

Estimating Cash Flows- Assignment V

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In this paper I attempt to compute the value of Convergys Corporation, USA through the Free Cash Flows to Equity and Free Cash Flows to Firm method and assess which one is a more suitable method of valuation for the company and the IT Outsourcing and Services Industry

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All data presented in this report is from secondary research on the internet. The analysis presented is original and not replicated from any other source

COMPANY OVERVIEW

Sector: Technology

Industry: IT Outsourcing and Services

Current Market Price: \$5.75

Indicator		Indicator	
Enterprise Value	973.31m	Beta	1.9
Enterprise Value/ EBITDA Multiple	2.48	P/Sales	0.3
Net Debt	139.60m	P/BV	0.67
Enterprise Value/ Total Market Cap	1.17	P/FCF	11.94
EBITD Margin (Avg)	14.5	ROA (Avg)	6.71
Net Profit Margin (Avg)	9.23	ROI (Avg)	8.95
EPS	6.98	ROE (Avg)	11.28

Convergys Corporation has recently announced the Intervice Voice Portal (IVP 6.0) and the introduction of its next generation interaction composer. In spite of the global slowdown of the IT outsourcing and services industry, the company through its innovative product offerings is expected to grow at 5.56% ie: the growth rate of its EPS over the period 2003- 2008. Convergys met its earnings guidance targets in 2006 and 2007, which is why we can rely upon the above assumption.

Cost of Equity by using 5 year weekly returns (2003 – 2008)

Beta	0.909
RFR	3.66%
RM - RFR	3.78%
KE	7.10%

Source: Thompson Reuters, Annual Reports of the company, www.finance.yahoo.com

Assumptions and Formulae used in Computation

Beta was arrived at by regressing the returns of the company stock against the returns of NASDAQ

RFR values are the most recent 10 Year Treasury Bond Rate as on November 13, 2008

RM – RFR was arrived at by finding the difference between monthly NASDAQ returns over the 10 Year Treasury Bonds for the period November 1978 – 2008

$$KE = RFR + \text{Beta} * (RM - RFR)$$

Growth rate of EPS of the company for the period 2003 – 2008 is 5.56% which is very similar to the expected growth rate of the US economy in the long run. Hence, we assume that the company would grow @ 5.56% in the long run.

VALUING THE FIRM THROUGH THE FREE CASH FLOWS TO EQUITY APPROACH

$FCFE = Net\ Income - (1 - \delta) (Capex - Depreciation) - (1 - \delta) \Delta\ non\ cash$

Working

To Calculate FCFE	Forecast			Historical		
	2010	2009	2008	2007	2006	2005
Revenues	3345.60	3169.38	3002.44	2844.30	2789.80	2582.10
Net Income after Tax	176.88	167.57	158.74	169.50	166.20	122.60
Gross Fixed Assets	1215.61	1243.21	1271.43	1300.30	1298.90	1321.90
Amortization	14.28	13.86	14.18	14.50	12.60	21.20
Depreciation	113.66	116.24	118.88	115.40	130.10	126.10
Δ Non Cash Working Capital	126.13	119.49	113.19	216.00	62.80	38.00
Debt/ (Equity + Debt) Ratio	14.59%	14.59%	14.59%	17.08%	23.61%	31.89%
Capital Expenditure	-27.60	-28.23	-28.87	1.40	-23.00	-7.70
FCFE	202.000	200.741	200.361	96.945	244.809	202.284

