A Weekly Analysis of Energy Stocks Using the McDep Ratio July 30, 2001

What's Working

Summary and Recommendation

Strong Buys performed strongly and Low McDep Ratio stocks performed better than peers, but Buys did not do well and High McDep Ratio stocks did better than expected in debt-adjusted total return for the past three months (see charts). While the short time period proves little, we believe that continuous and diligent investment analysis can help investors achieve favorable results in energy over time. Our current Strong Buys are **Burlington Resources Inc.** (BR) and USX-Marathon Group (MRO). Our Buys are **American Electric Power (AEP)**, **PetroChina (PTR)**, **Exelon Corporation (EXC)** and **Energy Partners**, **Ltd.** (EPL).

Measure Returns on Debt-Adjusted Basis

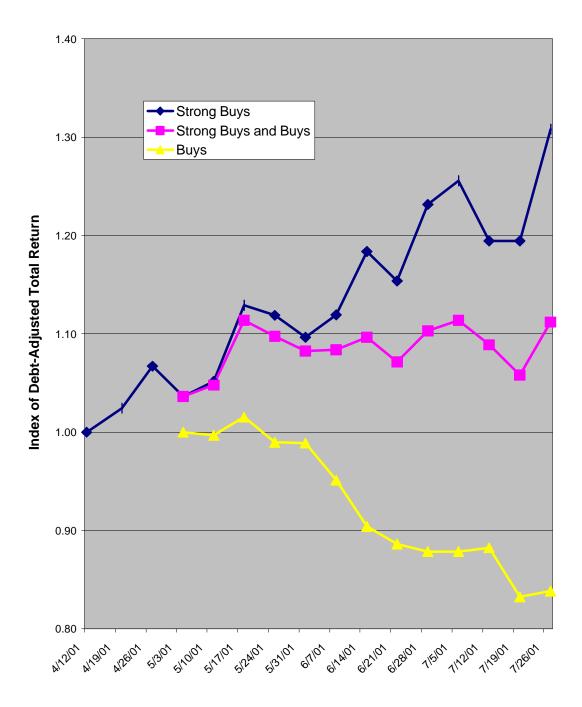
Since we use the McDep Ratio to pick stocks, we should measure subsequent performance on a consistent basis. Our valuation measure compares stocks by market cap and debt to present value. That means we should measure the performance of market cap and debt as expectations of present value change. Since the terms of debt are usually fixed, market cap usually reflects all of the change in present value.

The actual debt-adjustment process converts total return, stock price appreciation plus dividends, to a return on underlying present value and then converts it back to the equivalent return after normal leverage. Our measure of leverage is the Debt/Present Value ratio that appears in the column just before the McDep Ratio (see Table L-1, S-1). We assume that normal leverage is 0.35. For example, if a stock has a return of 10% and a Debt/PV of 0.20, the unlevered return would be 8% (10 times (1 minus 0.2)). The normalized return would be 12% (8 divided by (1 minus 0.35). The debt-adjusted returns in the charts are normalized returns assuming a Debt/PV of 0.35.

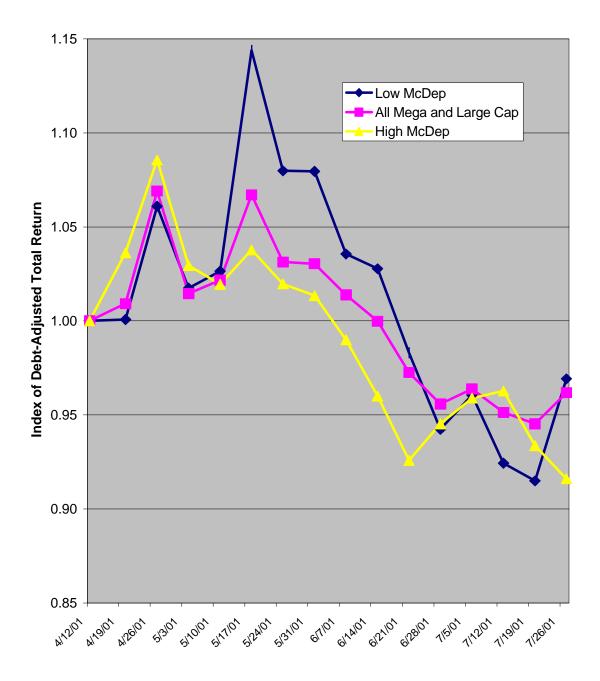
If you have trouble following the calculation just remember that the return on a low debt stock is better than is usually stated. Vice versa, the return on a high debt stock is not as good as usually stated. We put returns on the same basis after taking account of debt.

