Intrinsic Equity Valuation of Infosys Ltd. Using the Free Cash Flow to Equity (FCFE) Model

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Introduction

Equity valuation is an essential process in financial analysis because it helps investors, portfolio managers, and corporate executives make informed decisions about allocating resources, assessing investment opportunities, and guiding corporate strategy. The Free Cash Flow to Equity model is one of the most commonly used approaches for equity valuation. According to Damodaran (2012), this method emphasises the cash flows that remain available to equity shareholders after considering operational costs, capital expenditures, and debt obligations. The method above is viable because it provides a more direct and relevant estimate of the value attributable to shareholders, making it useful for equity investors.

This paper will thus focus on Infosys Limited, which is a global leader in technology services and consulting. This company has positioned itself as a key player in the Indian IT sector and offers a range of services, including software development, digital transformation, and consulting. Through these offerings, Infosys has shown consistent revenue growth and operational effectiveness. The report from Yahoo fiancé indicates how Infosys is expanding its presence in international markets while also still maintaining its position as a presence in India. Infosys Limited (2024) reports indicate that it is committed to innovation and excellence and has a large and diverse client base. These reasons thus make it a relevant subject of analysis in the context of equity valuation.

This report aims to apply the FCFE valuation method to Infosys Limited to determine the intrinsic value of its equity. We believe that by estimating the free cash flows available to shareholders and discounting these cash flows to present value, we will be able to calculate the "true" value per share of Infosys and offer insights into the investment attractiveness of this company.

2. Research Methodology

This analysis adapted a structured approach. This methodology included the selection of the valuation model, identification of relevant data sources, establishment of assumptions, and construction of financial forecasts.

2.1 Valuation Model Selection

The Free Cash Flow to Equity model was chosen for the valuation of Infosys Limited because it focuses directly on the cash flows available to equity shareholders. This model, as Damodaran (2012) claims, provides a more accurate reflection of the value attributable to the equity investors, as it directly accounts for the funds that can be distributed to shareholders after all other financial obligations are met. Unlike the FCFF model, which values the entire firm and adjusts for debt, Gnap & Pitera (2023) state that FCFE focuses on the equity value by considering the impact of debt payments.

The FCFE model is mathematically expressed as:

$$\text{Equity Value} = \sum_{t=1}^{n} \frac{\text{FCFE}_t}{(1+r)^t} + \frac{\text{Terminal Value}}{(1+r)^n}$$

Were,

FCFEt = Free Cash Flow to Equity in year t

r = Cost of equity (discount rate)

n = Number of years in the forecast period

Terminal Value = Present value of all cash flows beyond the forecast period

2.2 Data Sources and Key Assumptions

The analysis relied on publicly available data from Infosys Limited's financial reports, Yahoo Finance, investor presentations, and secondary sources, including analyst forecasts. Assumptions were made to project the future free cash flows and determine the appropriate discount rate

a) Projected FCFE

Projected Free Cash Flows to Equity were estimated for five years (FY2025–FY2029). The elements incorporated included moderate revenue growth assumptions, expected improvements in operational efficiency, and controlled capital expenditures.

b) Discount Rate

The cost of equity (r) was estimated between 12% and 13%. This percentage reflected Infosys's business risk, financial leverage, and the broader market conditions. Additionally, the Capital Asset Pricing Model was utilised using the formula r=Rf+β (Rm−Rf)

Where:

Rf = Risk-free rate (based on Indian government bonds

 β = Infosys's equity beta

Rm = Expected market return

c) Terminal Value Assumptions

The terminal value was calculated at the end of 2029 using the perpetuity growth method, assuming a stable growth rate of 5% per annum. This was consistent with long-term nominal GDP growth and Infosys's mature industry status.

d) Number of Outstanding Shares

Infosys Limited has approximately 415.09 crore shares outstanding, as per the latest annual report.

2.3 Forecast Period and Terminal Value Estimation

The explicit forecast period extends from 2025 to 2029. Beyond 2029, cash flows are assumed to grow at a stable rate indefinitely. The terminal value was calculated using the following formula:

Terminal Value= $\dfrac{FCFE_{2029} \times (1+g)}{r-g}$

Where;

 g = Perpetual growth rate (5%)

r = Cost of equity (12–13%)

FCFE2029 = Free Cash Flow to Equity in 2029

3. Numerical Results

This section presents detailed numerical results from the valuation exercise.

