

Energy (Oil & Gas)  
Colombia  
Credit Analysis

**Ecopetrol S.A.**

**Ratings**

Security Class	Current Rating
Foreign Currency IDR	BB+
Local Currency IDR	BBB-

**Outlook**

Stable

**Financial Data**

Ecopetrol S.A.	12/31/06	12/31/05
Total Assets (US\$ Mil.)	18,811	14,286
Total Equity (US\$ Mil.)	9,302	5,810
Net income (US\$ Mil.)	1,437	1,402
EBITDA (US\$ Mil.)	2,570	2,549
EBTIDA Margin (%)	33	38

**Analysts**

Lucas Aristizabal  
+1 312 368-3260  
[lucas.aristizabal@fitchratings.com](mailto:lucas.aristizabal@fitchratings.com)

María Consuelo Pérez Cavallazzi  
+ 571 326 9999, ext. 1150  
[mperez@drcrcolombia.com.co](mailto:mperez@drcrcolombia.com.co)

Glauca Calp  
+571 326 9999, ext. 1110  
[calp@drcrcolombia.com.co](mailto:calp@drcrcolombia.com.co)

**Rating Rationale**

- Ecopetrol S.A.'s (Ecopetrol) ratings are supported by the company's strong financial profile, sizable and stable reserves, steady production levels and dominant domestic market share. The ratings also reflect Ecopetrol's vulnerability to fluctuations in international commodity prices and tightening environmental regulations requiring material investment in downstream operations. Fluctuations in energy prices are generally mitigated by the company's hedging policy.
- Ecopetrol's ratings are strongly linked with the credit profile of the Republic of Colombia (local and foreign currency ratings of 'BBB-' and 'BB+', respectively), the company's current ultimate shareholder. This connection is based on the Colombian government's ownership of the company. Ecopetrol's ongoing capitalization process is expected to separate the company from the government's budgetary process, giving the company greater financial planning independency. This is considered positive for Ecopetrol's credit profile, as the company would be more competitive, independent and flexible.
- Ecopetrol must participate in a competitive bid process to acquire new exploratory blocks. Since 2003, oil and gas exploration and production (E&P) has become a more competitive business for Ecopetrol, when the administration of Colombian petroleum resources was removed from the company and assigned to the National Hydrocarbons Agency (ANH). As a result, Ecopetrol must increase its capital expenditures and enter into joint ventures with other companies in order to develop future reserves and increase crude production levels to remain competitive. Before this, the company had participation rights in successful exploration blocks.
- Due to the aforementioned fundamental business change, Ecopetrol established a capital-expenditure program of approximately US\$20 billion for the 2007–2015 period, which is expected to average approximately US\$2.0 billion–US\$2.5 billion per year. Over the next 2–3 years, the company plans to finance this capital-expenditure program using cash available estimated at approximately US\$4.4 billion after receiving proceeds from and equity issuance of US\$2.9 billion under an initial public offering (IPO) and US\$1.5 billion of cash on hand as of June 30, 2007. The company also plans to issue debt to finance the remaining portion of its capital expenditures. Fitch Ratings expects leverage, as measured by total debt to EBTIDA, to range between 1.5 times (x) and 2.0x over the medium term.

**Key Rating Drivers**

- Credit profile of the Republic of Colombia.
- Ecopetrol's strong financial profile.
- Fluctuations in international oil prices.

**Liquidity and Debt Structure**

Ecopetrol's liquidity position is currently strong, as the company has no financial debt and an estimated US\$4.4 billion of cash on hand, as previously mentioned. Going forward, liquidity is expected to remain strong for the company, although tighter than current levels as its capital expenditures ramp up and debt increases.

### **Corporate Strategy**

Ecopetrol's strategy has been affected primarily by Decree 1760, which was announced in June 2003 and became effective as of Jan. 1, 2004. The decree represented a major change in the structure of Colombia's energy sector. With the aforementioned decree, Ecopetrol became a public stock company focusing on the technical and commercial aspects of the business, driven by profitability criteria. The administration of petroleum resources, including land and exploration contracts, was given to the ANH (as discussed in the ANH section below).

