Build an Integrated Three-Statement Model

Excel & Financial Modeling | Intermediate | 90-120 minutes (estimate)

Learning outcomes

Link profit, working capital and cash without a hidden plug. Calculate the result, reconcile it and communicate its limitations.

Method

Build the income statement first, then use net income and noncash / working-capital adjustments for operating cash flow. Roll forward debt, PPE and equity. Cash comes from the cash-flow statement and is then linked into the balance sheet; it must not be whatever amount makes that statement balance.

Smaller worked example

Net income 50 plus depreciation 10 less an AR increase of 20 yields CFO 40 if there are no other changes. Profit and cash differ because earnings have not all been collected.

Business context and rules

Fictional Cedar Equipment, one-year forecast ending 30 September 2027. USD. Opening balances and drivers are provided. Assume all operating expenses, interest and current tax are paid during the year; no deferred taxes, dividends, equity issuance, new debt, asset sales or other balance-sheet accounts. Depreciation is 20 and capex 40. Interest is treated as operating cash flow here. Closing AR, inventory and AP are explicit forecast assumptions. Tax is 25% of positive pretax income, with no tax benefit for a loss. This is a bounded teaching model, not a standards-compliance assertion.

Original synthetic inputs

Input	Value	Unit
Opening cash	100	USD
Opening AR	80	USD
Opening inventory	60	USD
Opening net PPE	200	USD
Opening AP	50	USD
Opening debt	150	USD
Opening equity	240	USD
Forecast revenue	500	USD
COGS / revenue	0.6	fraction
Cash operating expenses	100	USD
Depreciation	20	USD
Cash interest	10	USD
Tax rate	0.25	fraction
Closing AR assumption	100	USD
Closing inventory assumption	70	USD
Closing AP assumption	60	USD
Cash capex	40	USD
Debt repayment	20	USD

Required deliverables

Produce the income statement, cash-flow statement and closing balance sheet, with supporting PPE, debt and equity roll-forwards. Test a 10-unit increase in closing AR while holding revenue fixed, and explain the cash effect. No balancing plug is permitted.

Use formulas for derived amounts and preserve source data. Put narrative deliverables in the workbook response area; expand it as needed. Compare amounts within 0.01 of the stated unit and percentages within 0.1 percentage point. No unsupported balancing plugs.

Workbook structure

The student workbook intentionally leaves the analysis structure open. Build the schedules required above, retain the source inputs, and add formula-based checks. You may add worksheets. The worked solution is one acceptable structure, not the only correct layout.