McDep LLC Independent Stock Idea March 24, 2008



Rating: Buy S&P 500: 1352 Intraday

## **Petrobras** Oil Growth at a Reasonable Price

Symbol	PBR	<i>Ebitda Next Twelve Months ending 3/31/09 (US\$mm)</i> 34,				
Rating		North American Natural Gas/Ebitda (%)	0			
Price (US\$/sh)	97.17	Natural Gas and Oil Production/Ebitda (%)	84			
Pricing Date	3/24/08	Adjusted Reserves/Production NTM	9.5			
Shares (mm)	2194	EV/Ebitda	7.2			
Market Capitalization (US\$mm)	213,000	PV/Ebitda	8.7			
Debt (US\$mm)	35,000	Undeveloped Reserves (%)	55			
Enterprise Value (EV) (US\$mm)	248,000	Natural Gas and Oil Ebitda (US\$/boe)	33.40			
Present Value (PV) (US\$mm)	302,000	Present Value Proven Reserves(US\$/boe)	22.34			
Net Present Value (US\$/share)	122	Present Value Proven Reserves(US\$/mcfe)	3.72			
Debt/Present Value	0.12	Earnings Next Twelve Months (US\$/sh)	8.02			
McDep Ratio - EV/PV	0.82	Price/Earnings Next Twelve Months	12			
Dividend Yield (%/year)	1.7	Indicated Annual Dividend (US\$/sh)	1.70			
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.						
Estimated present value	presumes a lo	ong-term price for oil of US\$80 a barrel and natural gas, \$11 a million	on btu.			
The Brazilian Government has voting control and with public sector entities owns 40% of Petrobras' equity.						

## Summary

The common stock of **Petroleo Brasileiro SA** also known as **Petrobras (PBR)** offers unlevered appreciation potential of 22% to estimated net present value (NPV) of \$122 a share. Concentration on oil production at a time of increased oil price generated a high level of unlevered cash flow (Ebitda) displayed in fourth quarter results according to U.S. accounting reported last week. Natural gas and downstream (Other) made additional contributions (see table <u>Next Twelve Months Operating and Financial Estimates</u>). On December 18 we increased NPV from \$105 a share prompted by an increase in long-term oil price for calculating present value to \$80 from \$66 a barrel. NPV includes 21% for offshore oil and gas in the early stages of discovery in addition to operations mostly supported by projected cash flow capitalized at unlevered multiples (PV/Ebitda) related to reserve life (Adjusted R/P) (see table <u>Functional Cash Flow and Present Value</u>). Take out that 21% and one could say that the price of Petrobras stock can be justified by NPV at \$80 oil without counting the world's most exciting new oil and gas discoveries of the past several years.

