydro ASA (post Oct 1)	NHY	H	12.62	-	6.6	6.4	10	1.4
Marathon Oil Corporation	MRO	H	57.00	7.8	5.9	5.5	9	1.7
Statoil ASA (29%)	STO	B	29.44	7.7	5.9	5.1	11	5.3
Lukoil Oil Company	LUKOY	B	80.00	17.8	7.5	5.0	9	1.9
Petro-Canada	PCZ	B	53.64	6.6	5.6	4.7	9	0.9
	<i>Median</i>			<i>10.6</i>	<i>7.0</i>	<i>6.0</i>	<i>10</i>	<i>1.5</i>
<b>Independent Natural Gas and Oil - Large Cap</b>								
Anadarko Petroleum Corp.	APC	B	50.10	11.2	8.5	6.8	12	1.4
XTO Energy Inc.	XTO	B	54.98	11.3	8.2	6.7	12	0.9
CNOOC Limited (34%)	CEO	B	116.75	10.6	6.0	6.4	12	2.9
Encana Corporation	ECA	B	60.33	9.2	7.0	6.0	12	1.3
EOG Resources	EOG	B	71.09	9.6	8.0	5.7	13	0.5
Devon Energy Corporation	DVN	B	75.38	9.4	8.2	5.3	10	0.7
Occidental Petroleum Corp.	OXY	B	57.41	11.5	6.8	5.2	10	1.7
	<i>Median</i>			<i>10.6</i>	<i>8.0</i>	<i>6.0</i>	<i>12</i>	<i>1.3</i>
<b>Independent Natural Gas and Oil - Small Cap</b>								
Berry Petroleum Company	BRY	B	37.88	10.3	8.6	7.7	13	0.8
Encore Acquisition Company	EAC	B	26.50	14.8	8.6	5.7	13	-
Cimarex Energy Company	XEC	B	38.69	8.1	7.0	3.9	9	0.4
Energy Partners Ltd.	EPL	B	16.01	5.4	5.4	3.4	-	-
	<i>Median</i>			<i>9.2</i>	<i>7.8</i>	<i>4.8</i>	<i>13</i>	<i>0.2</i>
<b>Income</b>								
Kinder Morgan Energy Partners, L.P.	KMP	S	52.79		8.0	15.9	36	6.4
Kinder Morgan Management, LLC	KMR	S	49.54		8.0	15.2	34	6.9
San Juan Basin Royalty Trust	SJT	B	32.41	10.2	12.5	10.1	12	8.1
Canadian Oil Sands Trust	COSWF	B	30.20	21.1	10.0	7.9	10	8.7
Hugoton Royalty Trust	HGT	B	23.88	13.9	11.1	7.9	11	8.8
Pengrowth Energy Trust	PGH		18.03	7.5	7.4	7.7	26	15.6
Enerplus Resources Fund	ERF		43.41	9.0	7.7	6.6	12	10.9
Penn West Energy Trust	PWE	B	31.09	7.6	7.4	6.5	13	12.3
	<i>Median</i>			<i>9.6</i>	<i>8.0</i>	<i>7.9</i>	<i>13</i>	<i>8.8</i>

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

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**McDep Energy Portfolio**  
**Composite of Buy Recommendations**

