

Rating: Buy
 S&P 500: 1194

BP p.l.c.

Cash Flows to Owners

<i>Symbol</i>	BP	<i>Ebitda Next Twelve Months ending 12/31/05 (US\$mm)</i>	36,400
<i>Rating</i>	Buy	<i>North American Natural Gas/Ebitda (%)</i>	9
<i>Price (US\$/sh)</i>	58.36	<i>Natural Gas and Oil Production/Ebitda (%)</i>	72
<i>Pricing Date</i>	12/17/04	<i>Adjusted Reserves/Production NTM</i>	9.9
<i>Shares (mm)</i>	3614	<i>EV/Ebitda</i>	6.7
<i>Market Capitalization (US\$mm)</i>	210,900	<i>PV/Ebitda</i>	6.9
<i>Debt (US\$mm)</i>	32,800	<i>Undeveloped Reserves (%)</i>	46
<i>Enterprise Value (EV) (US\$mm)</i>	243,700	<i>Natural Gas and Oil Ebitda (US\$/boe)</i>	18.50
<i>Present Value (PV) (US\$mm)</i>	249,600	<i>Present Value Proven Reserves(US\$/boe)</i>	9.90
<i>Net Present Value (US\$/share)</i>	60	<i>Present Value Proven Reserves(US\$/mcf)</i>	1.65
<i>Debt/Present Value</i>	0.13	<i>Earnings Next Twelve Months (US\$/sh)</i>	4.50
<i>McDep Ratio - EV/PV</i>	0.98	<i>Price/Earnings Next Twelve Months</i>	13
<i>Dividend Yield (%/year)</i>	2.9	<i>Indicated Annual Dividend (US\$/sh)</i>	1.70

Note: Estimated cash flow and earnings tied to one-year futures prices for oil, natural gas and refinery crack.
 Reported results may vary widely from estimates. Estimated present value per share revised only infrequently.

Summary and Recommendation

We continue a Buy rating on the common shares of **BP (BP)** for improving profitability of oil and gas upstream and downstream businesses accompanied by low financial risk. While adjusted reserve life approximates the industry median, representation in Russia may contribute above average growth. Financial risk is low with a ratio of debt to present value of 0.13. Stock price has nearly reached estimated net present value of \$60 a share that relates to our standard assumption of constant real oil price of \$35 a barrel. The average futures price for continuous delivery over the next six years is about \$41 a barrel. The benefits of recent oil price increases fund dividends and stock buybacks that may be as much as 8% of current share price in 2005.

Rich in Oil Resources

To no surprise for a mega cap energy company, oil resources account for the dominant portion of value (see table Functional Cash Flow and Present Value). Oil reserves by area include 34% in the USA, and 18% in Russia. BP has traditionally been concentrated on oil production.

Though North American natural gas has only a fifth the weight of global oil for BP, concentration is relatively greater than for mega cap peers. Most of that representation was obtained when BP acquired Amoco, once the largest owner of U.S. natural gas reserves.

Overseas natural gas has growth potential in liquefied natural gas (LNG). Large volumes of undeveloped reserves in Trinidad support future exports in a project acquired via Amoco. Similarly an Indonesian project acquired via Atlantic Richfield starts deliveries in the next few years.

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Refining/marketing emphasis is close to that of mega cap peers. BP's downstream system appears well-positioned to exploit the long-term trend to heavy, sour crude oil as light, sweet becomes less available.

Adjusted reserve life of 9.9 years for oil and natural gas matches the median for about 30 stocks in our coverage. Reserve life is the major variable influencing cash flow multiple, PV/Ebitda, which is a test of our present value estimate. In the current correlation of present value with reserve life for 30 stocks, the company's multiple could be considered high by 1.1 times. Some of that might be justified by extra growth in Russia.