One practical implication of debt adjustment for the past three months is to diminish, but not to deny, the decline in power stocks. **Calpine**, for instance, declined 31% in stock price, which becomes 24% after debt adjustment.

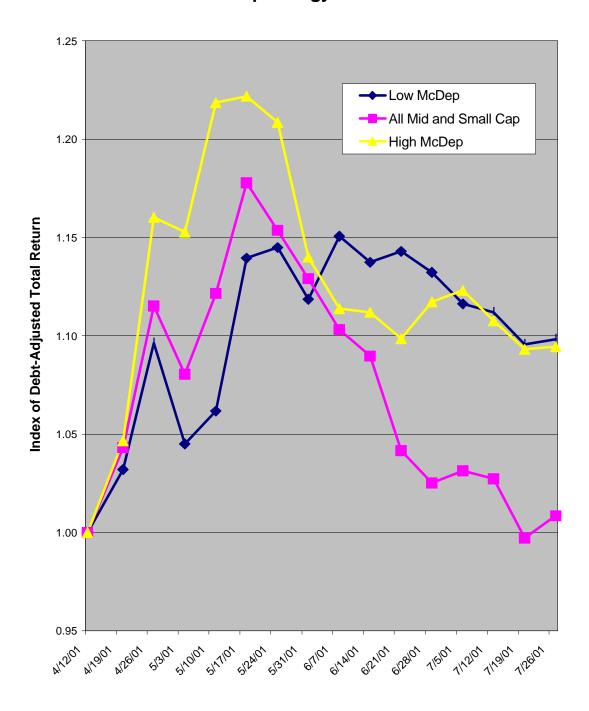
Strong Buys Perform



Mega and Large Cap Energy Stock Performance



Mid and Small Cap Energy Stock Performance



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Another implication of debt adjustment is that one would take account of debt in determining the size of a normal investment position. If a normal position in a portfolio is \$100 for a stock with a Debt/PV of 0.35, then a normal position for a stock with a Debt/PV of 0.20 would be \$123 (100 times (1 minus 0.20) divided by (1 minus 0.65).

Strong Buys More Timely Than Buys

A nice positive return for all recommendations of 11% masks a sharp divergence between Strong Buys at 31% and Buys at negative 16% (see first chart). In calculating the performance of the average recommendation we double weight a Strong Buy. Thus, a revision in rating from Strong Buy to Buy means sell half if one owned a double position or buy a single position if one did not own the stock.

Our recent experience with Strong Buys illustrates how investors can add value by paying careful attention to existing positions. A timely switch from EPL to BR as a Strong Buy at the end of June helped extend the positive trend for Strong Buys. The switch did not help the performance of Buys. The switch did help average performance. As a final qualification one of the stocks was a small cap, which, by definition, cannot be as freely traded without affecting price, as could a large cap stock.

Low McDep Ratio Stocks a Positive Choice

The performance of low McDep Ratio stocks was in the right direction, but three months is not much time to measure results. Nonetheless two observations appear valid and fit our expectations. Low McDep Ratio stocks outperformed High McDep Ratio stocks by 5% in our group of Mega and Large Cap stocks (see second chart). Low McDep Ratio stocks outperformed all stocks by 8% in our group of Mid, Small and Micro Cap stocks (see third chart).

High McDep Ratio Stocks Underperform and Outperform

Among big stocks, High McDep Ratio issues underperformed the median by about 5%. Among small stocks, High McDep Ratio issues outperformed the median by 9%. Among High McDep winners in the latter group was **Triton Energy**, the target of a takeover bid from Amerada Hess. Yet even when High McDep beat the median it did not beat Low McDep.

Conclusion: Recommendations and McDep Work With Qualifications

The latest three months experience fits with performance measures we have done in the past which show the McDep Ratio as having some ability to predict the future. The main qualification may be transaction costs. To compile the three-month record we picked the lowest quartile and highest quartile each week. There were usually some changes in stocks each week.

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Finally our experience is that judgment can improve on the technique. That was borne out by recommendations the past three months and we will strive to make that so in the future.

Hedge against Recession, Bet on Growth

While the weakening of economic activity has contributed to the recent decline in natural gas and in oil product margins, crude oil prices hold at reasonable levels. We fear that economic growth could actually turn negative and we are discouraged by the anticapitalist political response in California. We hedge against the downside, as we always do, by paying attention to leverage in selecting and weighting our recommendations.

