

Corporate Finance Decision Lab

Primary financial statements, cash-generation analysis and growth-funding valuation

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Decision and measured findings

Review the accounting source before trusting a financial number. Then distinguish cash generated by the historical business from the new capital a future growth policy requires. The study links nine annual reports to a reviewed financial spread and a ten-year model with immediate first-year growth funding.

FY 2025 case	Revenue	EBIT	CFO	Cash investment	CFO less that investment
Microsoft	281,724	128,528	136,162	64,551 PPE	71,611
Target	104,780	5,117	6,562	3,727 PPE	2,835
Infosys	19,277	4,071	4,351	263 PPE + intangibles	4,088 (combined)

USD millions. Different fiscal calendars. The Infosys combined measure is explicitly separate from pure PPE. None of these historical proxies is FCFF.

Microsoft

FY 2025 revenue grew 14.9%, while gross cash PPE spending rose 45.1%. Operating margin reached 45.6%, but CFO less cash PPE fell from USD 74,071m to USD 71,611m. Higher accounting profit did not translate into higher post-PPE cash than the previous year.

Target

FY 2025 revenue fell 1.7% and operating margin was 4.9%, down from 5.2%. CFO less cash PPE fell 36.7%, to USD 2,835m. Its current ratio of 0.94x is an accounting observation, not a standalone solvency conclusion.

Infosys

CFO rose USD 1,203m. The cash-flow bridge separates USD 751m of higher pre-tax operating cash from USD 452m of lower cash taxes. The tax component is 37.6% of the CFO increase; the historical cash increase should not simply be extrapolated as earnings growth.

Extraction result

Both methods returned 33 source-supported correct answers out of 36 final financial targets, with three justified direct-unavailable abstentions. There is no final-year accuracy gain. The two literal-lookup wrong-column errors occur in development, where the stricter method returns 66/72 correct versus 64/72. Control rejections are a separate API-contract check.

Source and evaluation controls

Issuer / format	Development	Final	Fiscal end / statement unit
Microsoft / 10-K DOCX	FY 2023, FY 2024	FY 2025	30 June / USD millions
Target / annual-report PDF	FY 2023, FY 2024	FY 2025	3 Feb 2024; 1 Feb 2025; 31 Jan 2026 / USD millions
Infosys / 20-F PDF	FY 2023, FY 2024	FY 2025	31 March / USD millions

Fixed requests and definitions

Nine reports × twelve financial targets = 108 targets. Nine reports × three unsupported controls = 27 controls. Both methods answer the same 135 requests, yielding 270 recorded responses. Targets comprise six annual flows (revenue, EBIT, consolidated net income, CFO, gross cash PPE and pure D&A) and six fiscal-end balances (assets, liabilities, equity, cash, current assets and current liabilities). Net income and equity include NCI where reported. Cash excludes investments.

Source review

Every original file has a SHA256, byte count, issuer URL, retrieval record, identity, calendar and unit check. DOCX CRC/XML and PDF parsing checks pass. Issuer-hosted versions retrieved later are not certified immutable original SEC accessions. HTTP Last-Modified is not treated as a filing date. Raw reports remain private; the repository publishes numerical facts, short row labels and locators.

Fixed methods and references

The literal baseline searches matching row labels and year columns anywhere in the report. The strict method adds main-statement scope and conflict rejection. They share aliases and audited document metadata. Separately transcribed references supply source cells for evaluation and the reviewed finance model; they are never extractor inputs. Correct consolidated annual MD&A/summary duplicates count as valid baseline provenance.

Split / method	Financial correct / targets	Financial answered	Controls rejected
Development / literal	64 / 72	66	18 / 18
Development / strict	66 / 72	66	18 / 18
Final / literal	33 / 36	33	9 / 9
Final / strict	33 / 36	33	9 / 9

Chronology and limits

The six development reports precede the method freeze. All final predictions were committed before final reference annotation/scoring; frozen code and prediction hashes remain unchanged. This is retrospective: Target FY 2025 cover highlights were incidentally displayed in source identity review. It is not a blind, prospective or unseen-issuer test. There are only three final report clusters, so no population confidence interval is presented. Workflow source annotations are not external human review.

Known error ledger

The literal baseline returns Infosys FY 2023 D&A 466 instead of 524, and FY 2024 D&A 524 instead of 565, because an earlier table's header positions select the prior-year cell. The final FY 2025 methods tie. All missed, wrong, unavailable and control outcomes remain in the ledger; difficult targets are not removed from denominators.

