

HOMEWORK SHORT-TERM FINANCING

SUBMISSION ONLINE TO: <http://bit.ly/201hw3>

Problem 1:

Costs of Alternative Sources of Short-term Financing. On March 1, 20X1, National Corporation purchased \$100,000 worth of inventory on credit with terms of 1/20, net/60. In the past, National has always followed the policy of making payment 1 month (30 days) after the goods are purchased.

A new member of National's staff has indicated that the company she had previously worked for never passed up its cash discounts, and she wonders if that is not a sound policy. She has also pointed out to National that if it does not take advantage of the cash discount, it should wait the entire 60-day period to pay the full bill rather than paying within 30 days.

If National were to take advantage of the discount and pay the bill on March 20 rather than on March 30, the firm would have to borrow the necessary funds for the 10 extra days. National's borrowing terms with a local bank are estimated to be at 9 percent (annual rate), with a 15 percent compensating balance for the term of the loan. Most members of National's staff feel that it makes little sense to take out an 9 percent loan with a compensating balance of 15 percent in order to save 1 percent on its \$100,000 by paying the account 10 days earlier than it had planned.

- a) Just in terms of true interest cost, would it be to National's advantage to take the 1 percent discount by paying the bill 10 days earlier than usual if to do this it borrowed the necessary amount on the above-mentioned terms?
- b) If National ordinarily paid 60 days after purchase (instead of 30 days); would the company benefit by taking the discount if it had to borrow the money on the above-mentioned terms?
- c) Compare your answers to (a) and (b) and explain what makes the discount more (less) desirable under the conditions stated in (b) than in (a).

Problem 2:

Jackie Corp. turns over its inventory 9 times during the year, and its days sales outstanding was 36 days. Under regular payment policy, the company payables deferral period is 40 days. Jackie's daily operating cash is around \$64,000. Assume a 360-day year.

- a) Calculate firm's cash conversion period and the amount of resources or minimum cash needed to support its cash conversion cycle.
- b) Jackie normally buys inventory on account with credit term of 2/15, net 40. If the company decides to take cash discount, what effect will this have on the cash cycle and the minimum cash required?
- c) If Jackie decides to take 2 percent cash discount, it has to make short-term bank loan at 15 percent cost and 25 percent compensating balance. How much does it need to pay to suppliers and apply for total loan with commercial bank?
- d) Will it be better for Jackie to take 2 percent discount when short-term bank loan costs 15%? Please calculate and compare the opportunity cost rate of foregoing cash discount and the actual interest rate to make decision.