

Valuation

Corporate Valuation Assignment - II

GMAY08 - IB100 11/12/2008

Valuation

CRISIL can be valued using the following 2 models:

- Dividend discount model using constant growth rate
- Dividend discount model using 2-phased growth rates
- Relative valuation based on P/E multiples of peers

Table 1: Valuation Metrics (1)

	Dec-07	Dec-06	Dec-05	Mar-05	Mar-04
Dividend Per Share	18.06	10.14	6.58	7.96	6.29
Earnings Per Share	91.68	50.29	25.44	31.26	23.41
Price per share	3,627.90	2,250.00	1,549.35	683.30	480.00
Dividend Yield	0.00	0.00	0.00	0.01	0.01
Ke (assumed)	0.14	0.14	0.14	0.14	0.14
Dividend Payout Ratio	0.20	0.20	0.26	0.25	0.27
Retention Ratio (RR)	0.80	0.80	0.74	0.75	0.73
Growth = Ke*RR	0.11	0.11	0.10	0.10	0.10
PER	39.57	44.74	60.89	21.86	20.51

In the above table, we have calculated the growth rate taking into consideration the retention ratio and assumed cost of equity of 14%. This gives a growth rate of 11% for the last 2 years.

However, we should not ignore the increasing retention ratio and the reducing dividend payout ratio. Also, the dividend yield is insignificant. Also, the Price-to-earnings ratio has been reducing on a y-o-y basis.

Additionally, CRISIL has a virtual monopoly in the ratings business in India.

Also its research business (Irevna) contributes more than 45% to the revenue mix which resembles a good diversification of the business portfolio.

Taking into consideration the above two arguments, we have considered a constant growth rate of 13% for the next 5 years.

Notes:

(1) All figures have been calculated using the data from Reuters Knowledge and company website.

Dividend Discount – Constant Growth Model

We have estimated the future price and then discounted it back to the current year using the constant growth model.

Table 2: Constant Growth Model

Years	Growth	Dividend	Cash Flow	Disc. Price
0		18.06	18.06	Rs. 1,981.10
1	0.13	20.41	38.47	Rs. 2,240.39
2	0.13	23.06	61.53	Rs. 2,515.58
3	0.13	26.06	87.59	Rs. 2,806.23
4	0.13	29.45	117.03	Rs. 3,111.52
5	0.13	33.27	3,910.31	Rs. 3,430.10
6	0.13	37.60		
P5 = D6/(ke-g)	3,760.00			

We have discounted the future dividends and the expected price with the expected rate of return of 14% to Year 0 and this gives us a share price value of Rs. 1,981.

Dividend Discount – Phased Growth Model

Over here, we have estimated the future growth of CRISIL in 2 phases.

- An initial growth rate of 13% for the first 5 years
- Then a declining growth rate of 5 basis point each year until year 10
- After that, we have a terminal growth rate of 8%

Table 3: Phased Growth Model

Years	Growth	Dividend	Cash Flow	Disc. Price
0		18.06	18.06	Rs. 932.65
1	0.130	20.41	38.47	Rs. 1,045.16
2	0.130	23.06	61.53	Rs. 1,153.01
3	0.130	26.06	87.59	Rs. 1,252.91
4	0.130	29.45	117.03	Rs. 1,340.73
5	0.130	33.27	150.31	Rs. 1,411.39
6	0.125	37.43	187.74	Rs. 1,458.68
7	0.120	41.93	229.67	Rs. 1,475.16
8	0.115	46.75	276.41	Rs. 1,452.01
9	0.110	51.89	328.30	Rs. 1,378.88
10	0.105	57.34	1,417.72	Rs. 1,243.62
11	0.080	61.92		
P10 = D11/(ke-g)	1,032.08			

The phased growth model gives us a price of R 932 after discounting the future dividends and price is year 11 with expected rate of return of 14%.

Relative Valuation based on P/E multiple

We have considered two peers of CRISIL, one being ICRA listed in India and other being Moody's Corp. We have taken the average TTM P/E multiples of both ICRA and Moody's. Since, both ICRA and CRISIL are both in the growth phase, we have taken the P/E multiple instead of P/BV multiple.

Table 3: Relative Valuation (2)

P/E Ratio (TTM)				
ICRA	11.98			
Moody's Corp	11.64			
Mean	11.81			
CRISIL EPS (TTM)	182.30			
CRISIL Price	2,152.96			

Share Price of CRISIL = Mean PER of peers *EPS of CRISIL

Based on the above 3 models, we consider that CRISIL is currently fairly overvalued at Rs. 3,627 and recommend a SELL. Currently, CRISIL is trading at a P/E multiple of 39.5x which is very high compared to its peers.