Source: Annual Reports of the company 2003- 2007, Thompson Reuters

Assumptions and Formulae used in estimation

1. Revenues are expected to grow @ 5.56% ie: growth rate of EPS 2004 – 2007
2. Net Income after tax has been forecasted as a percentage of revenues. Over the period 2004 - 2008. Over the period these figures ranged from 4.48% to 5.96%. Since, the range is reasonably small, I have considered the average of the same for future estimation.
3. Gross fixed Assets have been estimated to grow at a CAGR of -2.22%. This estimate is predicted from the past 4 years CAGR of Gross Fixed Assets.
4. Amortization is estimated to grow at the same rate as fixed assets including intangibles.
5. Depreciation is forecasted by taking the average of depreciation/ gross fixed assets for the period 2004 – 2007 @ 9.35% of gross fixed assets.
6. Non Cash working capital is estimated by taking it as an average of its percentage of sales for the period 2004-2007. Change in non cash working capital / Sales averaged @ 3.77% for the period 2005 – 2007. The variance of the same was much lesser than that as a percentage of gross fixed assets which averaged around 8.11% during the same period of study.
7. The D/V ratio of the company is along the lines of the sector. Hence, we assumed it to be constant for the future as well (Source: www.reuters.com)
8. Capital Expenditure = Gross Fixed Assets 1 - Gross fixed Assets 0

9. The company does not have any amortization expenses on account of Research and Development Expenditure
10. Non Cash working capital is considered for our analysis as cash as a percentage of current assets over the period 2004 – 2007 is 17% which is reasonably high. This means that the company is holding cash.

	Forecast			Historical		
	2010	2009	2008	2007	2006	2005
Intrinsic Value	13,846.17	13,759.90	13,733.83	6,645.11	16,780.53	13,865.62

$$\text{Intrinsic Value} = \text{FCFE} * (1 + \text{Growth}) / (\text{Ke} - \text{Growth})$$

VALUING THE FIRM THROUGH THE FREE CASH FLOWS TO FIRM APPROACH

$$\text{FCFF} = \text{Operating Income} (1 - \text{Tax rate}) - (\text{Capex} - \text{Depreciation}) - \Delta \text{Non-Cash Working Capital}$$

To Calculate FCFF	Forecast			Historical		
	2010	2009	2008	2007	2006	2005
Revenues	3345.60	3169.38	3002.44	2844.30	2789.80	2582.10
Operating Income	282.70	267.81	253.71	244.80	252.90	223.60
Amortization	14.28	13.86	14.18	115.40	130.10	126.10
Depreciation	119.73	116.24	118.88	14.50	12.60	21.20
Δ Non Cash Working Capital	129.47	122.65	116.19	153.20	24.80	38.00
Capital Expenditure	-27.60	-28.23	-28.87	1.40	-23.00	-7.70
FCFF	215.89	209.75	210.64	134.42	305.29	262.34

Source: Annual Reports of the company 2003- 2007, Thompson Reuters

Assumptions and Formulae used in estimation other those mentioned earlier

1. Revenues are expected to grow @ 5.56% ie: growth rate of EPS 2004 – 2007
2. Operating Income after tax has been forecasted as a percentage of revenues. Over the period 2004 -2008. Over the period these figures ranged from 4.48% to 5.96%. Since, the range is reasonably small, I have considered the average of the same for future estimation.

	Forecast			Historical		
	2010	2009	2008	2007	2006	2005
Intrinsic Value	14,798.13	14,377.56	14,438.31	9,213.88	20,925.90	17,982.21

$$\text{Intrinsic Value} = \text{FCFE} * (1 + \text{Growth}) / (\text{Ke} - \text{Growth})$$

INFERENCE AND CONCLUSION

The advantage of using both FCFF and the FCFE method is that they consider free cash flow as against EPS and they focus outward on key business drivers rather than inward on budget variances.

The Free Cash flow to Cash method is better suited to value companies in the high growth or even growth stage. This method intends to value the firm from all stake holders point of view rather than just equity share holders. In a high growth or even a growth stage, the companies may earn minimal returns which may sometime even be negative, especially in case of IT or telecom companies. Very little of what the company would actually earn would trickle down to the bottom-line, thus resulting in lesser payouts to the shareholders. Also, those companies with a high variance in the debt – equity ratio are better suited to be valued under the FCFF method as leverage generally increases the growth rate of the firm in the FCFE method, relative to the FCFF method.

The Free Cash flow to Equity Method of valuation is usually applied to value companies which are in a mature stage in the life cycle such as Convergys Corporation. Also, the industry to which the company belongs generally has a low and a relatively stable debt equity ratio. In case of significant amount of changes in the leverage the FCFE growth would skew the growth rate due to the inclusion of principal and interest payments.