On balance, we are optimistic that economic growth will continue positive and support a profitable environment for energy producers. Our recommendations can do well in a moderate growth case.

A return of high growth would be especially positive for energy prices and energy stocks. Should higher growth entail more inflation, energy stocks offer protection from a declining currency.

Kurt H. Wulff, CFA

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Table L-1
Mega Cap and Large Cap Energy Companies
Rank by McDep Ratio: Market Cap and Debt to Present Value

	Price			Net			
		(\$/sh)		Market	Present	_Debt/	
	Symbol/	27-Jul	Shares	Cap	Value	Present	McDep
	Rating	2001	(mm)	(\$mm)	(\$/sh)	Value	Ratio
Mega Cap							
Exxon Mobil Corporation	XOM	42.73	7,020	300,000	37.10	0.09	1.14
BP PLC	BP	48.75	3,720	181,000	48.90	0.17	1.00
TOTAL Fina Elf S.A.	TOT	69.50	1,400	97,000	72.00	0.16	0.97
Royal Dutch/Shell	RD	57.88	3,580	207,000	60.80	0.09	0.96
Chevron (incl. Texaco)	CHV	91.10	1,060	96,600	103.40	0.15	0.90
Total or Median				882,000		0.15	0.97
Power							
Enron Corp.	ENE	46.10	891	41,100	15.00	0.69	1.65
Dynegy Inc.	DYN	46.90	338	15,900	20.60	0.56	1.57
Calpine Corporation	CPN	37.90	317	12,000	19.90	0.52	1.43
Mirant Corporation	MIR	31.90	353	11,300	12.70	0.73	1.41
Duke Energy Corporation	DUK	38.35	779	29,900	19.90	0.62	1.35
AES Corporation	AES	37.30	538	20,100	17.40	0.71	1.34
El Paso Corporation	EPG	52.36	521	27,300	30.00	0.57	1.32
Williams Companies	WMB	33.09	485	16,000	16.60	0.69	1.30
American Electric Power Co. Inc.	AEP 2	44.20	324	14,300	25.90	0.73	1.19
Southern Company	SO	22.98	683	15,700	16.90	0.54	1.17
Exelon Corporation	EXC 2	57.90	324	18,800	55.30	0.51	1.02
Total or Median				222,000		0.62	1.34
Natural Gas and Oil							
Anadarko Petroleum Corp.	APC	58.56	263	15,400	66.30	0.24	0.91
Occidental Petroleum	OXY	27.40	370	10,100	35.60	0.46	0.88
Phillips (incl. Tosco)	P	56.97	383	21,800	75.90	0.31	0.83
Burlington Resources, Inc	BR 1	43.28	215	9,300	54.90	0.17	0.82
Conoco Inc.	COC.B	30.33	623	18,900	48.00	0.21	0.71
ENI S.p.A.	E	60.64	800	48,500	91.90	0.10	0.69
Total or Median				124,000		0.22	0.83
Service							
Schlumberger Ltd.	SLB	56.03	581	32,600	37.70	0.14	1.42
Halliburton Company	HAL	36.10	430	15,500	27.20	0.13	1.28
• •							

Buy/Sell rating after symbol: 1 - Strong Buy, 2 - Buy

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

A Weekly Analysis of Energy Stocks Using the McDep Ratio July 30, 2001

Table L-2
Mega Cap and Large Cap Energy Companies
Rank by EV/Ebitda: Enterprise Value to Earnings Before Interest, Tax, Deprec.