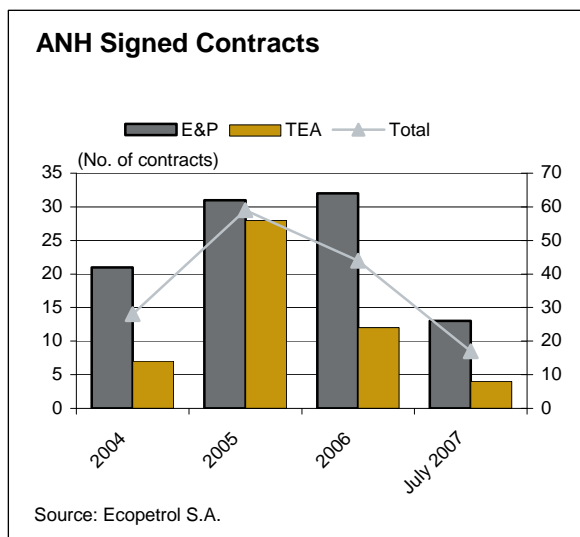
The decree marks a relevant change in Ecopetrol's profile in terms of operations and strategy. In the past, the company was afforded low-risk access to oil reserves through its exclusive option to participate, post exploration, in any commercial discoveries made by the private sector. This legal mandate allowed Ecopetrol to assume almost any participation in the project. Going forward, while existing association agreements remain in place, future agreements depend on Ecopetrol's own strategy and performance. The company must compete for exploration blocks going forward, or it may enter into joint ventures with other energy partners. Production from existing agreements is significant, with association-related production accounting for 50% of the company's average crude oil output during 2006.

Ecopetrol's current strategic plan for 2007–2011 encompasses its growth and operational consolidation goals. The company's growth goals are to be vertically integrated, producing 550,000 barrels of oil equivalent (boe) per day by 2011; to have some of the top refineries and transportation systems in Latin America; and to be the best hydrocarbons supply option for Colombia. The 550,000 boe per day goal seems somewhat aggressive, although it is possible as Ecopetrol's production has presented an upward trend during recent years due to higher investment in the business. Furthermore, the company has increased its exploration efforts in order to be more competitive going forward. Additionally, the current capitalization process gives the company financial flexibility. Ecopetrol's operational consolidation seeks to strengthen its vertical integration.

Understanding the limitations that stem from being a public-sector company, Ecopetrol and the Colombian government started the company's capitalization process, which, during its first phase, aims to sell 10.1% of the company so that it could be more independent from the central government and become a mixed-capital company. The main benefit from the capitalization process is that, going forward, Ecopetrol would have budgetary impendency, which would allow it to raise debt to finance its capital expenditure needs. In addition, the company would be able to retain human capital by offering more competitive remuneration and it would have more operational flexibility, as its contracting process would become easier. In the past, the bureaucracy imbedded in the company's contracting process somewhat hindered Ecopetrol's flexibility to operate.

### **ANH**

The Colombian government's strategy of promoting additional private-sector investment in the petroleum business is evidenced by the increased number of contracts granted. From 2005–July 2007, the ANH signed 76 E&P contracts and 44 technical evaluation agreements (TEA). During 2006, the ANH opened 2.3 million hectares for E&P contracts. Approximately 41% of this area, most of which was in the Sinu area, was assigned to BHP Billton.



The Colombian government aims to improve the oil sector's recovery with more attractive investment conditions. The new contract model allows private investors to take 100% of the production and has reduced the country's share of oil projects to 50%–55% from the previous 70%. Since 2002, royalty payments have also been cut from a flat 20% to a sliding scale of between 8% and 25%, depending on production levels. Additionally, this decree eliminates the right of Ecopetrol to come in post exploration. In contrast to the past, Ecopetrol would also have a measure of control and participation in the operation of projects, with a sharing of production and investment through association agreements.

