Rating: Buy
S&P 500: 1121

CNOOC Limited
Higher Dividend, Higher Present Value

Symbol	CEO	*Ebitda Next Twelve Months ending 6/30/05 (US$mm)*	3,900
Rating	Buy	*North American Natural Gas/Ebitda (%)*	0
Price (US$/sh)	48.51	*Natural Gas and Oil Production/Ebitda (%)*	100
Pricing Date	9/7/04	*Adjusted Reserves/Production NTM*	10.4
Shares (mm)	411	*EV/Ebitda*	5.2
Market Capitalization (US$mm)	19,900	*PV/Ebitda*	6.3
Debt (US$mm)	0	*Undeveloped Reserves (%)*	51
Enterprise Value (EV) (US$mm)	19,900	*Natural Gas and Oil Ebitda (US$/boe)*	28.79
Present Value (PV) (US$mm)	24,300	*Present Value Proven Reserves(US$/boe)*	12.96
Net Present Value (US$/share)	59	*Present Value Proven Reserves(US$/mcfe)*	2.16
Debt/Present Value	0.00	*Earnings Next Twelve Months (US$/sh)*	4.87
McDep Ratio - EV/PV	0.82	*Price/Earnings Next Twelve Months*	10
Dividend Yield (%/year)	3.7	*Indicated Annual Dividend (US$/sh)*	1.79

Note: Estimated cash flow and earnings tied to one-year futures prices for oil and natural gas.
Reported results may vary widely from estimates. Estimated present value per share revised only infrequently.
The Peoples Republic of China holds 81% of the outstanding shares.

Summary and Recommendation

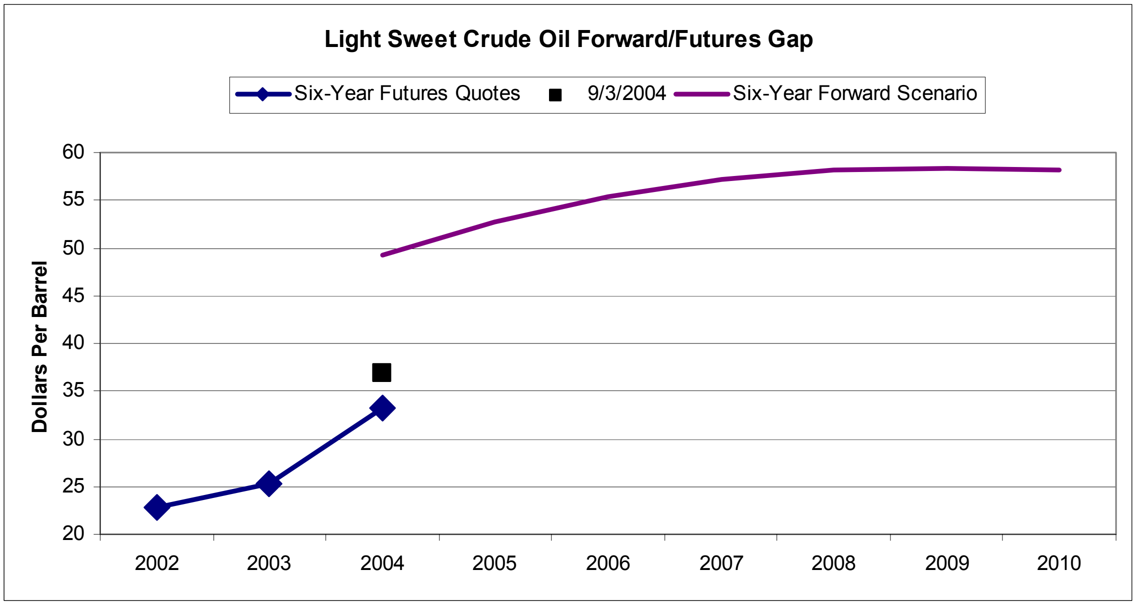
We continue to recommend current purchase of the American Depositary Shares of **CNOOC Limited (CEO)** the "independent producer" of China-domiciled oil and gas companies. A thirteen percent increase in dividend places the indicated annual yield at 3.7%. We illustrate a calculation that supports an increase in our estimate of present value to $59 a share from $55 previously. Business risk is partly shifted to other companies and financial risk is low as there is no net debt on the company's balance sheet. To allow for political risk, investors may want to limit ownership to half a normal portfolio position.