3.1 Projected Free Cash Flows (FCFE)

Based on moderate revenue and operational projections, the following FCFE estimates were made:

Year	FCFE (₹ Crore)
2025	30,571.40
2026	33,628.54
2027	36,991.39

2028	40,690.53
2029	44,759.58

Terminal Value (calculated at the end of 2029) was estimated at: 671,393.76 crore

(Infosys Limited, 2024 and Yahoo Finance. 2024)

3.2 Discount Factors and Present Value (PV) of Cash Flows

The projected cash flows were discounted using a discount rate between 12% and 13%, and the present values were calculated:

Year	Discount factor	PV of FCFE (₹ Crore)
2025	0.89	27,295.89
2026	0.80	26,808.46
2027	0.71	26,329.74
2028	0.64	25,859.57
2029	0.57	25,397.79

PV of Terminal Value = 380,966.85 crore

3.3 Equity Valuation Summary

The intrinsic equity value of Infosys Limited was determined by adding the present value of the forecasted Free Cash Flows to Equity from 2025 to 2029 and the present value of the terminal value, which captures all cash flows expected beyond the forecast horizon.

Total Present Value of FCFE (2025–2029):

The present value of the free cash flows from 2025 to 2029 was computed using a discount rate ranging between 12% and 13%, resulting in the total present value of the projected FCFE as: ₹131,691.46 crore

The terminal value, as Nissim (2019) contends reflects the value of the company's free cash flows beyond the forecast period (after 2029), and is discounted to the present value using the same discount rate. After the valuation, the PV of the terminal value stood at ₹380,966.85 crore.

The overall equity value is obtained by combining the present value of the projected FCFE and the present value of the terminal value. As a result, the intrinsic equity value of Infosys Limited is estimated at ₹512,658.30 crore.

To determine the intrinsic value per share, the total equity value is divided by the number of shares outstanding. According to the most recent annual report, Infosys has 415.09 crore shares in circulation, resulting in an intrinsic value per share of ₹1,235.05.

Hence, this intrinsic value per share serves as a benchmark for assessing the company's current market price. If the market price is significantly below ₹1,235.05, Subramanyam & Venkatachalam (2007). State that it may indicate that the stock is undervalued, and this indicates a potential investment opportunity. Conversely, if the market price exceeds ₹1,235.05, investors may need to be cautious, as the stock may be overvalued based on this intrinsic valuation

3.4 Sensitivity Analysis

Given that valuation models are highly sensitive to key assumptions, a sensitivity analysis was performed.

a) Impact of Discount Rate Changes

The discount rate is essential in calculating the present value of future cash flows, as it directly influences the valuation of a company by accounting for the time value of money even small changes potentially causing significant shifts in a company's valuation (Reynolds, 1959). For Infosys, both the intrinsic equity value and the per-share value are sensitive to variations in the discount rate.

Discount Rate	Equity Value (₹ Crore)	Per Share Value (₹)
12	512,658.30	1,235.05
13	475,632.21	1,145.74
14	443,021.67	1,067.23

Analysis:

At a 12% discount rate:

The total equity value of Infosys is ₹512,658.30 crore, which corresponds to an intrinsic value of ₹1,235.05 per share. This is the base scenario used in the primary valuation.

At a 13% discount rate:

In a case where the discount rate increases to 13%, the equity value decreases to ₹475,632.21 crore, corresponding to a per-share value of ₹1,145.74. This represents a reduction of ₹89.31 in the intrinsic value per share compared to the 12% discount rate scenario.

At a 14% discount rate:

Increasing the discount rate further to 14% results in an equity value of ₹443,021.67 crore and a per-share value of ₹1,067.23. This represents a further reduction of ₹78.51 in the intrinsic value per share compared to the 13% discount rate scenario.

