

CRISIL Ltd.

Estimating Cash Flows

Corporate Valuation Assignment - V

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Estimating Cash Flows

We have valued the Free Cash Flow to Equity Shareholders (FCFE) of CRISIL using the following relevant financial data items.

Table 1: Financial Data Items ⁽¹⁾

	Dec-07	Dec-06	Dec-05
Gross Fixed Assets	95,09,56,551	83,84,55,710	84,41,35,430
Depreciation as a % of Fixed Assets	14.03%	7.81%	5.17%
Depreciation	13,34,00,000	6,55,00,000	4,36,00,000
Sales	2,70,88,00,207	1,56,85,30,121	84,98,49,772
Non-cash WC as a % of Sales	16.69%	-1.43%	-1.26%
Non-cash working capital	45,22,00,000	(2,25,00,000)	(1,07,00,000)
Change in Non-Cash WC	47,47,00,000	(1,18,00,000)	(5,94,00,000)
Operating Income	1,04,78,00,000	59,37,00,000	29,84,00,000
Net Profit/Loss	70,67,00,000	37,38,00,000	18,14,00,000

Source: Annual Report 2005-2007 and Reuters Knowledge.

Gross Fixed Assets: Gross Fixed Assets of the company has been a growing at CAGR of 6.14% from 2005-2007 and has increased by 13% yoy. The assets acquired during the year were mainly computers and leasehold improvements to support the expansion of business and to provide for replacement of existing assets.

Depreciation: Depreciation as a % of sales has increased to 4.92% in 2007 from 4.18% in 2006. The increase is mainly due to the increase in fixed assets acquired by the company in 2007.

Revenues, Operating Income and Net Profit: During the year 2007, sales have increased by 73% yoy and the sales have been increasing at a CAGR of 79% from 2005-2007. The operating income (EBT) has increase at a CAGR of 87% from 2005-2007 and grew by 76% yoy. The net profit also grew by 89% in 2007 and has been increasing at a CAGR of 97% from 2005-2007.

Interest expense: CRISIL continues to be a debt-free company and hence there are no financial expenses or interest expense incurred during the year.

Non-Cash WC ⁽²⁾: Sundry Debtors comprise a major portion of the Current Assets which have increased by 27% yoy (representing an outstanding of 97 days of operating revenue) as against 17% (representing an outstanding of 63 days in 2006).

Notes:

(1) Source: <http://www.crisil.com/crisil-investors/annual-financial-reports-crisil.htm#> and Reuters Knowledge

(2) Information on the current assets and current liabilities has been sourced from Annual report 2007.

Current Liabilities and Provisions include amount payable to vendors, provisions for bonus payable to staff and commissions payable to directors and advances received from clients.

In 2007, there has been an increase in non-cash working capital mainly due to the increase in sundry debtors. In the previous years, there was a negative working capital with current liabilities funding current assets.

Based on the above data items, we have calculated the FCFE for CRISIL.

FREE CASH FLOW TO EQUITY SHAREHOLDERS ⁽³⁾

(Figures in INR)	Dec-07	Dec-06	Dec-05
Net Profit/Loss	70,67,00,000	37,38,00,000	18,14,00,000
Add: Depreciation	13,34,00,000	6,55,00,000	4,36,00,000
Less: Capex	11,25,00,841	56,79,820	4,25,13,710
Less: Non-Cash WC	47,47,00,000	(1,18,00,000)	(1,55,00,000)
FCFE	25,28,99,159	44,54,20,180	19,79,86,290

ESTIMATING 2008 FCFF

Based on the above FCFE figures we have estimated the FCFE for 2008.

