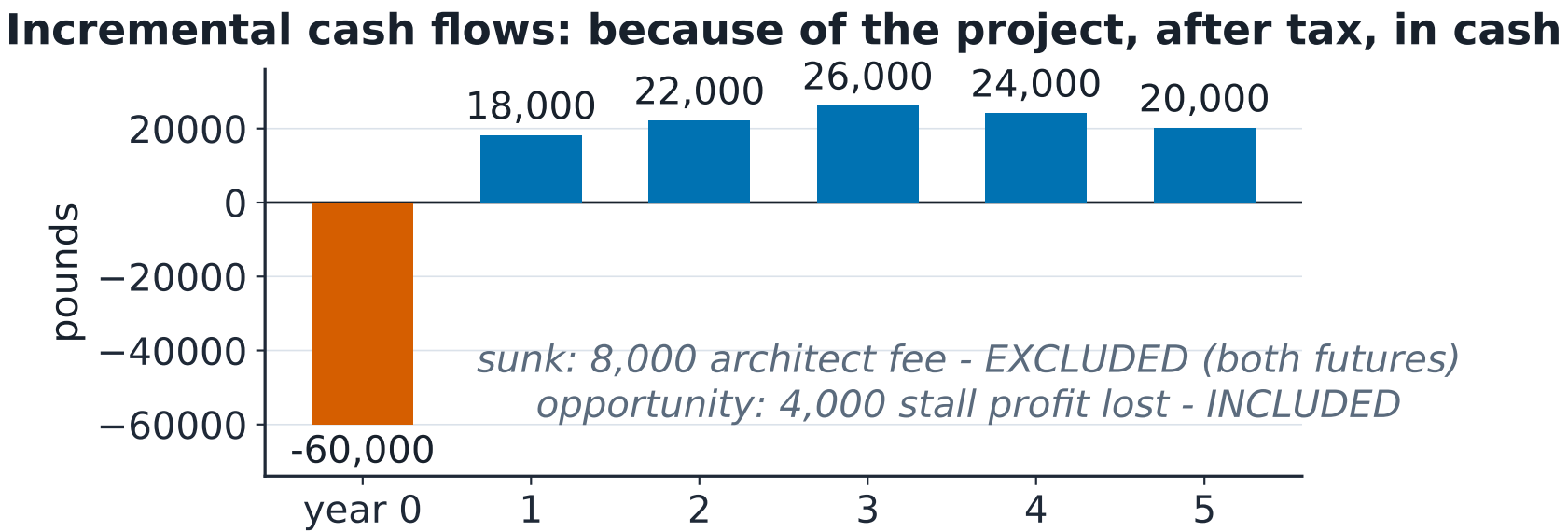
Exercise walk-through

9.6
Financing and working capital

University Business

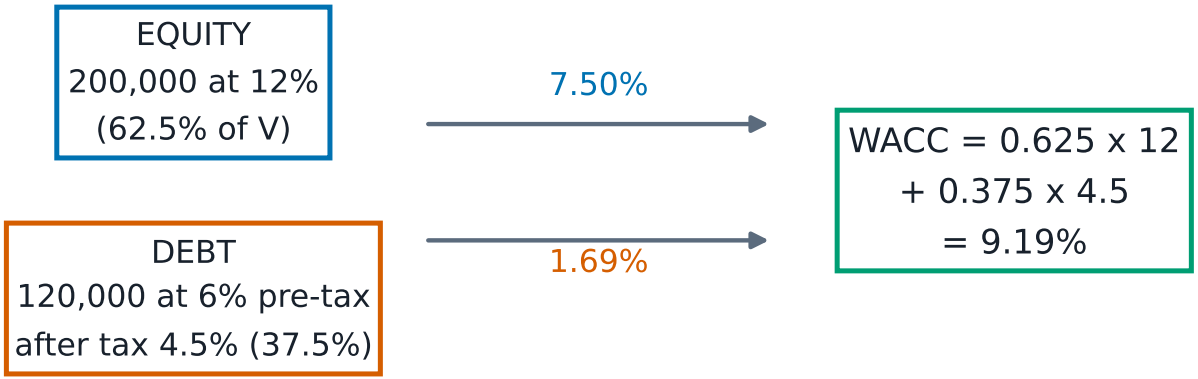
Cash flows: the list is the craft



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

Cost of capital: the honest hurdle

The hurdle is a blend of market values

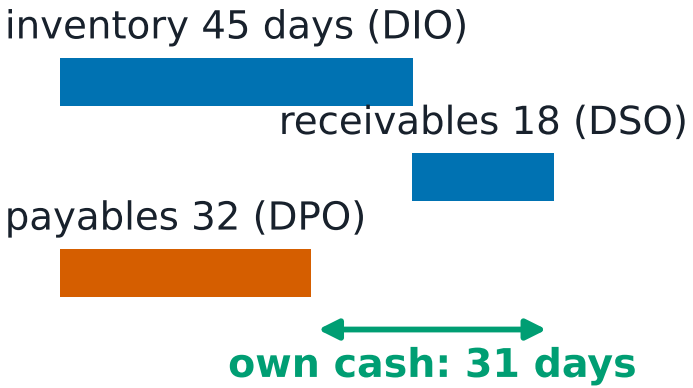


previously assumed 8%: every NPV was 2,740 too fat;
the proxy working: k_e = 4 + 1.1 x 6 + 1.4 private

> Equity 12% and after-tax debt 4.5% at 62.5/37.5 give WACC 9.19%.

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 2.1·2.2

2.1 Compute the CCC and the NWC tied up at 18% of sales. [3]

2.2 Sales grow 50% and NWC/sales rises to 21%. Compute the new NWC and the extra cash required (nearest £100). [3]

Exercises 2.1·2.2

2.1 Compute the CCC and the NWC tied up at 18% of sales. [3]

2.1

- $CCC = 60 + 35 - 41 = 54$ days.
- $NWC = 0.18 \times 1{,}100{,}000 = £198{,}000$.

2.2 Sales grow 50% and NWC/sales rises to 21%. Compute the new NWC and the extra cash required (nearest £100). [3]

2.2

- New sales = 1.65m; new NWC $= 0.21 \times 1{,}650{,}000 = £346{,}500$.
- Extra cash $= 346{,}500 - 198{,}000 = £148{,}500$ – the 1.5×1.167 multiplier at work.

Exercises 2.3·2.4

2.3 The MD celebrates the profit. In two lines, explain why the overdraft may still grow. [2]

2.4 The expansion vans (8-year life) are to be funded by a 3-year loan at 6.5% or new equity at 13%. In two lines each: the matching verdict, and one speed lever that releases cash regardless. [4]

Exercises 2.3·2.4

2.3 The MD celebrates the profit. In two lines, explain why the overdraft may still grow. [2]

2.3

- Profit is an opinion: the cycle grew with sales and worsened with terms.
- The cash cycle doubled the tie-up faster than profit replaced it – profitable and insolvent at once.

2.4 The expansion vans (8-year life) are to be funded by a 3-year loan at 6.5% or new equity at 13%. In two lines each: the matching verdict, and one speed lever that releases cash regardless. [4]

2.4

- Mismatch: 3-year money funding 8-year assets is refinancing risk – lengthen the debt or write the risk down.
- Equity is permanent and matches, but costs 13% – a pricing choice, not a free pass.
- Speed lever: collect faster or stretch payables honestly – each day of DSO/DPO moves about £3,000 of cash.