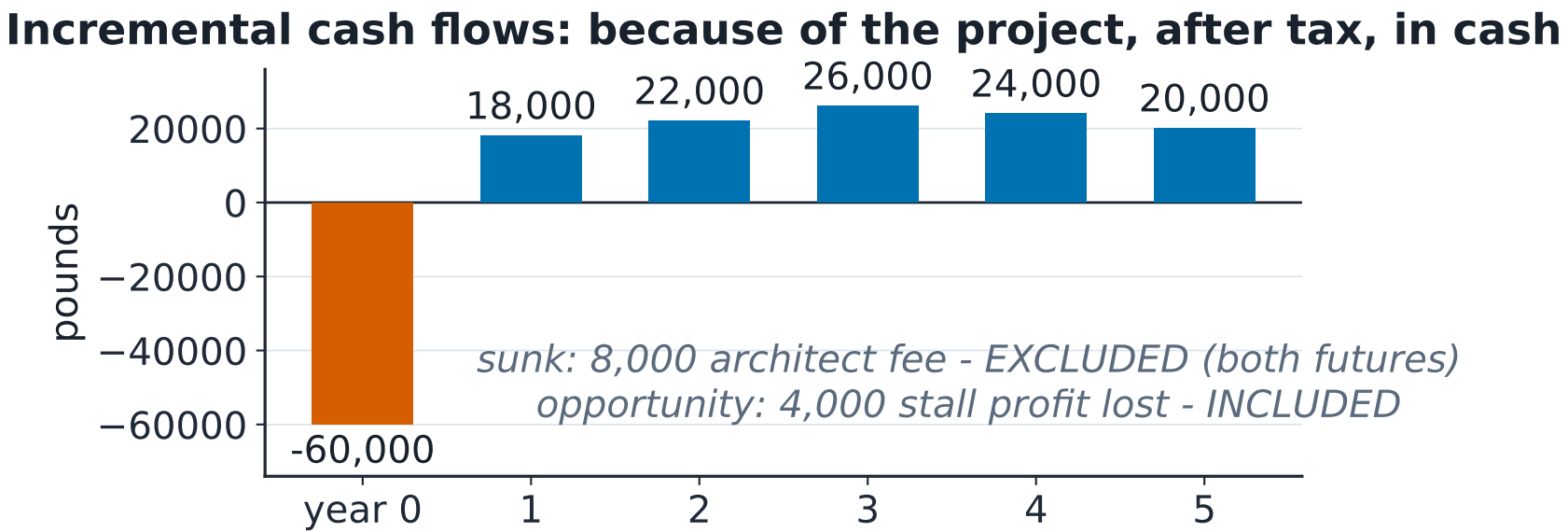
Exercise walk-through

9.2
Cash flows and valuation basics

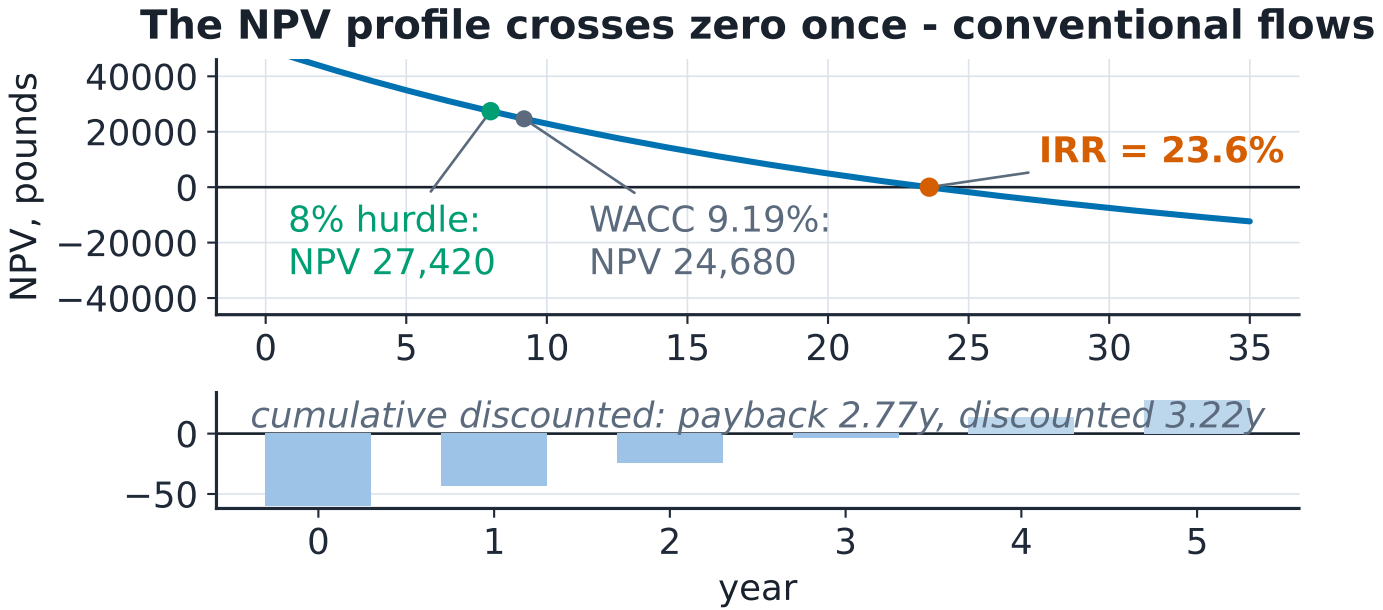
University Business

Cash flows: the list is the craft



Relevant flows: sunk fee out, **opportunity cost** in, working capital returned.

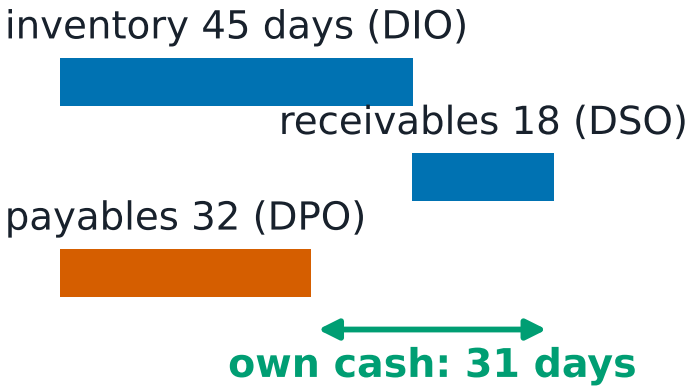
Appraisal: NPV is the referee



IRR 23.6%; NPV 27,420 at 8% and 24,680 at the 9.19% WACC.

Working capital: the cash the growth eats

The 31-day bridge of own cash



CCC = 45 + 18 - 32 = 31 days of sales tied up

Overtrading, one table

sales	100	**160**
NWC/sales	20%	**25%**
NWC	24,000	**48,000**

NWC DOUBLES
(1.6 x 1.25)

sales +60%, not +60% cash

A 31-day cash cycle; 60% growth doubles working capital.

Exercises 2.1–2.3

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]

Exercises 2.1·2.3

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

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

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

2.3

- $6{,}750 + 2{,}000 = £8{,}750$.

exercises.lol exercises.com.cn

Exercise 2.4

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]

Exercise 2.4

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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.