

ROCE and gearing: which gym is in better shape?

Student tasks | Original TBS lesson for A level Business, Year 13 (Edexcel 9BS0 content, Theme 3, section 3.5.2 Ratio analysis)

Two gym businesses want money. PulseFit wants to borrow to open two new sites; Ironworks Gym is looking for a new investor. Use return on capital employed (ROCE) and gearing to compare them, then advise PulseFit on how to pay for its expansion.

Before you start you should know: capital employed = total equity + non-current liabilities. ROCE = operating profit / capital employed x 100. Gearing = non-current liabilities / capital employed x 100; gearing above 50% is often called high. You need a calculator. This is original classroom practice, not an exam paper. Both businesses and every figure are fictional; all figures are for one year, in £000.

Extracts from the latest accounts (£000)

	PulseFit	Ironworks Gym
Operating profit	180	150
Total equity	900	400
Non-current liabilities (long-term loans)	600	600

Give ratios to one decimal place.

Starter: which term?

Match each description to capital employed, ROCE or gearing.

Description	Term
(i) How much of the long-term finance comes from loans	
(ii) All the long-term finance invested in the business	
(iii) Operating profit as a percentage of the long-term finance	

Task 1: calculate the ratios

Use the figures (£000): PulseFit operating profit 180, total equity 900, non-current liabilities 600; Ironworks operating profit 150, total equity 400, non-current liabilities 600.

	PulseFit	Ironworks Gym
Capital employed (£000)		
ROCE (%)		
Gearing (%)		

Working space:

Task 2: two points of view (pairs)

One partner is a bank manager deciding whether to lend more; the other is an investor deciding where to put money. Each writes what the ratios tell them, then compare.

Bank manager: which business is safer to lend to, and why?

Investor: which business earns more on the money invested, and what is the risk?

Task 3: how should PulseFit pay for two new sites?

PulseFit needs £500,000 (£500k) for two new sites. With them, it forecasts operating profit of £240k a year. Today it has total equity of £900k and non-current liabilities of £600k.

Option L: a long-term bank loan of £500k at 6% interest a year. Option S: issue new shares worth £500k to new owners.

After the expansion (£000)	Option L: loan	Option S: shares
Total equity		
Non-current liabilities		
Capital employed		
ROCE (%)		
Gearing (%)		

Working space:

a. How much interest a year would Option L cost?

b. ROCE is the same under both options. Explain why, using the formula.

Task 4: how far can you trust the ratios?

Give two limitations of using ROCE and gearing to judge PulseFit and Ironworks Gym.

Task 5: decide

Your Task 3 results (check them against your own): ROCE 12.0% under both options; gearing 55.0% with the loan (interest £30k a year) and 30.0% with the share issue; today gearing is 40.0%.

Write about 100 words advising PulseFit whether to choose Option L or Option S. Use at least three figures from your answers and one limitation of ratio analysis.

Exit ticket

A business has operating profit of £45k, total equity of £180k and non-current liabilities of £120k.

a. Calculate its ROCE.

b. Calculate its gearing. Is it highly geared (gearing above 50% is often called high)? Explain in one sentence.