Historical cash and accounting controls

Case	Revenue	EBIT margin	CFO	Cash PPE	CFO – PPE	Combined proxy*
MSFT_2023	211,915	41.8%	87,582	28,107	59,475	n.a.
MSFT_2024	245,122	44.6%	118,548	44,477	74,071	n.a.
MSFT_2025	281,724	45.6%	136,162	64,551	71,611	n.a.
TGT_2023	107,412	5.3%	8,621	4,806	3,815	n.a.
TGT_2024	106,566	5.2%	7,367	2,891	4,476	n.a.
TGT_2025	104,780	4.9%	6,562	3,727	2,835	n.a.
INFY_2023	18,212	21.0%	2,853	n.a.	n.a.	2,534
INFY_2024	18,562	20.7%	3,148	n.a.	n.a.	2,882
INFY_2025	19,277	21.1%	4,351	n.a.	n.a.	4,088

*Infosys only: CFO minus combined PPE/intangibles cash. USD millions, except margins. Report labels are not a common market date. Target FY 2023 has 53 weeks; the other displayed Target years have 52. Values are from each pinned report, not a reconstructed immutable vintage.

Three source definitions that matter

Microsoft: the main cash-flow line combines depreciation, amortisation and other. It is unavailable as a direct pure-D&A target. Cash PPE purchases exclude noncash lease additions and acquisitions.

Target: no direct total-liabilities line is substituted. The balance control adds separately reported current and noncurrent liabilities before comparing with assets and equity.

Infosys: the cash-flow line combines PPE and intangibles. Pure-PPE extraction abstains; the combined spending and its separate cash-generation proxy remain labelled. IFRS lease and interest classifications are retained.

Infosys FY 2024 → FY 2025 cash bridge (USDm)

Component	FY 2024	FY 2025	Contribution to CFO change
Cash generated before tax	4,262	5,013	+751
Cash income taxes paid	1,114	662	+452 from lower cash outflow
Net operating cash	3,148	4,351	+1,203

Reconciliations

All nine balance identities, nine sums of operating/investing/financing cash plus FX, and nine beginning-to-ending-cash bridges have zero residual at reported million-unit precision. These checks do not rely on making total liabilities an assets-minus-equity plug. They test source consistency; they do not establish operating liquidity or regulatory solvency.

Growth funding and policy valuation

The model starts at $N_0 = \text{reported EBIT} \times (1 - \text{assumed tax})$. Growth is fixed for years 1–5 and fades to terminal growth by year 10. New capital paid at time t earns its marginal return in year $t+1$. The immediate I0 payment prevents free first-year growth. Initial marginal ROIC fades to its terminal rate over funding dates 5–10.

$$N_t = N_{t-1} \times (1 + g_t)$$

$$I_t = [N_{t+1} - N_t] / R_t$$

$$V_0 = -I_0 + \sum (F_t / (1+w)^t, t=1 \dots 10) + TV_{10} / (1+w)^{10}$$

$$F_t = N_t - I_t; F_{11} = N_{11} \times (1 - g_T/R_T); TV_{10} = F_{11} / (w - g_T)$$

Policy	Initial growth	ROIC initial / terminal	Terminal growth	Policy value	Immediate I0	Terminal share
MSFT downside	5.0%	10.0% / 10.0%	2.0%	963,960	48,198	58.7%
MSFT reference	10.0%	18.0% / 12.0%	2.5%	1,316,560	53,553	64.2%
MSFT expansion	15.0%	25.0% / 15.0%	3.0%	1,855,713	57,838	68.9%
TGT downside	0.0%	7.0% / 8.0%	1.0%	37,732	0	39.7%
TGT reference	2.0%	12.0% / 10.0%	2.0%	39,143	640	47.0%
TGT expansion	4.0%	18.0% / 12.0%	2.5%	44,096	853	51.5%
INFY downside	2.0%	10.0% / 10.0%	2.0%	30,532	611	47.9%
INFY reference	5.0%	16.0% / 12.0%	2.5%	35,379	954	54.6%
INFY expansion	8.0%	22.0% / 15.0%	3.0%	43,528	1,110	59.7%