## Reserves and Production

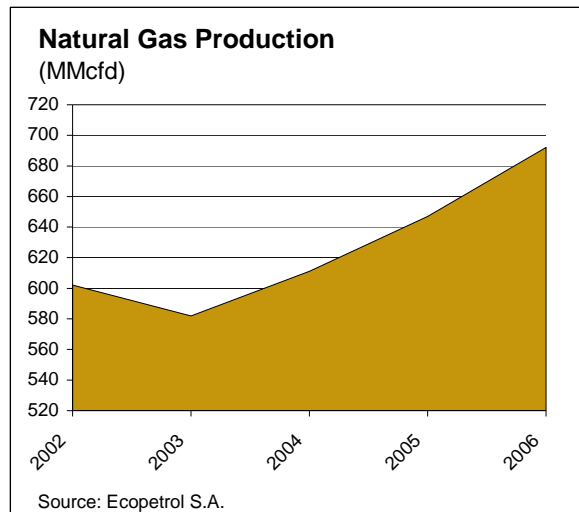
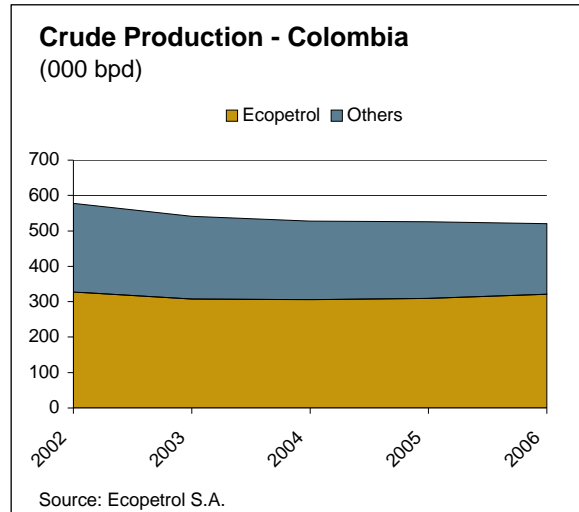
Ecopetrol generates revenues from the export of crude oil and refining products, as all domestic oil sales are derived from the sale of refined products. Approximately 60% of crude oil production is used in the domestic refinery market and the balance is exported.

In 2006, Colombia was able to reverse its declining trend in its reserves base. As of Dec. 31 2006, Colombia's proved conventional oil and gas reserves totaled 1.5 billion barrels, yielding a proved crude oil reserve life of approximately eight years; in 2006, Ecopetrol continued increasing proved oil reserves when it reported an increase in reserves to 1.18 billion barrels from 1.10 billion barrels one year earlier. The company's proved reserves are determined in accordance with the criteria and methodology of the World Petroleum Congresses (WPC) and the Society of Petroleum Engineers (SPE). These groups focused their analyses on the estimation, based on reasonable certainty, that the underlying proved hydrocarbon reserves were commercially recoverable. Ecopetrol is currently undergoing an audit of its reserves.

Ecopetrol's capital-expenditure program is largely earmarked for exploratory and exploitation activities and so far has resulted in an increase in the company's reserves and production. Ecopetrol's firm investment in E&P is forecasted to increase to between \$1.5 billion and \$2 billion per year going forward, aiming to increase oil and gas reserves and production.

In Colombia, a new exploratory cycle has begun. In 2006, there were 56 exploratory wells drilled and there have been approximately 70 this year. Currently, Ecopetrol participates in 64% of the exploration being carried out in the country. The company's near-term strategy is expected to be focused on activities near existing producing projects with relatively lower levels of risk. For larger, riskier projects, Ecopetrol is looking to participate in partnerships, as is the case with ExxonMobil Corporation and Petróleo Brasileiro S.A. (Petrobras) in the Tayrona block. Ecopetrol has participated in bidding processes in Brazil and Peru. Ecopetrol, in association with other companies, was awarded six blocks in Brazil and nine in Peru.

The country's crude production continues to moderately decline. In 2006, crude production was approximately 529,100 barrels per day (bpd), slightly up from 526,000 bpd in 2005 and 528,000 bpd in 2004, yet down from 541,000 bpd in 2003. In 2006, Ecopetrol produced approximately 316,000 bpd of crude, while 213,100 bpd was produced by other



companies. Much of Colombia's crude oil is lighter and sweeter than that of other major Latin American oil producers.