Moderate Oil Price Scenario

The value of the company depends in large part on the future price of crude oil. Publicly traded in the commodity markets, futures contracts for delivery over the next six years continue in a steep uptrend. Whether the trend will slow for awhile we cannot know. Our scenario is that a move that began in the low $20 and is now in the mid $30 could reach $50 (see chart Light Sweet Crude Oil Forward/Futures Gap).

To construct the scenario we assumed oil would peak in 2010 at $50 in constant dollars. That is more moderate than the peak in early 1981 at more than $80 in constant dollars. Then we applied 3% per year inflation and calculated six-year averages to build a forward curve.

Economics support the price trends. Oil demand is strong with world economic growth paced by developing countries, especially China. Supply growth is limited as spare capacity has virtually disappeared. The largest producing fields in the Middle East are now mature. It will take time, large amounts of capital and a secure political climate to boost producing rates.



Monetary factors favor oil investment as interest rates below inflation drive investors to real assets for protection against the dollar losing value. If similar past periods are any guide, the authorities may not raise interest rates above inflation for the rest of the decade.

Environmental factors favor higher oil and gas price. Coal is still a quarter of world primary energy supply. Cleaner oil and gas are undervalued as long as we tolerate environmentally disadvantageous coal.

Political factors favor higher oil price in consuming countries and producing countries. Consuming governments often resort to artificial forces to hold down oil price that can appear to work temporarily.

In producing countries we have seen time and again that oil production goes down when international oil companies are not welcome. After Iran, Iraq and Venezuela, now Saudi Arabia appears vulnerable to political change that may bring about production decline.

Too much of a gain in oil price might cause problems of economic adjustment though we think much of the concern expressed is exaggerated. Nonetheless we have a threshold of 60% gain in monthly price compared to a year earlier when we start to become concerned about weak demand for oil. October futures currently near $43 a barrel would have to remain above $52 for the 60% threshold to be breached.

One-Year Futures Point to Higher Cash Flow and Profits

CNOOC reports operations quarterly and financial results semiannually. Quarterly volumes and prices are stated in common international terms. We relate natural gas and oil price to the quotes for commodities traded on the New York Mercantile Exchange (see table Next Twelve Months Operations).

Investors who want calendar year estimates can find 2004 in the table. For 2005 we suggest using the next twelve months as a rough estimate. Estimates can change frequently along with oil markets.

CNOOC Limited
Next Twelve Months Operations

	Q1 3/31/04	*Q2 6/30/04*	*Q3E 9/30/04*	*Q4E 12/31/04*	***Year 2004E***	*Q1E 3/31/05*	*Q2E 6/30/05*	***Next Twelve Months 6/30/05***
Volume								
Natural gas (bcf)	29	33	33	33	**129**	32	33	**132**
Natural Gas (mmcfd)	323	361	361	361	**351**	361	361	**361**
Days	91	91	92	92	**366**	90	91	**365**
Oil (mmb)	28	28	28	28	**112**	28	28	**112**
Oil (mbd)	307	307	307	307	**307**	307	307	**307**
Total gas & oil (bcf)	197	200	202	202	**802**	198	200	**803**
Total gas & oil (mbd))	360	367	367	367	**365**	367	367	**367**
Price								
Natural gas ($/mcf)								
Henry Hub ($/mmbtu)	5.64	6.10	5.36	5.44	**5.64**	6.51	5.92	**5.81**
Company	2.55	3.15	3.15	3.15	**3.02**	3.15	3.15	**3.15**
Oil ($/bbl)								
WTI Cushing	35.23	38.34	43.25	43.86	**40.17**	42.83	41.63	**42.89**
Company	30.72	33.64	38.46	39.00	**35.47**	38.09	37.02	**38.14**
Total gas & oil ($/mcf)	4.74	5.21	5.88	5.95	**5.45**	5.82	5.68	**5.83**
Revenue ($mm)								
Natural Gas	75	103	105	105	**388**	102	103	**415**
Oil	857	939	1,085	1,100	**3,980**	1,051	1,033	**4,269**
Other								
Total	932	1,042	1,189	1,205	**4,368**	1,153	1,136	**4,684**

Semiannual financial results are reported in the currency of China, the renminbi, also known as the yuan, pronounced “wahn” (see table Next Twelve Months Financial Results). Projected cash flow is higher following recently reported results. After jumping to 84% from 77%, the current cash flow margin, Ebitda margin, is among the highest of companies in our coverage. We are not aware of specific temporary factors, but we would not be surprised to see that margin recede somewhat.