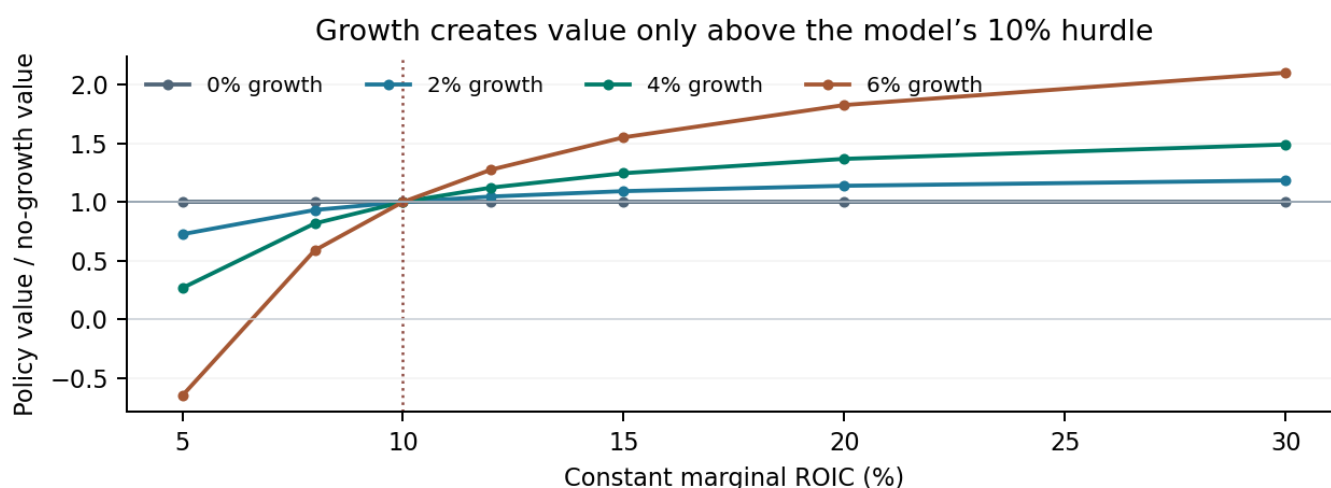
Values in USDm. Common illustrative WACC 10% and normalised tax 25%. Values are operating-policy scenarios before financing, cash/nonoperating assets, NCI, pension and option adjustments. They retain reported EBIT accounting and are not observed enterprise/equity values, share-price targets or market-calibrated forecasts.

Sensitivity and reverse cases

Reference-policy sensitivity uses WACC 6%–16% in 1 pp steps and terminal growth 0%–5% in 0.5 pp steps: 121 cases per issuer, 363 total. A 49-regime growth/ROIC grid is repeated at each issuer's profit scale (147 evaluations), not 147 independent economic patterns. Reverse cases target 80%, 100% and 120% of reference policy value, solving initial growth only on [0%, 25%]. Seven targets solve; Target and Infosys 80% targets are unreachable in that bracket. No extrapolation or implied market expectation is claimed.

The funding amount is aggregate net growth investment after maintenance, including working-capital and intangible needs on the chosen EBIT basis. It is not a mechanical substitution of historical CFO-minus-PPE for unlevered free cash flow. Comparing I0 with historical post-PPE cash is only a scale diagnostic.

Independent checks and reproducibility



Illustrative constant-return/growth policies. Negative forced-policy value is possible when growth consumes more capital than the specified policy earns; it is not a negative limited-liability equity valuation. At $ROIC=WACC$, growth is value-neutral after funding 10.

Verification	Recorded result
Mathematical boundaries	16 focused tests, including year/scope/currency/hash controls, advance funding, no-growth and $ROIC=WACC$ identities
Different valuation formulation	519 case evaluations matched 45-digit Decimal incremental-profit-layer values; maximum difference 3.95×10^{-9} USDm
Formula workbook	932 numeric reconciliations across all nine cases; active/unselected missing inputs, zero EBIT, invalid spread, input change and saved-file reopening checked
Fresh raw-source reconstruction	Nine original reports re-decoded/OCR'd; eleven scientific outputs byte-identical; 565.57s wall, max child RSS 553,208 KiB
Public numeric reconstruction	Nine outputs rebuilt from published facts and sealed predictions; two original prediction seals checked

Independent mathematics, not an external audit

The main model discounts policy cash flows. The independent calculation values each permanent incremental-profit layer as $\Delta N \times (1/WACC - 1/ROIC)$, discounts its funding time, then sums the infinite terminal layers analytically. It uses 45-digit Decimal arithmetic and does not import the model implementation or its ledger. The check tolerance is USD 1 absolute plus 2×10^{-12} relative. It is a computational cross-check, not third-party professional review.

Execution and source limits

The clean run used Python 3.12.14, PyMuPDF 1.26.6 and Tesseract 5.3.4 with a pinned English trained-data hash. It reused original source bytes; fresh-network or cross-platform reproduction is not established. A separately labelled cached-structure run took 8.71s. Native Excel and human time savings were not measured. The public workbook retains formulas and one active scenario build; it was recalculated, exported and reimported in Artifact Tool.

Primary references

Issuer annual reports: [Microsoft](#), [Target](#), [Infosys](#). Exact nine original-file URLs and per-field locators are in `data/sources.json` and `data/references.json`. Growth/reinvestment background: [Damodaran](#), [NYU Stern](#). The exact advance-funding model is defined in this study's protocol.