Of Colombia's total crude production, approximately 310,000 bpd are transported to the refineries, 80,000 bpd are exported by Ecopetrol and 140,000 bpd are exported by the associated producers.

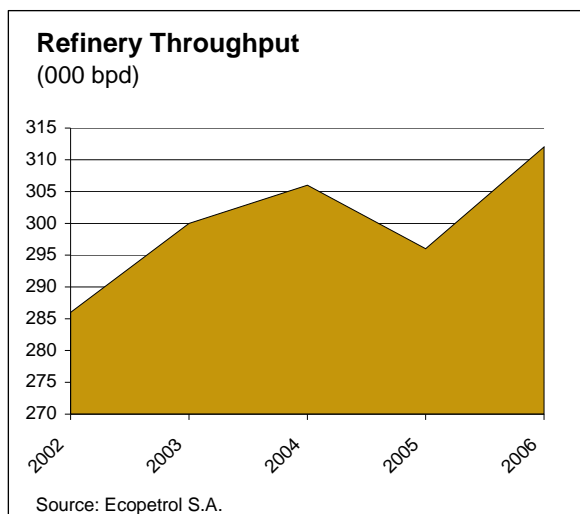
Ecopetrol's mean lifting cost continues to increase similar to most oil companies and in 2006 averaged an estimated US\$4.13 per boe. While expenses associated with gas injection and extending the life of certain fields are expected to result in higher average lifting costs in the coming years, the company's production cost structure remains competitive.

Colombia's dry natural gas reserves currently total 4.34 trillion cubic feet (tcf), with production during 2006 of 692 million cubic feet (mcf) per day. Ecopetrol's gas reserves currently amount to 3.2 tcf, and production is 383 mcf per day. An estimated 40% of the total gas output is associated with crude oil production. Ecopetrol's business plan includes additional natural gas development, though recent development has been slow. The reduction of gasoline and diesel subsidies was established to help

increase natural vehicular gas consumption and alleviate pressures on oil production, as formalized in the Consejo Nacional de Política Económica y Social (CONPES) document, which establishes the country's economic and development policies. Ecopetrol is looking to develop the domestic gas market and turn toward neighboring countries for natural gas export opportunities.

In August 2005, Ecopetrol announced the results of exploratory work in the Gibraltar field in Colombia's Siriri block. The company believes, with 90% accuracy, the field holds at least 120 million boe, divided between 630 billion cubic feet of natural gas and 15 million barrels of oil. Occidental Petroleum Corp. previously drilled in this area and abandoned the block in 2002.

One of the company's other larger projects is the development of the Tayrona block. The offshore Tayrona block was the first new contract to be assigned by the ANH. For this project, ExxonMobil, Petrobras and Ecopetrol participate on a 40/40/20 basis with an estimated total investment of US\$100 million.



### Downstream Operations

The company owns 87% of Colombia's refining capacity. Downstream operations encompass two major domestic refineries with a combined installed capacity of 319,500 bpd: Barrancabermeja (241,000 bpd) and Cartagena (78,500 bpd). During 2006, throughput at Ecopetrol's refineries was 312,000 bpd, which was a record high and compares favorably with the 306,000 bpd refined in 2004 and the 296,000 bpd in 2005. Ecopetrol expects refinery throughput for 2007 to be approximately 307,000 bpd.

Current conversion capacity at the Barrancabermeja refinery is 79.5%, translating into a output matrix of 48.4% liquefied petroleum gas (LPG) and gasoline, 31.1% diesel, 19.3% fuel oil and the balance composed of petrochemicals and lubricants. Cartagena's conversion capacity is 72% with most production being LPG and gasoline (40.6%), followed by 31.4% diesel and 28% fuel oil.

