

Rating: Buy
S&P 500: 1175

Total S.A. **African Oil, European Refining**

<i>Symbol</i>	TOT	<i>Ebitda Next Twelve Months ending 12/31/05 (US\$m)</i>	25,600
<i>Rating</i>	Buy	<i>North American Natural Gas/Ebitda (%)</i>	1
<i>Price (US\$/sh)</i>	106.07	<i>Natural Gas and Oil Production/Ebitda (%)</i>	70
<i>Pricing Date</i>	11/16/04	<i>Adjusted Reserves/Production NTM</i>	9.6
<i>Shares (mm)</i>	1228	<i>EV/Ebitda</i>	6.2
<i>Market Capitalization (US\$m)</i>	130,300	<i>PV/Ebitda</i>	6.5
<i>Debt (US\$m)</i>	28,100	<i>Undeveloped Reserves (%)</i>	48
<i>Enterprise Value (EV) (US\$m)</i>	158,400	<i>Natural Gas and Oil Ebitda (US\$/boe)</i>	20.50
<i>Present Value (PV) (US\$m)</i>	166,900	<i>Present Value Proven Reserves(US\$/boe)</i>	9.81
<i>Net Present Value (US\$/share)</i>	113	<i>Present Value Proven Reserves(US\$/mcf)</i>	1.64
<i>Debt/Present Value</i>	0.17	<i>Earnings Next Twelve Months (US\$/sh)</i>	9.73
<i>McDep Ratio - EV/PV</i>	0.95	<i>Price/Earnings Next Twelve Months</i>	11
<i>Dividend Yield (%/year)</i>	2.9	<i>Indicated Annual Dividend (US\$/sh)</i>	3.11

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 **Total (TOT)**, the leading Euro Oil that offers international diversification with emphasis on growing oil production in Africa. Liquefied natural gas (LNG) is a growth business for mega cap companies like Total who can manage giant projects. Prospects are better than in the past for the company's leadership position in European refining. Chairman Thierry Desmarest has built a respectable record as a capable and energetic leader. We see potential appreciation to present value of \$113 a share that relates to a constant real oil price of \$35 a barrel. The average futures price for continuous delivery over the next six years is about \$40 a barrel.

African Oil Producer

To no surprise for a mega cap energy company, Total's oil resources account for the dominant portion of its value (see table Functional Cash Flow and Present Value). While the company is diversified globally, it has enjoyed its greatest success in Africa that accounts for 40% of proven oil reserves. West Africa production is projected to grow from about 500,000 barrels daily (bd) to about 800,000 bd in the five years through 2008. The largest single new field for Total may be Dalia expected to flow 240,000 bd (40% TOT) at its peak. Indicating the direction of future production and the need for investment, more than half of proven reserves in Africa are reported as undeveloped

In its natural gas business Total is represented in 40% of the world's liquefied natural gas capacity. The company has a quarter of the Dolphin project in Qatar designed to produce two billion cubic feet daily beginning in about 2007.

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Adjusted reserve life of 9.6 years for oil and natural gas, slightly less than for peer companies, would be a longer 12.6 years before adjustment. Undeveloped reserves account for 48% of the total. Our adjustment counts undeveloped reserves at half the weight of developed reserves because the development investment has not yet been made.

Total					
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>	
Overseas Natural Gas	5,475	11.1	7.0	38,300	23%
Oil	12,539	8.9	6.3	79,000	47%
Downstream	7,586		6.5	49,600	30%
	25,600	9.6	6.5	166,900	100%
Debt (US\$mm)					28,100
Net Present Value (US\$mm)					138,800
Shares (mm)					1,228
Net Present Value (US\$/sh)					113

Largest European Refiner

Combining the refining properties of predecessor Total with Elf Aquitaine and Belgian Petrofina, the company has about 20% of capacity in Western Europe and the U.K. Europe refining margin appears to have increased more in recent quarters, but still remains near half that of N.Y. Harbor in our projection. (Multiply the margin in dollars per barrel by seven to get the rough equivalent in dollars per ton.)

An active Atlantic gasoline trade has helped balance the European market. Drivers are more apt to fill 'er up with diesel to power their speed trips on the autobahn. That leaves less demand for gasoline that is a normal product of distillation and cracking.