BP plc					
Functional Cash Flow and Present Value					
	<i>NTM Ebitda</i>	<i>Adjusted</i>	<i>PV/</i>	<i>Present</i>	
	<i>(US\$mm)</i>	<i>R/P</i>	<i>Ebitda</i>	<i>Value</i>	
				<i>(US\$mm)</i>	
North American Natural Gas	3,210	13.4	8.2	26,400	11%
Overseas Natural Gas	3,480	11.1	7.3	25,500	10%
Oil	19,400	8.8	6.6	127,100	51%
Downstream	10,300		6.9	70,600	28%
	36,390	9.9	6.9	249,600	100%
Debt (US\$mm)					32,800
Net Present Value (US\$mm)					216,800
Shares (mm)					3,614
Net Present Value (US\$/sh)					60

Free Cash Flow for Stockholders

Commodity price drives cash flow in our near-term model (see table Next Twelve Months Operating and Financial Estimates). We project constant volume for production operations while management promises moderate growth over the next several years. Projected refining/marketing margins reflect futures prices for gasoline and heating oil compared to crude oil.

After a gain in the last quarter of 2004, cash flow would be sustained at a high level in 2005. Because we use futures for our NTM price projection, there is gradual erosion from the initial level. That has been the pattern of futures and of analyst's estimates for the past several years while the reality has been the opposite. Thus, it is likely misleading to conclude that a slight downward projection means that stock price might follow.

Management contends that capital spending plans assume \$20 oil (perhaps \$22 a barrel on a light, sweet basis). The Lord Browne of Madingly, Group Chief Executive, known as John Browne before the Queen honored him, anticipates that \$30 is an operating floor for the next several years. Presumably those price assumptions are in real terms and would rise in nominal terms with inflation.