Ecopetrol currently supplies 100% and 96% of the national gasoline and diesel demand, respectively. The national fuel demand composition continues to change, with demand for gasoline declining and that for diesel increasing. The decrease in gasoline demand is mainly due to the conversion of public-service vehicles to natural gas, the higher use of ethanol-mix gasoline and lower overall demand for gasoline due to subsidies reduction. Higher diesel demand is mostly driven by the country's massive transportation systems. Ecopetrol expects this trend to continue going forward. The company expects to increase diesel production with lower sulphur content.

Fuel prices at the pump continue to be regulated and subsidized by the government. The Colombian government subsidizes the difference between the cost of importing diesel and the cost at the pump. Increasing diesel demand has pressured the company to raise imported volumes of diesel, increasing its exposure to subsidies from the government to cover price differentials.

Ecopetrol's export strategy aims to export to the most profitable markets under medium-term contracts, reducing the company's exposure to the spot market. Crude exports have increased in recent years, with the Castilla blend the most exported crude. Refined product exports have declined mainly due to higher national diesel demand. Average crude exports during year-to-date 2007, 2006 and 2005 were 84,000 bpd, 83,000 bpd and 78,000 bpd, respectively.

The most significant project is the Plan Maestro de Desarrollo (PMD) of the Cartagena refinery, which is expected to increase refining capacity from 78,500 bpd to 150,000 bpd and increase conversion capacity to 94%. It is expected to be commissioned in early 2010. In addition, the Cartagena PMD expects to increase the refinery capacity to produce better quality fuels. Total investment for this project is expected to be approximately US\$2.4 billion and to be financed 51% by Glencore and 49% by Ecopetrol. The Cartagena refinery is expected to continue to be operated by Ecopetrol after the expansion.

The second project is the addition of a hydro treating unit at the Barrancabermeja refinery to reduce sulphur content in diesel and gasoline output. This project is estimated to cost US\$500 million.

These two projects will give Ecopetrol a competitive edge, as the company would be able to offer a product that meets stricter environmental requirements. They would also increase Ecopetrol's throughput, decreasing Colombia's dependency on imported fuel. During 2006, Ecopetrol exported an average of approximately 94,000 bpd of fuel and projects to export 92,000 bpd in 2007.

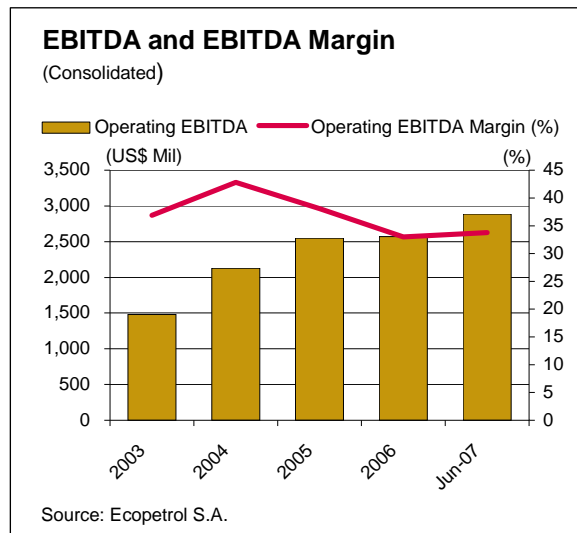
### Country Analysis

Colombia's public finances have been steadily improving over the past few years, leading to a decline in the public debt burden. While higher commodity prices have helped fiscal results, past reforms related to the social security and regional transfers programs have also played a role in improving general government balances. More importantly, growth prospects appear to have improved in a much more fundamental manner, as evidenced by robust consumption and investment growth, a better security situation and continued macroeconomic stability. The higher investment ratio, notwithstanding the rising savings ratio, is the driving force behind some of the deterioration in the current account deficit. More importantly, the current account deficit is being fully financed by foreign direct investment flows, reducing the vulnerability of external accounts. External debt ratios have also continued to decline, although most still remain above the 'BB' median.

Although some overheating of the economy is evident from rising inflation and the growing current account deficit, Fitch believes the recent interest rate hikes and the increase in banks' reserve requirements should enable a "soft landing" of the Colombian economy. Nevertheless, Fitch cautions that the past heavy foreign exchange intervention by the central bank geared toward preventing a faster appreciation of the Colombian peso has complicated the country's monetary policy.

