9.2 Cash flows and valuation basics

Name: _____ Class: _____ Date: _____ **Total: 10 marks**

KEY WORDS incremental cash flow • sunk cost

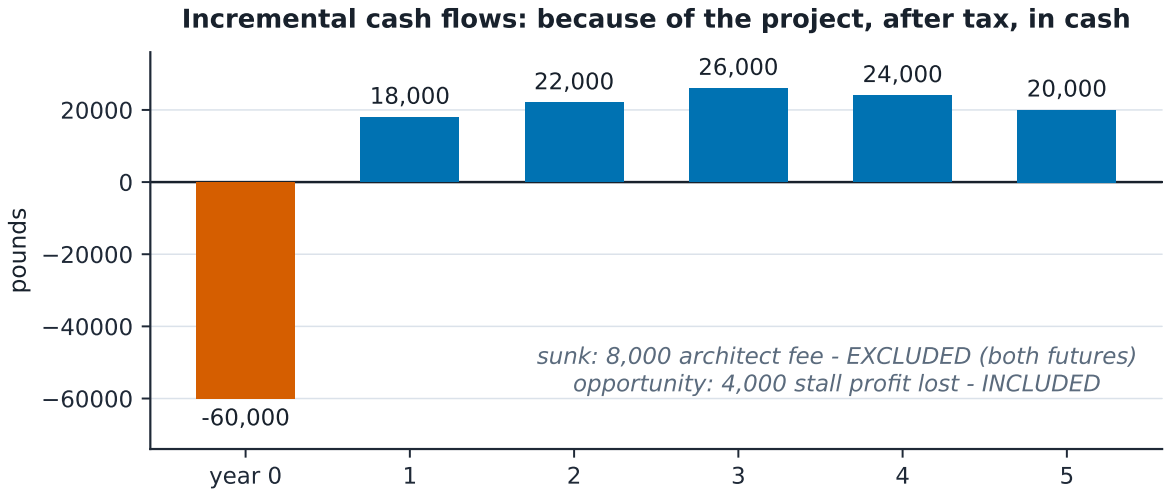
Objective

Build an incremental cash-flow list: sunk excluded, opportunity included, financing in the rate, tax shields and working capital handled.

1 Key knowledge and worked examples

■ The three tests

Because-of, after tax, in cash. Sunk never; opportunity always; financing in the discount rate. Depreciation's only entry is its tax shield.



Because of the project, after tax, in cash

■ Worked example. The raise's list

Architect 8,000 excluded; stall 4,000 included; WC 4,000 out at year 0, back at year 5 ✓.

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2 Practice

A courier firm adds an evening route. It paid £3,600 last year for a route survey. The van (already owned, could sell for £14,000) will be used. New running costs £11,000 a year; revenues £19,000 a year for 4 years; extra working capital £2,000 now, recovered in year 4; tax 25%.

2.1 State the year-0 cash flow, with reasons for the survey and the van. [3]

2.2 If depreciation on the van is £3,000 a year for tax, compute the annual after-tax operating cash flow. [3]

2.3 State the year-4 cash flow including the working-capital recovery. [2]

2.4 The firm's finance director adds the loan interest (7% on £15,000) to the flows. Correct the error and say where the 7% belongs. [2]

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Solutions

2.1

- Year 0: $-14{,}000 - 2{,}000 = -£16{,}000$.
- Survey 3,600: sunk – in both futures.
- Van: opportunity cost of 14,000 (the sale forgone) – in.

2.2

- Taxable profit $= 19{,}000 - 11{,}000 - 3{,}000 = 5{,}000$; tax 1,250.
- After-tax profit 3,750 + depreciation 3,000 = £6,750.

2.3

- $6{,}750 + 2{,}000 = £8{,}750$.

2.4

- Interest is a financing flow: it lives in the discount rate (WACC), never in the list.
- Including it double-counts the cost of capital.

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