BP plc
Next Twelve Months Operating and Financial Estimates

	<i>Q1</i>	<i>Q2</i>	<i>Q3</i>	<i>Q4E</i>	<i>Year</i>	<i>Q1E</i>	<i>Q2E</i>	<i>Q3E</i>	<i>Q4E</i>	<i>Next Twelve Months</i>
	<i>3/31/04</i>	<i>6/30/04</i>	<i>9/30/04</i>	<i>12/31/04</i>	<i>2004E</i>	<i>3/31/05</i>	<i>6/30/05</i>	<i>9/30/05</i>	<i>12/31/05</i>	<i>12/31/05</i>
Volume										
Natural Gas (mmcf)										
U.S. (or North America)	2,869	2,790	2,685	2,685	2,764	2,685	2,685	2,685	2,685	2,685
Overseas (or Int'l)	5,731	5,635	5,590	5,590	5,652	5,590	5,590	5,590	5,590	5,590
Total	8,600	8,425	8,275	8,275	8,416	8,275	8,275	8,275	8,275	8,275
Oil (mbd)	2,533	2,518	2,479	2,479	2,502	2,479	2,479	2,479	2,479	2,479
Total gas & oil (mmb)	361	357	355	355	1,428	347	351	355	355	1,408
Price										
Natural gas (\$/mcf)										
Henry Hub (\$/mmbtu)	5.64	6.10	5.75	7.10	6.15	7.48	6.77	6.82	7.12	7.04
U.S. (or North America)	4.72	5.11	4.94	6.09	5.21	6.42	5.81	5.86	6.11	6.05
Overseas (or Int'l)	3.32	2.97	3.05	3.35	3.17	3.23	3.19	3.12	3.06	3.15
Total	3.79	3.68	3.66	4.24	3.84	4.26	4.04	4.01	4.05	4.09
Oil (\$/bbl)										
WTI Cushing	35.23	38.34	43.89	48.35	41.45	46.49	45.97	44.98	44.16	45.40
Worldwide	30.48	33.27	38.29	42.18	36.04	40.56	40.10	39.23	38.52	39.60
Total gas & oil (\$/bbl)	27.68	29.26	32.45	36.20	31.38	35.20	34.43	33.81	33.44	34.21
NY Harbor 3-2-1 (\$/bbl)	6.98	12.78	7.83	5.53	8.28	7.52	8.45	7.55	6.24	7.44
BP Refining Indicator	4.62	7.89	6.20							
Revenue (\$mm)										
Natural Gas										
U.S. (or North America)	1,232	1,297	1,220	1,505	5,255	1,551	1,420	1,447	1,509	5,927
Overseas (or Int'l)	1,734	1,524	1,566	1,725	6,549	1,623	1,622	1,605	1,576	6,425
Total	2,966	2,821	2,786	3,230	11,804	3,174	3,043	3,051	3,085	12,352
Oil	7,026	7,623	8,733	9,620	33,001	9,049	9,047	8,948	8,786	35,830
Other	59,488	60,709	62,333	62,333	244,863	62,333	62,333	62,333	62,333	249,332
Total	69,480	71,154	73,852	75,183	289,669	74,555	74,423	74,332	74,203	297,514
Expense (\$mm)										
Production	4,208	4,482	5,419	5,685	19,794	5,560	5,533	5,515	5,489	22,097
Other	57,009	57,499	59,134	59,833	233,474	59,747	59,587	59,734	59,958	239,027
Ebitda (\$mm)										
Exploration and Production	5,784	5,963	6,100	7,165	25,011	6,663	6,556	6,484	6,381	26,084
Other	2,479	3,211	3,199	2,500	11,389	2,586	2,745	2,599	2,375	10,305
Total Ebitda	8,263	9,173	9,299	9,665	36,400	9,249	9,302	9,083	8,756	36,389
Exploration	67	22	34	34	157	34	34	34	34	136
Deprec., Deplet., & Amort.	2,814	2,738	2,648	2,648	10,848	2,648	2,648	2,648	2,648	10,592
Other non cash	(1,177)	258	401		(518)	-	-	-	-	-
Ebit	6,559	6,155	6,216	6,983	25,913	6,567	6,620	6,401	6,074	25,661
Interest	152	145	156	156	609	156	156	156	156	624
Ebt	6,407	6,010	6,060	6,827	25,304	6,411	6,464	6,245	5,918	25,037
Income Tax	2,242	2,104	2,121	2,389	8,856	2,244	2,262	2,186	2,071	8,763
Net Income (\$mm)										
Exploration and Production	4,568	4,558	5,144							
Other	1,114	1,986	1,619							
Unallocated	(1,517)	(2,637)	(2,824)							
Total	4,165	3,907	3,939	4,437	16,448	4,167	4,202	4,059	3,846	16,274
Shares (millions)	3,681	3,651	3,614	3,614	3,640	3,614	3,614	3,614	3,614	3,614
Per share (\$)	1.13	1.07	1.09	1.23	4.52	1.15	1.16	1.12	1.06	4.50
Ebitda Margin (E&P)	58%	57%	53%	56%	56%	55%	54%	54%	54%	54%
Tax Rate	35%	35%	35%	35%	35%	35%	35%	35%	35%	35%

Current pricing results in cash flow above an amount needed to justify BP's capital program. The difference is promised to shareholders. Inflation adjusting spending for 2005 is currently budgeted at about \$10 billion. Our current projection of \$36 billion of Ebitda for 2005 becomes \$27 billion after interest and tax. Then after funding capital expenditures, \$17 billion might be considered free cash flow available for dividends or stock repurchase, about 8% of current market cap. After \$6 billion for dividends \$11 billion might remain for stock repurchase. BP repurchased \$5.5 billion of equity in the first nine months of 2004.

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Muted Supply Response May Enhance Investment Opportunity

Consumers are wont to question why BP and other producers do not invest more aggressively in the current climate. Of course, consumers would love to see producers overspend and create a surplus that would drive down price. In fact, producers did overspend for much of the 1980s and 1990s compared to the price of oil realized then. Seriously burned in the past, producers are understandably cautious about responding to new price signals. We remember the resignation of Chief Executive Robert Horton and the subsequent dividend cut for BP in mid 1992. Investors and analysts taking their cues from the leading companies are reacting similarly cautiously.

Meanwhile producing governments are doing their part to mute supply response. BP calls attention to new taxes in Russia that amount to a 90% marginal rate on oil for export. While there remain attractive prospects for established companies like TNK-BP, rapid development is discouraged. The Russian government seems to have new appreciation for the strategic value of oil wealth for future generations.