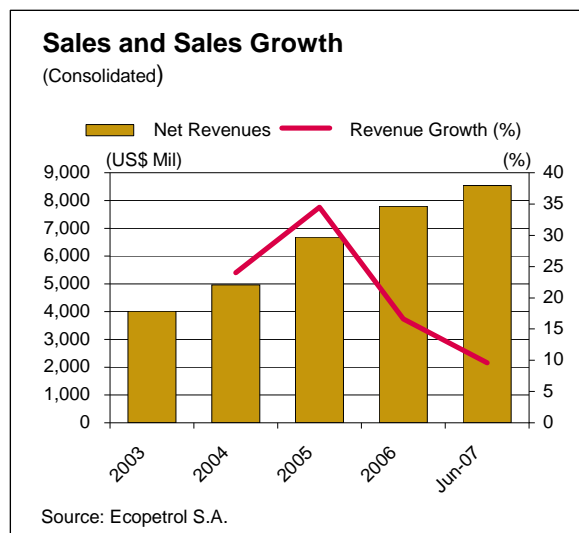
### Financial Profile

Ecopetrol's financial profile is considered strong, with steadily growing revenues, strong operational margins and no financial debt. Operating costs have increased somewhat more quickly than revenue, mainly due to higher capital expenditures for E&P.



Ecopetrol reported fiscal year-end 2006 revenues of COP18.4 trillion (US\$7.79 billion), an increase from COP15.51 trillion (US\$6.68 billion) in 2005, reflecting higher international energy and product prices. EBITDA for 2006 was COP6.06 trillion (US\$2.57 billion), versus COP5.92 trillion in 2005, due to higher revenues, the implementation of an internal organizational restructuring plan, increased refining margins and continued fuel theft reduction. EBITDA to interest coverage remained very strong during 2006.

The company's main costs are directly related to oil and gas production, as



well as royalties to the Colombian government. Royalties represent the payments for the depletion of government-owned, nonrenewable natural resources.

Ecopetrol commercializes the production from its direct operations and under association agreements that were originated prior to Dec. 31, 2003. With Decree 1760 introduced in 2003, this function was transferred to the ANH for contracts originated on Jan. 1, 2004, and thereafter.

Royalty payments to the government from Ecopetrol and third parties amounted to COP3.71 trillion as of December 2006, accounting for 31.1%

of total company costs. As of year-end 2006, Ecopetrol's net income was COP3.39 trillion. Ecopetrol's transfers to the government amounted to approximately COP9.59 trillion, which was represented by dividends (COP2.0 trillion), production royalties (COP3.71 trillion) and taxes (COP3.88 trillion).

EBITDA to interest coverage should remain strong, given the company's conservative capital structure and relatively low debt levels. Going forward, the natural gas business is expected to be a larger contributor to Ecopetrol's operations as new markets, domestically and internationally, are opening for the use of the existing gas reserves.

Ecopetrol's pension liabilities are not considered a major concern for the company's credit profile due to the meaningful steps taken by Ecopetrol to address the situation. The company is responsible for the pension liabilities of all employees that have been with Ecopetrol prior to 1990. As of July 2007, the company's pension liabilities were approximately US\$5.2 trillion, of which approximately US\$640 million remained unfunded.

Ecopetrol's future capital expenses average between \$2 billion and \$2.5 billion per year during the next nine years. As previously mentioned, the company plans to finance its investment plant using i) cash proceeds from the capitalization process, ii) internally generated cash flow and iii) debt issuances. Ecopetrol expects to collect approximately COP5.7 billion from the first phase of its capitalization process. The company has already received 81% of the proceeds from the initial public offering (IPO). The remaining balance was sold in installments and will be collected in the short term. Most of the remaining capital needs are expected to be financed with debt.

