

# Discounted Cash Flow (DCF) Valuation of Infosys Ltd.

## Overview

This project implements a **Discounted Cash Flow (DCF)** valuation model in Python to estimate the **intrinsic share value of Infosys Ltd.**, using historical financial data and forward-looking assumptions. The analysis spans a 5-year forecast horizon and considers cash flow generation, cost of capital, and terminal growth.

## Dataset Used

- **Source:** Google Drive CSV File
- **Contents:** Historical revenue, EBIT, net income, depreciation, CapEx, net debt, and change in net working capital for FY21–FY25.

## Assumptions Used

Parameter	Value
Forecast Horizon	5 years
Revenue Growth Rate ( $g$ )	2%
EBIT Margin	22.2%
Tax Rate	26.5%
WACC	8%
D&A as % of Revenue	3%
CapEx as % of Revenue	1.7%
Change in NWC as % of Revenue	3%
Net Debt	0
Shares Outstanding	4,153,600,000

# Step-by-Step Valuation Process

## 1. Revenue Forecasting

Starting from FY25, the next 5 years of revenue are projected using a fixed growth rate:

$$\text{Revenue}_t = \text{Revenue}_{t-1} \times (1 + g)$$

## 2. EBIT Forecasting

$$\text{EBIT}_t = \text{Revenue}_t \times \text{EBIT Margin}$$

## 3. NOPAT (Net Operating Profit After Tax)

$$\text{NOPAT}_t = \text{EBIT}_t \times (1 - \text{Tax Rate})$$

## 4. Adjustments

$$\text{D\&A}_t = \text{Revenue}_t \times 3\%$$

$$\text{CapEx}_t = \text{Revenue}_t \times 1.7\%$$

$$\Delta\text{NWC}_t = \text{Revenue}_t \times 3\%$$

## 5. Free Cash Flow (FCF)

$$\text{FCF}_t = \text{NOPAT}_t + \text{D\&A}_t - \text{CapEx}_t - \Delta\text{NWC}_t$$

## 6. Discounting FCFs

$$\text{Discounted FCF}_t = \frac{\text{FCF}_t}{(1 + \text{WACC})^t}$$

## 7. Terminal Value

Using the Gordon Growth Model:

$$\text{Terminal Value} = \frac{\text{FCF}_{\text{last}} \times (1 + g)}{\text{WACC} - g}$$

$$\text{Discounted Terminal Value} = 304,333.81 \text{ Cr}$$

## 8. Enterprise Value

$$\text{EV} = \sum \text{Discounted FCF}_t + \text{Discounted Terminal Value} = 405,012.22 \text{ Cr}$$

## 9. Equity Value

$$\text{Equity Value} = \text{EV} - \text{Net Debt} = 405,012.22 \text{ Cr}$$

## 10. Intrinsic Value per Share

$$\text{Intrinsic Value} = \frac{\text{Equity Value} \times 10^7}{\text{Shares Outstanding}} = 957.12$$

## Results Summary

Metric	Value ( Cr)
Discounted Terminal Value	304,333.81
Enterprise Value	405,012.22
Equity Value	405,012.22
Intrinsic Value per Share	957.12

## Conclusion

Based on the above valuation, the **intrinsic value of Infosys Ltd. is estimated at 957.12 per share**. This value can be compared against the current market price to determine whether the stock is undervalued or overvalued.