(Figures in INR)	Dec-08 est.	Dec-07	Dec-06	Dec-05
Net Profit/Loss	1,11,19,90,373	70,67,00,000	37,38,00,000	18,14,00,000
Add: Depreciation	19,36,62,534	13,34,00,000	6,55,00,000	4,36,00,000
Less: Capex	15,56,07,798	11,25,00,841	56,79,820	4,25,13,710
Less: Non-Cash WC	21,32,90,962	47,47,00,000	(1,18,00,000)	(1,55,00,000)
FCFE	48,45,54,147	25,28,99,159	44,54,20,180	19,79,86,290

Assumptions:

- We have estimated the Net Profit using the CAGR of 97% from 2005-2007.
- We have estimated that the Fixed Assets would grow at a CAGR of 6.14% as calculated from 2005-2007. Similarly, we have calculated depreciation to grow at a CAGR of 74.92% from 2005-2007.
- The capital expenditure of CRISIL has been increasing at a CAGR of 63% from 2005-2007 and we have calculate the 2008 estimate using the same. Moreover, CRISIL is a growing company and is venturing into different areas.
- We have estimate the Non-cash working capital to grow at the same rate as 2007 which is 17%.

Notes:

(3) Source: <http://www.crisil.com/crisil-investors/annual-financial-reports-crisil.htm#> and Reuters Knowledge

FREE CASH FLOW TO THE FIRM ⁽⁴⁾

	Dec-07	Dec-06	Dec-05
Operating Income	1,04,78,00,000	59,37,00,000	29,84,00,000
Tax paid	20,80,27,968	16,52,90,000	10,52,75,000
Effective Tax Rate	19.85%	27.84%	35.28%
Operating Income*(1-Tax rate)	83,97,72,032	42,84,10,000	19,31,25,000
Add: Depreciation	13,34,00,000	6,55,00,000	4,36,00,000
Less: Capex	11,25,00,841	56,79,820	4,25,13,710
Less: Non-Cash WC	47,47,00,000	(1,18,00,000)	(1,55,00,000)
FCFF	38,59,71,191	50,00,30,180	20,97,11,290

Operating Income: CRISIL operating income as been consistently growing at an average rate of 37.21% from 2005-2007. However, it grew by 76% in 2007. We have estimating the 2008 operating income using the CAGR of 87% from 2005-2007.

Tax Expense: The effective tax rate for CRISIL in 2007 was 19.85% and the average tax rate has been 27.66% from 2005-2007. To be on the conservative side, we have assumed the average tax rate of 27.66% to estimate the tax expense for 2008.

Depreciation, Capex and Non-Cash WC has been estimates in the same way as used for estimating 2008 FCFE.

ESTIMATING 2008 FCFF

	Dec-08 est.	Dec-07	Dec-06	Dec-05
Operating Income	1,96,34,42,475	1,04,78,00,000	59,37,00,000	29,84,00,000
Tax paid	54,30,50,699	20,80,27,968	16,52,90,000	10,52,75,000
Effective Tax Rate	27.66%	19.85%	27.84%	35.28%
Operating Income*(1-Tax rate)	1,42,03,91,776	83,97,72,032	42,84,10,000	19,31,25,000
Add: Depreciation	23,33,40,702	13,34,00,000	6,55,00,000	4,36,00,000
Less: Capex	18,30,07,611	11,25,00,841	56,79,820	4,25,13,710
Less: Non-Cash WC	35,51,24,187	47,47,00,000	(1,18,00,000)	(1,55,00,000)
FCFF	1,11,56,00,680	38,59,71,191	50,00,30,180	20,97,11,290

Comments:

- As CRISIL is a debt-free company, there is no interest expense to be deducted nor are there any changes in the debt-equity ratio of the company. The company has clearly stated in its 2007 Annual report that *“CRISIL has been a debt-free company since its date of incorporation. The company followed the strategy of funding all its expansion, diversification and infrastructure related expenditure through internal accruals.”* Hence, the equity shareholders do not face any financial risk.

Notes:

(4) Source: <http://www.crisil.com/crisil-investors/annual-financial-reports-crisil.htm#> and Reuters Knowledge

- The intrinsic value using the estimates 2008 FCFE comes to INR 1,761 whereas the intrinsic value using the estimates 2008 FCFF comes to INR 3,080. The stock is currently trading at INR 2,600 ⁽⁶⁾ levels.

Ke = 16.84%

G (Average Growth of past 5 years): 11.83%

No. of outstanding shares= 72,25,000

- Taking into consideration the above 2 points, we consider that valuing CRISIL using estimated 2008 FCFE as it gives us a fair valuation of CRISIL.

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