		Price			Di		
		(\$/sh)	EV/	EV/	Dis	stribution	PV/
		27-Jul	Sales	Ebitda	P/E	NTM	Ebitda
	Symbol	2001	2001E	NTM	NTM	(%)	NTM
Mega Cap							
Exxon Mobil Corporation	XOM	42.73	1.5	8.0	16	2.1	7.0
BP PLC	BP	48.75	1.2	7.0	11	2.9	7.0
TOTAL Fina Elf S.A.	TOT	69.50	1.1	6.8	16	1.6	7.0
Royal Dutch/Shell	RD	57.88	1.4	6.7	14	2.4	7.0
Chevron (incl. Texaco)	CHV	91.10	1.0	5.4	10	2.9	6.0
Median			1.2	6.8	14	2.4	7.0
Power							
Enron Corp.	ENE	46.10	0.3	16.5	23	1.1	10.0
Dynegy Inc.	DYN	46.90	0.4	14.1	22	0.6	9.0
Calpine Corporation	CPN	37.90	2.6	12.9	18	-	9.0
Mirant Corporation	MIR	31.90	0.7	11.3	15	-	8.0
Duke Energy Corporation	DUK	38.35	0.9	10.8	15	2.9	8.0
AES Corporation	AES	37.30	3.8	10.7	17	-	8.0
Williams Companies	WMB	33.09	3.3	10.4	14	1.8	8.0
El Paso Corporation	EPG	52.36	0.7	9.2	16	1.6	7.0
American Electric Power Co. Inc.	AEP 2	44.20	0.7	8.3	12	5.4	7.0
Southern Company	SO	22.98	2.7	8.2	14	5.8	7.0
Exelon Corporation	EXC 2	57.90	2.5	7.2	13	2.9	7.0
Median			0.9	10.7	15	1.6	8.0
Natural Gas and Oil							
Burlington Resources, Inc	BR 1	43.28	4.6	7.4	33	1.3	9.0
Phillips (incl. Tosco)	P	56.97	0.8	5.8	9	2.5	7.0
Occidental Petroleum	OXY	27.40	1.3	5.3	8	3.6	6.0
Anadarko Petroleum Corp.	APC	58.56	2.4	5.5	10	0.3	6.0
Conoco Inc.	COC.B	30.33	0.6	4.2	8	2.5	6.0
ENI S.p.A.	E	60.64	1.1	3.5	6	2.6	5.0
Median			1.2	5.4	9	2.5	6.0
Service							
Halliburton Company	HAL	36.10	1.3	10.3	24	1.4	8.0
Schlumberger Ltd.	SLB	56.03	2.9	9.9	28	1.3	7.0

EV = Enterprise Value = Market Cap and Debt; Ebitda = Earnings before interest, tax, depreciation and amortization; NTM = Next Twelve Months Ended March 31, 2002; P/E = Stock Price to Earnings; PV = Present Value of oil and gas and other businesses

A Weekly Analysis of Energy Stocks Using the McDep Ratio July 30, 2001

Table S-1
Mid Cap and Small Cap Energy Companies
Rank by McDep Ratio: Market Cap and Debt to Present Value

		Price			Net		
		(\$/sh)		Market	Present	Debt/	
	Symbol/	27-Jul	Shares	Cap	Value	Present	McDep
	Rating	2001	(mm)	(\$mm)	(\$/sh)	Value	Ratio
Power							
CMS Energy Corporation	CMS	26.85	128	3,400	19.80	0.80	1.07
Consol Energy Inc.	CNX	23.48	79	1,900	19.70	0.65	1.07
Sempra Energy	SRE	25.69	203	5,200	23.10	0.65	1.04
Constellation Energy Group	CEG	30.55	152	4,600	37.10	0.45	0.90
Total or Median				15,100		0.65	1.05
Natural Gas and Oil							
Triton Energy Limited	OIL	44.72	59	2,600	24.50	0.24	1.63
TEPPCO Partners, L.P.	TPP	31.14	38	1,180	13.20	0.65	1.47
Ocean Energy, Inc.	OEI	19.99	177	3,500	21.90	0.27	0.94
Unocal Corporation	UCL	35.96	256	9,200	51.90	0.27	0.78
Petro-Canada	PCZ	25.66	272	7,000	35.20	0.09	0.75
PanCanadian Pete (15%)(US\$)	PCP.TO	26.83	38	1,030	37.00	0.08	0.75
Norsk Hydro ASA (49%)	NHY	42.15	128	5,400	61.60	0.16	0.73
Devon Energy Corporation	DVN	54.49	135	7,400	80.10	0.16	0.73
Marathon Oil Corporation	MRO 1	29.84	309	9,200	48.00	0.24	0.71
Valero Energy Corp.(with UDS)	VLO	34.84	112	3,900	70.70	0.42	0.71
PetroChina Company Ltd (10%)	PTR 2	20.60	176	3,600	32.50	0.15	0.69
Total or Median				54,000		0.24	0.75
Small Cap							
Dorchester Hugoton, Ltd.*	DHULZ	13.24	10.7	142	12.40	-	1.07
Cross Timbers Royalty Tr*	CRT	16.94	6.0	102	16.90	-	1.01
San Juan Basin Royalty Tr*	SJT	13.86	46.6	650	15.10	-	0.92
Encore Acquisition Corporation	EAC	14.50	30.0	440	16.40	0.15	0.90
Penn Virginia Corporation	PVA	36.30	8.8	320	44.20	0.00	0.82
Hugoton RoyaltyTrust*	HGT	12.29	40.0	490	15.60	-	0.79
Energy Partners Ltd.*	EPL 2	12.44	27.0	340	18.10	0.04	0.70
Total or Median				2,480		-	0.90
Micro Cap							
Purcell Energy, Ltd. (US\$)	PEL.TO	2.07	26.0	54	3.70	0.07	0.60