Symbol	Price (US\$/sh)	Portfolio Weight		Non- U.S. HQ	North Amer. Natural Gas (%)	Rest of World Natural Gas (%)	Oil Prod'n (%)	Down- stream (%)	McDep Ratio	
		30-Jul 2007	Equity (%)							EV (%)
<b>Mega Cap</b>										
Exxon Mobil Corporation	XOM	86.01	1.6	1.4		0.1	0.2	0.8	0.4	0.94
Total S.A.	TOT	78.95	2.9	2.9	2.9		0.7	1.5	0.6	0.90
Royal Dutch Shell plc	RDS-A	77.94	3.0	2.9	2.9	0.1	0.4	1.4	1.0	0.85
Chevron Corporation	CVX	86.43	6.0	5.7		0.3	0.3	3.6	1.5	0.84
BP plc	BP	69.91	2.7	2.9	2.9	0.2	0.3	1.7	0.7	0.84
ConocoPhillips	COP	81.39	5.2	5.7		0.9	0.4	3.0	1.4	0.77
Gazprom	OGZPY	42.50	9.1	8.6	8.6		6.6	2.0		0.71
<b>Producer/Refiners - Large Cap</b>										
Imperial Oil Limited	IMO	46.71	1.6	1.4	1.4	0.1		1.1	0.2	1.10
PetroChina Company Ltd.	PTR	146.50	3.2	2.9	2.9		0.2	2.5	0.2	0.89
Statoil ASA	STO	29.44	1.4	1.4	1.4		0.5	0.9	-	0.86
Suncor Energy	SU	88.71	1.5	1.4	1.4	0.0		1.3	0.1	0.86
Petro-Canada	PCZ	53.64	1.4	1.4	1.4	0.2	0.0	1.0	0.2	0.85
Lukoil Oil Company	LUKOY	80.00	6.5	5.7	5.7			4.1	1.6	0.67
<b>Independent Natural Gas and Oil - Large Cap</b>										
CNOOC Limited	CEO	116.75	3.4	2.9	2.9		0.3	2.6		1.08
Encana Corporation	ECA	60.33	4.2	4.3	4.3	3.0		0.9	0.4	0.86
XTO Energy Inc.	XTO	54.98	4.0	4.3		3.4		0.9		0.82
Anadarko Petroleum Corp.	APC	50.10	1.7	2.9		1.5		1.3	0.1	0.80
Occidental Petroleum Corp	OXY	57.41	3.0	2.9		0.4	0.0	2.2	0.2	0.76
EOG Resources	EOG	71.09	6.3	5.7		4.3	0.4	1.0		0.71
Devon Energy Corporation	DVN	75.38	5.2	5.7		3.2		2.5		0.64
<b>Independent Natural Gas and Oil - Small Cap</b>										
Berry Petroleum Company	BRY	37.88	1.2	1.4		0.4		1.0		0.89
Encore Acquisition Comp	EAC	26.50	1.6	2.9		0.5		2.4		0.67
Energy Partners Ltd.	EPL	16.01	1.5	2.9		1.4		1.5		0.63
Cimarex Energy Company	XEC	38.69	2.8	2.9		2.0		0.9		0.55
<b>Income</b>										
Penn West Energy Trust	PWE	31.09	2.7	2.9	2.9	0.9		1.9		0.89
San Juan Basin Royalty Tr	SJT	32.41	6.7	5.7		5.7				0.81
Canadian Oil Sands Trust	COSWF	30.20	6.1	5.7	5.7	(0.6)		6.3		0.79
Hugoton Royalty Trust	HGT	23.88	3.4	2.9		2.9				0.71
<b>Portfolio Composite</b>			<b>100</b>	<b>100</b>	<b>47</b>	<b>31</b>	<b>10</b>	<b>50</b>	<b>9</b>	<b>0.77</b>
Canada					17					
Russia					14					
Europe					10					
China					6					

Note: Percentages in the Portfolio Weight - EV column correspond to unlevered positions ranging from triple at 8.6% to half at 1.4%.

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**Index of Recent Research****Stock Ideas**

<u>Date</u>	<u>Symbol</u>	<u>Stock</u>	<u>Theme</u>
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
25-Jul	COSWF	Canadian Oil Sands Trust	Potential Distribution Double
24-Jul	XTO	XTO Energy Inc.	Volume Growth in Underpriced Natural 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
20-Jul	CEO	CNOOC Ltd	Fu Chengyu Meets Boone Pickens
19-Jul	KMx	Kinder Morgan	Suggestions for New General Partner Owners
16-Jul	PTR	PetroChina Company Limited	Raise NPV to \$166 a Share
29-Jun	* OGZPY	Gazprom	Raise NPV to \$62 a Share
29-Jun	* LUKOY	Lukoil Oil Company	Raise NPV to \$121 a Share
1-Jun	* SJT	San Juan Basin Royalty Trust	Stable Present Value (RT Weekly)
18-May	* MRO	Marathon Oil Corporation	Downgrade to Hold from Buy on Price
9-May	* XEC	Cimarex Energy Company	Lowest McDep Ratio
8-May	* PWE	Penn West Energy Trust	Committed to Income Distributions
7-May	* EAC	Encore Acquisition	Encore for Bell Creek
4-May	* TOT	Total S.A.	Integrated Model
4-May	* EPL	Energy Partners, Ltd.	Strategic Alternatives Disappointment
2-May	* BRY	Berry Petroleum	Piceance and Diatomite
2-May	* DVN	Devon Energy Corporation	Low McDep Ratio Natural Gas
2-May	* IMO	Imperial Oil Limited	Oil Sands Deal Unmasks Value
1-May	* EOG	EOG Resources Inc.	Productive Drilling Boosts Cash Flow
1-May	* APC	Anadarko Petroleum Corporation	Adjust NPV to \$70 a Share on Lower Debt

**Meter Reader - A Weekly Analysis**

31-Jul		Value Growth
24-Jul		Europe Wants Natural Gas Again
17-Jul	*	Understated U.S. Oil Benchmark
10-Jul	*	Natural Gas Price Extremely Low

**Natural Gas and Oil Royalty Trusts - A Weekly Analysis**

30-Jul		Market Reprices Credit Risk
20-Jul		The Last Laggards
13-Jul	*	Too Much Coal
6-Jul	*	Permian for Patient Investors

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