Investors who try to compare current earnings projections with those we published about three months ago need to keep in mind that the stock has split five for one in China. Earnings per share on the NTM table are for Chinese shares.

The number of American Depositary Shares remains the same while the conversion rate of Chinese shares to ADS’s has been adjusted accordingly. Earnings per share in the masthead are for ADS’s.

CNOOC Limited
Next Twelve Months Financial Estimates

	Year 2003	*H1 6/30/04*	*H2E 12/31/04*	*Year 2004E*	*H1E 6/30/05*	*Next Twelve Months 6/30/05*
Revenue (mmRMB)						
Natural Gas (from Q table)	**2,480**	1,474	1,720	**3,194**	1,701	**3,421**
Oil (from Q table)	**25,680**	14,840	17,500	**32,340**	17,221	**34,722**
Other	**(44)**	(129)	(129)	**(258)**	(129)	**(258)**
Total	**28,116**	16,028	19,091	**35,119**	18,793	**37,885**
Expense						
Fixed	**3,266**	1,452	1,452	**2,903**	1,452	**2,903**
Variable	**3,266**	1,452	1,710	**3,162**	1,684	**3,394**
Other	**-**			**-**		**-**
Ebitda	**21,628**	13,411	16,058	**29,469**	15,787	**31,845**
Exploration	**848**	551	551	**1,102**	551	**1,102**
Deprec., Deplet., & Amort.	**4,643**	2,648	2,648	**5,296**	2,648	**5,296**
Ebit	**16,137**	10,212	12,859	**23,071**	12,588	**25,447**
Interest	**-**	-	-	**-**	-	**-**
Ebt	**16,137**	10,212	12,859	**23,071**	12,588	**25,447**
Income Tax	**4,627**	3,221	4,501	**7,722**	4,406	**8,907**
Net Income	**11,510**	6,991	8,359	**15,350**	8,182	**16,541**
Shares (millions)	**41,107**	41,124	41,124	**41,124**	41,124	**41,124**
Per share (RMB)	**0.28**	0.17	0.20	**0.37**	0.20	**0.40**
Ebitda Margin	**77%**	84%	84%	**84%**	84%	**84%**
Tax Rate	**29%**	32%	35%	**33%**	35%	**35%**

Present Value at Real Price and Real Return

NTM estimates determine to a large extent the first year of projected cash flow that we discount to present value (see table Present Value of Oil and Gas Reserves). The calculation is set up on the basis of a barrel of proven reserves, 0.49 developed and 0.51 undeveloped.

While there are many assumptions that could be discussed, discount rate and oil price are especially important. Price escalation and discount rate interact. In this case we make the simplification of dealing in constant dollars. That assumes price escalation, cost escalation and discount rate are all net of inflation.

For discount rate we use a 7% real return per year on an unlevered basis. That means a buyer who pays present value would earn 7% per year above inflation if all the projections were to materialize as stated.

First year oil price is from the futures market. We hold it constant at an arbitrary level thereafter. The assumed price listed in the upper right hand corner is the commonly quoted benchmark Light, Sweet Crude. A price of $35 a barrel leads to present value of future cash flow from a barrel of reserves equal to $13.00 (see box in right hand column).

CNOOC Limited
Present Value of Oil and Gas Reserves

Volume Decline (%/yr):	14	Nymex Oil Price Post 2005 ($/bbl)	35
Volume Enhancement (%/yr):	17	Price/Nymex Post 2005 (%):	84
Variable Cost (%):	10	Real Discount Rate (%/yr):	7.0
Capex/Cash Flow (%):	25		