Muted supply tends to add further strength to longer-term expectations. Slow reactions by mega cap companies and most investors may present opportunities to those who act sooner. Policy action by producing governments may alter the form of reward to producers and investors.

Competitive Value among Mega Caps

The positive conclusions we draw on BP also extend to its competitors. The valuation distinctions are slight (see table Rank by McDep Ratio).

	<i>Symbol/</i>	<i>Rating</i>	<i>Price</i> <i>(\$/sh)</i>	<i>Shares</i>	<i>Market</i>	<i>Net</i>	<i>Debt/</i>	<i>McDep</i>
			<i>17-Dec</i>	<i>(mm)</i>	<i>Cap</i>	<i>Present</i>	<i>Present</i>	<i>Ratio</i>
			<i>2004</i>		<i>(\$mm)</i>	<i>Value</i>	<i>Value</i>	
Mega Cap								
Exxon Mobil Corporation	XOM	B3	49.80	6,508	324,000	50.00	0.07	1.00
Shell Transport and Trading Co. plc	SC	B3	49.79	1,587	79,000	51.00	0.17	0.98
BP plc	BP	B3	58.36	3,614	211,000	60.00	0.13	0.98
Total S.A.	TOT	B3	105.15	1,228	129,000	113.00	0.17	0.94
Royal Dutch Petroleum	RD	B1	55.63	2,021	112,000	60.00	0.17	0.94
ChevronTexaco Corporation	CVX	B1	51.72	2,126	110,000	62.50	0.13	0.85
	<i>Total or Median</i>				<i>965,000</i>		<i>0.15</i>	<i>0.96</i>

B1 = Buy full unlevered position, B2 = Buy half unlevered position, B3 = Alternative buy
 McDep Ratio = Market cap and Debt to present value of oil and gas and other businesses
 Source: www.mcdep.com updated

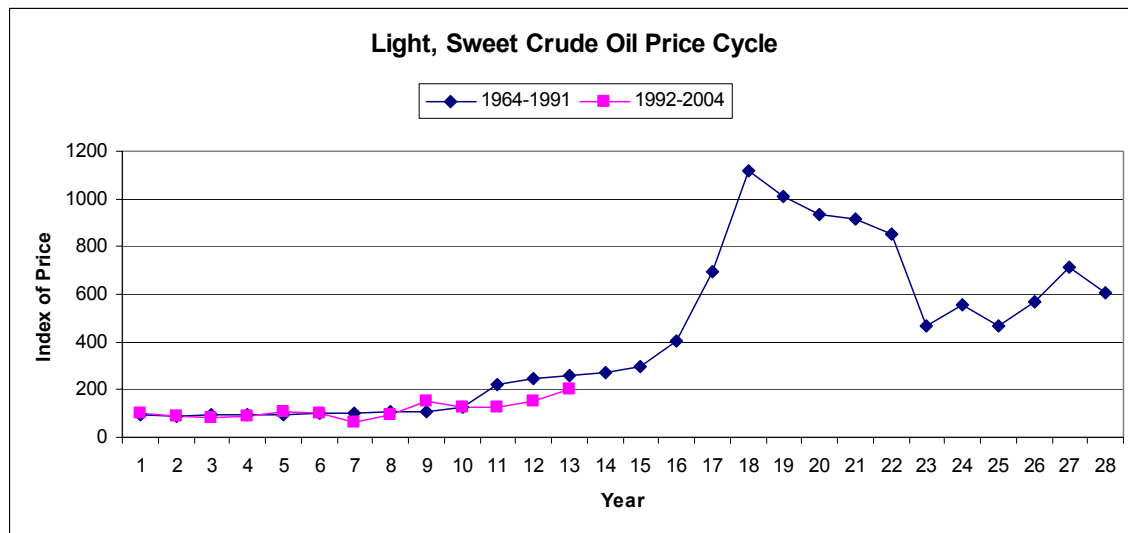
Buy Oil and Gas Producers at Mid Decade

Three to five-fold gain potential for oil and gas price over the next 5 to 13 years justifies investment in recommended oil and gas producers including BP, in our opinion. Supporting improving prospects, the average futures prices of oil and gas for continuous delivery over the next six years are in a multi-year uptrend defined by the current quotes above the 40-week average. The current benchmark oil average futures price for the next six years is about \$41 a barrel. That is higher than our estimate that current stock price of BP reflects a constant real oil price of perhaps \$35 a barrel.