Kurt H. Wulff, CFA

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			Petr	obras						
Next Twelve Months Operating and Financial Estimates										
(U.S. Accounting, US\$)										
									Next	
									Twelve	
	Q3	Q4	Year	QlE	Q2E	Q3E	Q4E	Year	Months	
	9/30/07	12/31/07	2007	3/31/08	6/30/08	9/30/08	12/31/08	2008E	3/31/09	
Volume										
Natural Gas (mmcfd)	2,310	2,280	2,285	2,280	2,286	2,310	2,310	2,297	2,304	
Days	92	92	365	91	91	92	92	366	365	
Oil (mbd)	1,908	1,905	1,907	2,000	2,000	2,000	2,000	2,000	2,000	
Total gas & oil (mmb)	211	210	835	217	217	219	219	872	870	
Total gas & oil (mbd)	2,293	2,285	2,288	2,380	2,381	2,385	2,385	2,383	2,384	
Price										
Natural gas (\$/mcf)	5.13	4.99	4.92	5.00	5.00	5.00	5.00	5.00	5.00	
Oil (\$/bbl)										
WTI Cushing	75.48	90.67	72.28	97.87	101.58	99.71	98.45	99.40	99.31	
Brent	74.87	88.69	72.52	95.73	99.36	97.53	96.30	97.23	97.14	
Company	63.82	75.63	60.89	81.63	84.73	83.17	82.12	82.91	82.84	
Total gas & oil (\$/bbl)	58.27	68.04	55.68	73.39	75.97	74.58	73.71	74.41	74.33	
NY Harbor 3-2-1 (\$/bbl)	12.64	8.19	14.37	7.48	13.17	12.87	9.83	10.84	11.81	
Revenue (mm\$)										
Natural gas	1,090	1,048	4,106	1,037	1,040	1,063	1,063	4,203	4,205	
Oil	11,203	13,255	42,395	14,857	15,421	15,303	15,110	60,690	60,470	
Total production	12,293	14,303	46,502	15,894	16,461	16,365	16,173	64,893	64,675	
Other	11,154	11,021	22,175	11,021	11,021	11,021	11,021	44,085	44,085	
Total	23,447	25,324	48,771	26,916	27,482	27,386	27,194	108,978	108,760	
Expense			,					, í	,	
Production			25,451	8,742	9,053	9,001	8,895	35,691	35,571	
Other			16,699	9,652	9,652	9,652	9,652	38,609	38,609	
Ebitda (mm\$)			,					<i>,</i>	,	
Production			21,050	7,152	7,407	7,364	7,278	29,202	29,104	
Other			5,476	1,369	1,369	1,369	1,369	5,476	5,476	
Total Ebitda	7,081	6,846	26,526	8,521	8,776	8,733	8,647	34,678	34,580	
Exploration	283	634	1,423	356	356	356	356	1,423	1,423	
Deprec., Deplet., & Amort.	1,277	1,728	5,544	1,386	1,386	1,386	1,386	5,544	5,544	
Ebit	5,521	4,484	19,559	6,780	7,035	6,992	6,905	27,711	27,613	
Interest	115	(21)	554	139	139	139	139	554	554	
Ebt	5,406	4,505	19,005	6,641	6,896	6,853	6,766	27,157	27,059	
Income Tax	1,589	1,697	5,888	2,324	2,414	2,399	2,368	9,505	9,471	
Net Income (mm\$)	3,817	2,808	13,117	4,317	4,482	4,454	4,398	17,652	17,588	
Shares (millions)	2,194	2,194	2,194	2,194	2,194	2,194	2,194	2,194	2,194	
Per share (\$)	1.74	1.28	5.98	1.97	2.04	2.03	2.01	8.05	8.02	
Ebitda Margin (E&P)			45%	45%	45%	45%	45%	45%	45%	
Tax Rate	29%	38%	31%	35%	35%	35%	35%	35%	35%	

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Petrobras									
Functional Cash Flow and Present Value									
				Present					
1	NTM Ebitda	Adjusted	PV/	Value					
	<u>(US\$mm)</u>	<u>R/P</u>	<u>Ebitda</u>	<u>(US\$mm)</u>					
Rest of World Natural Gas	1,892	10.5	7.9	15,000	5%				
Oil	27,212	9.3	7.1	193,000	64%				
Downstream	5,476		5.5	30,000	10%				
Pre Salt Deep Water Oil				65,000	21%				
	34,580	9.5	8.8	303,000	100%				
Debt (US\$mm)					35,000				
Net Present Value (US\$mm)					268,000				
Shares (mm)					2,194				
Net Present Value - Standard Estimate (US\$/sh)	)				122				
Net Present Value - Approximation by Correlation				110					

**Disclaimer:** This analysis was prepared by Kurt Wulff, Manager of McDep LLC as of January 1, 2008. Previously Mr. Wulff was doing business as McDep Associates. The firm used sources and data believed to be reliable, but makes no representation as to their accuracy or completeness. This analysis is intended for informational purposes and is not a solicitation to buy or sell a security. Past performance is no guarantee of future results.

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