Year	Basic (bbl)	Volume Enhanced (bbl)	Total (bbl)	Price ($/bbl)	Revenue ($)	Fixed Cost ($)	Var. Cost ($)	Cash Flow ($)	Cap Ex ($)	Free CF ($)	Disc Factor	Present Value ($)
Total 2005 through 2024; years ending on 6/30												
	0.491	0.509	1.000	29.80	29.80	2.98	2.98	23.84	3.27	20.57	0.63	13.00
2005	0.072	0.000	0.072	34.99	2.51	0.15	0.25	2.11	0.53	1.58	0.97	1.53
2006	0.062	0.011	0.073	29.40	2.13	0.15	0.21	1.77	0.44	1.33	0.90	1.20
2007	0.053	0.020	0.073	29.40	2.16	0.15	0.22	1.79	0.45	1.34	0.84	1.14
2008	0.046	0.028	0.074	29.40	2.18	0.15	0.22	1.82	0.45	1.36	0.79	1.07
2009	0.039	0.036	0.075	29.40	2.21	0.15	0.22	1.84	0.46	1.38	0.74	1.02
2010	0.034	0.042	0.076	29.40	2.23	0.15	0.22	1.86	0.47	1.40	0.69	0.96
2011	0.029	0.048	0.077	29.40	2.26	0.15	0.23	1.88	0.47	1.41	0.64	0.91
2012	0.025	0.053	0.078	29.40	2.29	0.15	0.23	1.91	0.00	1.91	0.60	1.15
2013	0.022	0.045	0.067	29.40	1.97	0.15	0.20	1.62	0.00	1.62	0.56	0.91
2014	0.019	0.039	0.058	29.40	1.70	0.15	0.17	1.38	0.00	1.38	0.53	0.72
2015	0.016	0.034	0.050	29.40	1.46	0.15	0.15	1.17	0.00	1.17	0.49	0.57
2016	0.014	0.029	0.043	29.40	1.26	0.15	0.13	0.98	0.00	0.98	0.46	0.45
2017	0.012	0.025	0.037	29.40	1.08	0.15	0.11	0.83	0.00	0.83	0.43	0.35
2018	0.010	0.021	0.032	29.40	0.93	0.15	0.09	0.69	0.00	0.69	0.40	0.28
2019	0.009	0.018	0.027	29.40	0.80	0.15	0.08	0.57	0.00	0.57	0.37	0.22
2020	0.008	0.016	0.024	29.40	0.69	0.15	0.07	0.47	0.00	0.47	0.35	0.17
2021	0.007	0.014	0.020	29.40	0.60	0.15	0.06	0.39	0.00	0.39	0.33	0.13
2022	0.006	0.012	0.017	29.40	0.51	0.15	0.05	0.31	0.00	0.31	0.31	0.10
2023	0.005	0.010	0.015	29.40	0.44	0.15	0.04	0.25	0.00	0.25	0.29	0.07
2024	0.004	0.009	0.013	29.40	0.38	0.15	0.04	0.19	0.00	0.19	0.27	0.05

Present Value per Barrel Leads to Present Value per Share

We illustrate the calculation of Net Present Value (NPV) in a sensitivity table where each column is headed by a different oil price (see table Net Present Value Calculation). Oil price corresponds to present value per barrel which then leads step by step to the final result. The price of $35 a barrel corresponds to our standardized present value of $59 a share. Turn the comparison around and a stock price of $49, near the current quote, corresponds to a constant real oil price of $29 a barrel.

Kurt H. Wulff, CFA

CNOOC Limited
Net Present Value Calculation

Constant Oil Price ($/bbl):	29	35	40	50
Present Value per Barrel ($):	10.80	13.00	14.80	18.50
Oil and Gas reserves (million barrels equivalent):	1,875	1,875	1,875	1,875
Present Value of Oil and Gas Reserves ($mm):	20,200	24,370	27,700	34,700
Total	20,200	24,370	27,700	34,700
Debt ($mm):	-	-	-	-
Present Value of Equity ($mm):	20,200	24,370	27,700	34,700
Shares (mm):	411	411	411	411
Net Present Value ($/sh):	49	59	67	84

Research Methodology/Ratings Description: McDep Associates is an independent research originator focused on oil and gas stocks exclusively. The firm applies the thirty years of experience of its analyst to estimate a present value of the oil and gas resources and other businesses of covered companies. That value is compared with a company's stock market capitalization and debt. Stocks with low market cap and debt relative to present value tend to outperform stocks with high market cap and debt relative to present value. Buy recommendations are expected to deliver a total return better than 7% per year above inflation. Hold recommendations assume the attributes of the underlying business are reflected in the current price of the stock. Sell recommendations are expected to deliver a negative total return less than 7% per year including the effects of inflation.