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Three to Five in Five to Thirteen

Taking the experience of past trends in oil price we see the potential for further gains beyond what most investors contemplate. Keying on the twice-in-a-lifetime bear market bottoms in 1974 and 2002, we note a preceding ten-year period of relatively stable oil price. Thus, we plot a 28-year period of oil price indexed to the average for the first ten years (see chart [Light, Sweet Crude Oil Price Cycle](#)). The historical cycle runs from 1964 to 1991. We superimpose on that a new cycle starting in 1992 and continue it through the last data point, 2004, year 13. There are similarities between 2004 and 1976 as well as differences. Undoubtedly, the current cycle will play out differently. The main point that we think is valid is that there may be surprising upside in oil price after 2004 as there was after 1976.



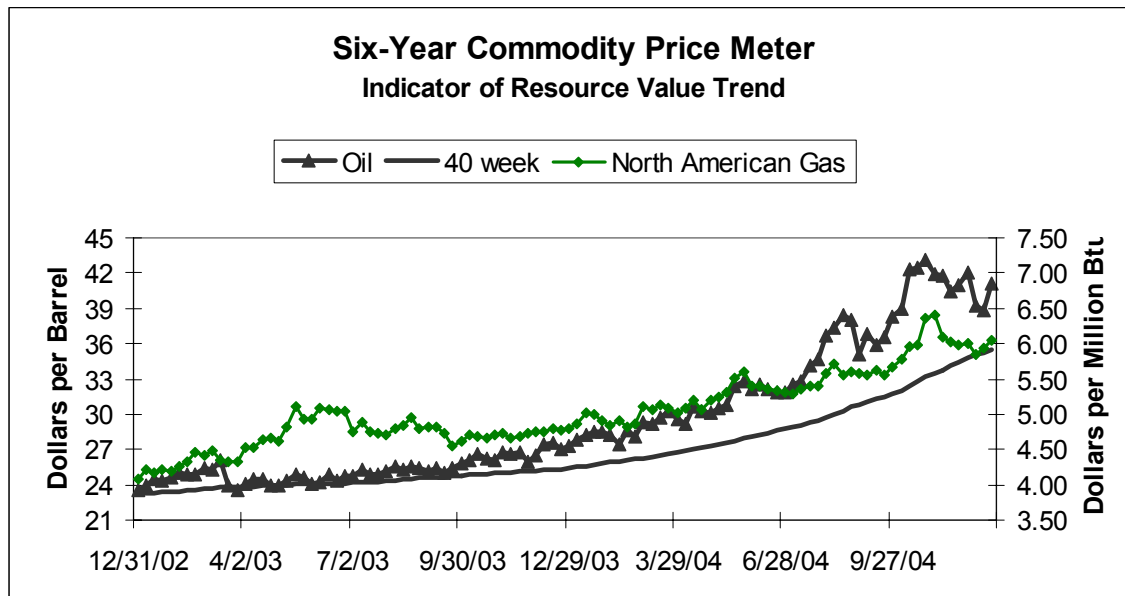
Source: www.eia.doe.gov, www.mcdep.com

Futures Trend Up

Futures traders are expressing increasing conviction that the oil price trend is up. Tracking the average futures price for continuous delivery over the next six-years we see that the current quote is above the 40-week average (see chart [Six-Year Commodity Price Meter](#)). A common presumption is that the trend is likely to continue until the current quote falls below the 40-week average. We believe the uptrend will continue, but cannot rule out occasional interruptions.

Kurt H. Wulff, CFA

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Source: www.nymex.com, www.mcdep.com updated

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