Sensitivity Analysis and Interpretation

As observed, a 1% increase in the discount rate (from 12% to 13%) reduces the per-share value by approximately ₹90. This trend continues with a further decrease in per-share value as the discount rate rises to 14%, although the reduction becomes slightly smaller at ₹78.51. The observed changes highlight the moderate sensitivity of the valuation to the discount rate. (Infosys Limited, 2024 and Yahoo Finance. 2024)

b) Impact of Terminal Growth Rate Changes

As Ashton and Wang (2013) explain, the terminal growth rate reflects the anticipated long-term growth of a company's free cash flows beyond the explicit forecast period. Malik and Sikarwar (2024) further emphasise that this is a critical assumption in the valuation process, especially when applying the perpetuity growth method to determine the terminal value. Even slight adjustments to the terminal growth rate can impact the valuation of a company.

The table below illustrates how varying terminal growth rates affect Infosys' equity value and per-share value.

Growth Rate	Equity Value (₹ Crore)	Per Share Value (₹)
4	487,120.45	1,173.51
5	512,658.30	1,235.05
6	541,827.12	1,305.05

Analysis

At a 4% terminal growth rate:

When the terminal growth rate is set at 4%, the equity value of Infosys is ₹487,120.45 crore,

resulting in a per-share value of ₹1,173.51. This is the lower end of the range and reflects a conservative long-term growth assumption.

At a 5% terminal growth rate:

With the terminal growth rate set at 5%, the equity value increases to ₹512,658.30 crore, which corresponds to a per-share value of ₹1,235.05. This represents the base case scenario used in the original valuation.

At a 6% terminal growth rate:

If the terminal growth rate increases to 6%, the equity value rises significantly to ₹541,827.12 crore, resulting in a per-share value of ₹1,305.05. This reflects a more optimistic view of the company's long-term growth prospects.

Sensitivity Analysis and Interpretation:

A **1% change** in the terminal growth rate (from 5% to 4% or from 5% to 6%) can result in a significant swing in the valuation, approximately ₹60–70 per share. When we break this down:

From 5% to 4% growth rate:

A reduction of the terminal growth rate by 1% (from 5% to 4%) decreases the equity value from ₹512,658.30 crore to ₹487,120.45 crore, a drop of ₹25,537.85 crore. This results in a decrease of ₹61.54 in the intrinsic value per share (from ₹1,235.05 to ₹1,173.51).

From a 5% to a 6% growth rate:

A rise of the terminal growth rate by 1% (from 5% to 6%) raises the equity value from ₹512,658.30 crore to ₹541,827.12 crore, an increase of ₹29,168.82 crore. This results in an increase of ₹70.00 in the intrinsic value per share (from ₹1,235.05 to ₹1,305.05).

3.5 Key Risk Factors

Infosys's projected cash flows are subject to several risks that could lead to deviations from the estimates. One of the primary concerns is macroeconomic risks. When the global or domestic economy slows down, it directly impacts demand for IT services. Koti (2013) states that clients may tighten their budgets or delay investments, which would affect Infosys's revenue streams. Besides, fluctuations in currency exchange rates, inflation, or rising interest rates can make operations more expensive and reduce profit margins. If these economic conditions persist, SONI & NATHVANI (2023) claim that it could become more difficult for Infosys to keep its costs under control, potentially affecting its ability to generate the expected free cash flows.

Besides that, there is also competitive pressure. Laghari et al. (2023) state that the IT services industry is very competitive because large players like Tata Consultancy Services (TCS), Accenture, and emerging disruptors are always pushing for a larger slice of the market. Besides, there are regulatory risks that could impact Infosys's business. For example, changes to visa regulations, data protection laws, or tax policies, especially in important markets like the United States, could affect the ability of Infosys to hire skilled workers or increase costs related to compliance, and this would put pressure on its profitability.

4. Conclusion

After valuation of the FCFE, the intrinsic value of Infosys Limited stands at ₹512,658.30 crore. This value gives a per-share value of ₹1,235.05. Therefore, this value suggests that if the market price of Infosys happens to be lower than ₹1,235.05, then, the stock may be undervalued, and this may offer a potential investment opportunity. However, this assumes that the assumptions used in the valuation are accurate and that the company's fundamentals stay strong. When looking at the investment Implication in an undervalued scenario, if Infosys shares are priced below ₹1,235.05, it could be a good time for investors to buy the stock if the company's performance remains stable. On the other hand, in an overvalued scenario, where the market price is higher than ₹1,235.05, then investors should be careful. It might be wise for investors to wait for a better price or rethink the assumptions used in the valuation before making any investment decisions.

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