

Homework — Working Capital and Short-Term Finance

Optional. Worked solutions are on the website

Practice problems

4.1

1. The same firm plans to grow revenue by ₦80M next year. How much additional cash will the growth absorb? If its net margin is 6%, can the growth fund itself?
2. Two firms both grow revenue by ₦100M. Firm A has working-capital intensity of 24%; Firm B has intensity of negative 4%. Describe the cash consequence for each, and give a plausible industry for each.
3. Ilupeju's intensity is 19.7%. Its owner argues that since the business is profitable, growth must make it better off. Write a four-sentence response that accepts the profitability point and explains the cash problem anyway.

4.2

1. Using the same firm, find the amount of new sales at which the change breaks even.
2. Explain why a firm with a 55% gross margin can extend credit far more freely than a firm with a 12% gross margin, even if both face the same funding rate.
3. Ilupeju's sales director says the ₦60M account is worth taking because "it covers our fixed costs." Evaluate this argument in four sentences. Under what circumstance would it actually be correct?

4.3

1. A supplier offers 2/10 net 30 and a firm always pays on day 45 instead of day 30. Recompute the effective rate the firm is actually paying, and comment on what else it is risking.
2. Ilupeju wants to offer its customers terms that cost it no more than 12% effective. If the net period is 60 days and the discount period is 10 days, what is the largest discount it can offer? Show your working.

4.4

1. A finance company quotes 3.5% per month. Compute the simple annualised rate and the effective annual rate, and explain why they differ.
2. Rank these for a firm with no audited accounts and one strong customer: bank term loan, invoice discounting, LPO financing, supplier credit. Justify your ranking on availability rather than price.

3. A distributor funds a permanent ₦120M working-capital requirement by rolling a 90-day LPO facility at 4% per month, renewed continuously. Compute the annual cost. Then compute the annual cost if it could refinance with a term loan at 27%. What is the annual saving, and what would the firm need to do to obtain it?

4.5

1. The same firm has cost of goods sold of ₦420M. Compute its days of inventory. If it reduced holdings to 50 days, how much cash would be released and how much annual carrying cost saved?
2. A distributor's supplier lead time averages 5 weeks with a worst case of 11 weeks. Weekly usage is ₦3.2M. Compute the safety stock required to cover the worst case. Then compute it if the firm could reduce the worst case to 7 weeks, and state the value of that improvement at a 30% carrying cost.
3. A finance manager proposes cutting inventory across every product line by 25%. Give two reasons this is the wrong shape of recommendation, and describe what you would propose instead.