Whether it is gasoline, diesel, or jet fuel, transportation fuels are demanding a greater share of the oil barrel and oil has no competition for transportation fuel. Stationary, or non-transportation, demand is growing also, but that can be satisfied by natural gas as well as oil. At the same time most of the incremental crude oil supply requires more refining. Meanwhile excess refining capacity has been worked off or retired. As a result, Total should continue to generate strong cash from refining/marketing even though it may not be predictable from quarter to quarter.

Cash Flow Continues as a High Level

Commodity price drives cash flow in our model (see table Next Twelve Months Operating and Financial Estimates). We hold volume constant in our projection expecting to be favorably surprised as the company attempts to achieve 4% per year annual volume growth.

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Total S.A.
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/d)	4,951	4,915	4,386	4,386	4,671	4,386	4,386	4,386	4,386	4,386
Oil (mbd)	1,723	1,698	1,674	1,674	1,692	1,674	1,674	1,674	1,674	1,674
Total gas & oil (mmb)	232	229	221	221	903	216	219	221	221	878
Price										
Dollar (euro/\$)	1.25	1.20	1.22	1.29	1.24	1.29	1.29	1.29	1.29	1.29
Oil (\$/bbl)										
WTI Cushing	35.23	38.34	43.89	49.36	41.71	46.96	46.24	45.10	44.02	45.58
Brent	32.00	35.40	41.50	46.67	38.89	44.40	43.72	42.64	41.62	33.46
Company (euro/bbl)	17.92	20.65	23.81	25.23	21.85	24.00	23.63	23.05	22.50	23.29
Refining Margin										
NY Harbor 3-2-1 (\$/bbl)	6.98	12.62	7.83	6.31	8.43	6.93	8.19	7.43	6.39	7.24
Europe (\$/t)	21.60	34.40	32.90	24.99	28.47	27.43	32.44	29.42	25.28	28.65
Revenue (mmeuro)										
Production	4,155	4,730	5,269	5,583	19,737	5,196	5,172	5,101	4,978	20,447
Other	23,705	24,167	25,842	25,842	99,556	25,842	25,842	25,842	25,842	103,370
Total	27,860	28,897	31,111	31,425	119,293	31,038	31,015	30,943	30,821	123,817
Expense										
Production	893	1,305	1,711	1,869	5,778	1,675	1,663	1,627	1,566	6,532
Other	22,537	22,880	24,349	24,421	94,187	24,393	24,340	24,368	24,409	97,510
Ebitda (mmeuro)										
Production	3,263	3,425	3,557	3,714	13,959	3,521	3,509	3,473	3,412	13,915
Other	1,168	1,286	1,494	1,422	5,370	1,450	1,503	1,475	1,433	5,860
Total Ebitda	4,430	4,711	5,051	5,136	19,329	4,970	5,012	4,948	4,845	19,775
Exploration	73	109	81	81	344	81	81	81	81	324
Deprec., Deplet., & Amort.	1,268	1,237	1,280	1,280	5,065	1,280	1,280	1,280	1,280	5,120
Excess tax and other	(475)	(644)	(783)		(1,902)					
Operating Income										
Upstream	2,819	3,135	3,406							
Downstream	546	727	752							
Chemicals	199	147	315							
Total operating income	3,564	4,009	4,473							
Excess tax and other	475	644	783							
Ebit	3,089	3,365	3,690	3,775	13,919	3,609	3,651	3,587	3,484	14,331
Interest	42	43	33	33	151	33	33	33	33	132
Ebt	3,047	3,322	3,657	3,742	13,768	3,576	3,618	3,554	3,451	14,199
Income Tax	1,067	1,163	1,280	1,310	4,819	1,252	1,266	1,244	1,208	4,970
Net Income (mmeuro)	1,981	2,159	2,377	2,432	8,949	2,325	2,351	2,310	2,243	9,230
Shares (millions)	1,246	1,237	1,228	1,228	1,234	1,228	1,228	1,228	1,228	1,228
Per share (euro)	1.59	1.75	1.94	1.98	7.25	1.89	1.91	1.88	1.83	7.51
Ebitda Margin (E&P)	79%	72%	68%	67%	71%	68%	68%	68%	69%	68%
Tax Rate	35%	35%	35%	35%	35%	35%	35%	35%	35%	35%

After a gain in the last quarter of 2004, cash flow would be sustained at a high level in 2005. Of course that could change depending on how well futures prices anticipate actual prices among other factors.