Buy/Sell rating after symbol: 1 - Strong Buy, 2 - Buy

McDep Ratio = Market cap and **De**bt to **p**resent value of oil and gas and other businesses

^{*} For small cap stocks marked with asterisk, estimated present value recalculated weekly.

A Weekly Analysis of Energy Stocks Using the McDep Ratio July 30, 2001

Table S-2
Mid Cap and Small Cap Energy Companies
Rank by EV/Ebitda: Enterprise Value to Earnings Before Interest, Tax, Deprec.

		Price (\$/sh)	EV/	EV/	Dividend or Distribution		PV/
		, ,	Sales			NTM	Ebitda
	Symbol	27-Jul 2001	2001E	Ebitda NTM	P/E NTM	(%)	NTM
	Symbol	2001	2001E	IN I IVI	1 V 1 1V1	(70)	1 V 1 1 V1
Power							
CMS Energy Corporation	CMS	26.85	0.9	7.5	10	5.4	7.0
Consol Energy Inc.	CNX	23.48	2.0	7.5	8	4.8	7.0
Sempra Energy	SRE	25.69	1.1	7.3	10	3.9	7.0
Constellation Energy Group	CEG	30.55	1.8	6.3	10	1.6	7.0
Median			1.5	7.4	10	4.3	7.0
Natural Gas and Oil							
TEPPCO Partners, L.P.	TPP	31.14	0.7	11.8	16	6.7	8.0
Triton Energy Limited	OIL	44.72	6.3	9.8	24	-	6.0
Ocean Energy, Inc.	OEI	19.99	3.6	5.6	12	0.8	6.0
Unocal Corporation	UCL	35.96	1.7	4.7	13	2.2	6.0
Petro-Canada	PCZ	25.66	1.0	4.1	9	1.1	5.5
PanCanadian Pete (15%)(US\$)	PCP.TO	26.83	1.1	4.1	7	1.0	5.5
Valero Energy Corp.(with UDS)	VLO	34.84	0.3	3.9	4	0.9	5.5
Norsk Hydro ASA (49%)	NHY	42.15	0.8	3.7	8	2.5	5.0
Devon Energy Corporation	DVN	54.49	2.8	3.7	8	0.4	5.0
Marathon Oil Corporation	MRO 1	29.84	0.4	3.6	6	3.1	5.0
PetroChina Company Ltd (10%)	PTR 2	20.60	1.5	2.8	5	8.3	4.0
Median			1.1	4.1	8	1.1	5.5
Small Cap							
Cross Timbers Royalty Tr*	CRT	16.94	6.1	9.7	10	9.8	9.6
Dorchester Hugoton, Ltd.*	DHULZ	13.24	7.1	9.4	11	8.2	8.8
San Juan Basin Royalty Tr*	SJT	13.86	6.5	8.3	11	8.9	9.0
Hugoton RoyaltyTrust*	HGT	12.29	4.9	7.1	10	10.3	9.0
Encore Acquisition Corporation	EAC	14.50	3.7	5.4	13	-	6.0
Penn Virginia Corporation	PVA	36.30	3.5	4.9	11	2.5	6.0
Energy Partners Ltd.*	EPL 2	12.44	2.1	3.4	16	-	4.8
Median			4.9	7.1	11	8.2	8.8
Micro Cap							
Purcell Energy, Ltd. (US\$)	PEL.TO	2.07	2.8	3.6	12	-	6.0

EV = Enterprise Value = Market Cap and Debt; Ebitda = Earnings before interest, tax, depreciation and amortization; NTM = Next Twelve Months Ended June 30, 2002; P/E = Stock Price to Earnings; PV = Present Value of oil and gas and other businesses

^{*} For small cap stocks marked with asterisk, estimated present value recalculated weekly.