**Financial Summary – Ecopetrol S.A.**

(US\$ Mil., Years Ended Dec. 31)

	LTM 6/30/07	2006	2005	2004	2003
Period-End Exchange Rate	1,960.61	2,238.79	2,284.22	2,389.75	2,778.21
Average Exchange Rate	2,246.83	2,359.68	2,321.10	2,627.71	2,876.61
<b>Profitability</b>					
Operating EBITDA	2,882	2,570	2,549	2,126	1,478
Operating EBITDAR	2,882	2,570	2,549	2,126	1,478
Operating EBITDA Margin (%)	34	33	38	43	37
Operating EBITDAR Margin (%)	34	33	38	43	37
FFO Return on Adjusted Capital (%)	22	17	11	29	30
FCF Margin (%)	(4)	0	(0)	(1)	8
Return on Average Equity (%)	—	19	28	21	—
<b>Coverage (x)</b>					
FFO Interest Coverage	418.1	204.0	67.1	107.2	212.9
Operating EBITDA/Interest Expense	664.8	356.7	279.0	202.1	310.3
Operating EBITDAR/ Interest Expense + Rents	664.8	356.7	279.0	202.1	310.3
Operating EBITDA/Debt-Service Coverage	664.9	97.5	48.0	39.6	30.2
Operating EBITDAR/Debt-Service Coverage	664.9	97.5	48.0	39.6	30.2
FFO Fixed-Charge Coverage	418.1	204.0	67.1	107.2	212.9
FCF Debt-Service Coverage	(67.7)	1.2	—	(1.0)	6.5
(FCF + Cash and Marketable Securities)/Debt-Service Coverage	287.5	11.9	5.9	0.5	7.7
Cash Flow from Operations/Capital Expenditures	4.0	2.1	2.0	1.7	2.9
<b>Capital Structure and Leverage</b>					
FFO Adjusted Leverage	—	—	0.1	0.1	0.1
Total Debt with Equity Credit/Operating EBITDA	—	—	—	—	0.1
Total Net Debt with Equity Credit/Operating EBITDA	(0.5)	(0.1)	(0.1)	—	—
Total Adjusted Debt/Operating EBITDAR	—	—	—	—	0.1
Total Adjusted Net Debt/Operating EBITDAR	(0.5)	(0.1)	(0.1)	—	—
Implied Cost of Funds (%)	—	15.6	10.6	9.3	—
Short-term Debt/Total Debt	NM	1.0	0.6	0.4	0.3
<b>Balance Sheet</b>					
Total Assets	22,023	18,822	14,300	11,702	9,426
Cash and Marketable Securities	1,540	282	316	76	73
Short-Term Debt	—	19	44	43	44
Long-Term Debt	—	—	27	56	94
Total Debt	—	19	71	99	138
Total Equity	9,536	9,307	5,816	4,185	3,322
Total Adjusted Capital	9,536	9,326	5,887	4,284	3,460
<b>Cash Flow</b>					
FFO	1,808	1,462	604	1,117	1,009
Change in Operating Working Capital	460	224	486	(157)	30
Cash Flow from Operations	2,268	1,686	1,090	960	1,039
Total Nonoperating/Nonrecurring Cash Flow	—	—	—	—	—
Capital Expenditures	(573)	(815)	(541)	(581)	(361)
Dividends	(1,992)	(848)	(559)	(441)	(376)
FCF	(298)	24	(10)	(61)	302
Net Acquisitions and Divestitures	324	(986)	(213)	(48)	(245)
Other Investments, Net	—	—	—	—	—
Net Debt Proceeds	(52)	(51)	(32)	(55)	(212)
Net Equity Proceeds	764	1,006	580	173	160
Other Financing, Net	30	(33)	(92)	(16)	—
Total Change in Cash	768	(39)	233	(8)	4
<b>Income Statement</b>					
Net Revenues	8,531	7,793	6,683	4,967	4,007
Revenue Growth (%)	9.5	16.6	34.5	24.0	NM
Operating EBIT	2,637	2,015	1,952	1,497	1,061
Gross Interest Expense	4	7	9	11	5
Net Income	1,619	1,437	1,402	803	552

NM -Not meaningful.



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