The company discloses little detail of actual prices received for its production. Overseas natural gas price is particularly mysterious as information is held confidential. That seems to be the case for much of the overseas natural gas business where long-term contracts are usually secured at the same time development commitments are made. We understand that contract prices are tied in part, but not wholly to oil price on a delayed basis. We need to see more cash flow eventually to justify normal valuation of global natural gas resources.

Investors' greatest concern may be the sustainability of the current level of oil price. Energy consumers and energy investors should, in our opinion, take recent oil price action as a sign of a

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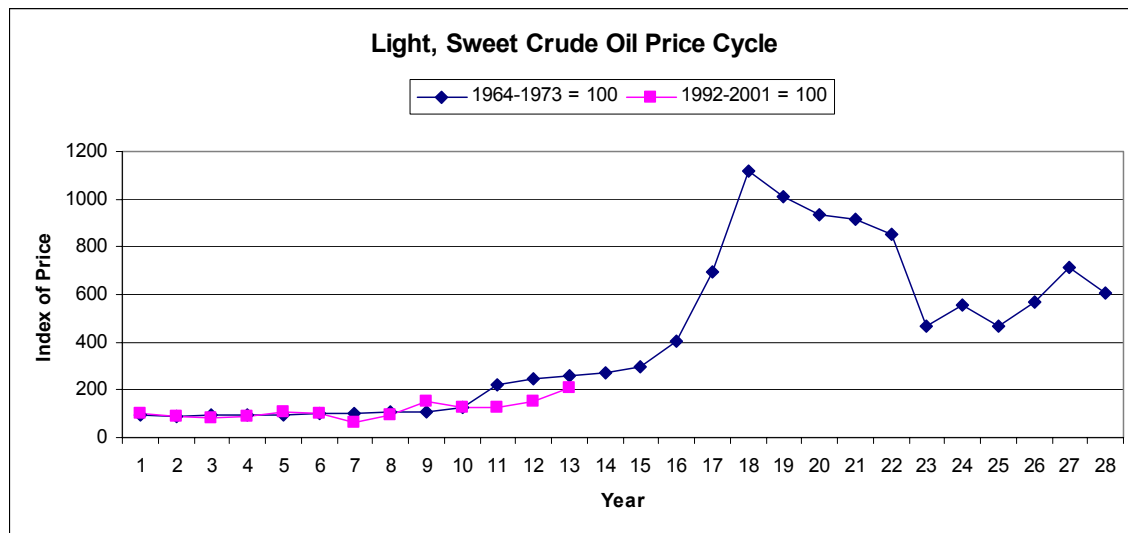
long term change to higher price. Recent softening of oil price is welcome relief for the economy while we adjust to the price increases that have occurred and prepare for those that may occur in the future.

Oil Price Move Possibly Just Starting

To offset any inclination to underestimate further potential for oil and gas price, we compare the relatively stable price period from 1992 to 2001 to the period from 1964 to 1973. Each was a ten year period that immediately preceded a sharply lower stock market in 2002 and in 1974. After quiescence, oil price started moving up in each case. We may be in the early stages of a new historic move (see chart [Light, Sweet Crude Oil Price Cycle](#)).

Frankly, few investors would give much weight to the likelihood of continued oil price strength. Contrast that with the growing chorus for a weaker dollar. It may just be that oil price is not high, but the real value of the dollar is low. That, too, is a parallel to historical experience.

Let us imagine how the cycle might unfold. By the way we chose to draw the chart Year 13 corresponds to 1976 and 2004. Once the move got going in the previous cycle, the annual average oil price did not decline until Year 19 (1982). The annual peak of 1100, or 11 times the first ten year average, was too high to be sustained. It might be less disruptive economically if the peak ahead of us were lower and the decline shallower. The end point in Year 28 at 600 implies a tripling over the next 15 years. If higher oil price unfolded gradually it would give everyone time to adjust.



Kurt H. Wulff, CFA

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