Lancaster University Management School

AcF 302 – Corporate Finance

Workshop Questions – Week 18

Working Capital Management and Short Term Financing

(Note: It's unlikely I'll manage to finish all these exercises in week 18. Some of these exercises will be left to be revised during week 19).

1) The term 5/10 net 30 means:

A) If the invoice is paid within 10 days a 5% discount can be taken. If the invoice is paid between 11 and 29 days a 1% discount can be taken. After 30 days the full invoice is due.

B) If the invoice is paid within 5 days a 10% discount can be taken, otherwise the full invoice is due in 30 days.

C) If the invoice is paid within 2 days a 10% discount can be taken, otherwise a 2% discount can be taken if the invoice is paid in 30 days.

D) If the invoice is paid within 10 days a 5% discount can be taken, otherwise the full invoice is due in 30 days.

2) Assume the credit terms offered to your firm by your suppliers are 3/5, Net 30. Calculate the cost of the trade credit if your firm does not take the discount and pays on day 30.

3) Your supplier offers terms of 1/10, Net 45. What is the effective annual cost of trade credit if you choose to forgo the discount and pay on day 45?

4) Your firm purchases goods from its supplier on terms of 1/10, net 30. Calculate the effective annual cost to your firm if it chooses not to take advantage of the trade discount offered and stretches the accounts payable to 45 days.

5) Simple Simon's Bakery purchases supplies on terms of 1/10, Net 25. If Simple Simon's chooses to take the discount offered, it must obtain a bank loan to meet its short-term financing needs. A local bank has quoted Simple Simon's owner an interest

rate of 12% on borrowed funds. Should Simple Simon's enter the loan agreement with the bank and begin taking the discount?

6) Your firm purchases goods from its supplier on terms of 3/15, Net 40.

a. What is the effective annual cost to your firm if it chooses not to take the discount and makes its payment on day 40?

b. What is the effective annual cost to your firm if it chooses not to take the discount and makes its payment on day 50?

7) Shipping Transcontinental needs a £200,000 loan for the next 30 days. Shipping has three alternatives available.

i. Alternative #1: Forgo the discount on its trade credit agreement that offers terms of 2/5 net 35.

ii. Alternative #2: Borrow the money from Bank Vicovaro, which has offered to lend the firm £200,000 for one month at an APR of 9%. The bank will require a (no-interest) compensating balance of 10% of the face-value of the loan and will charge a £600 loan origination fee, which means that Taggart must borrow even more than the £200,000 they need.

iii. Alternative #3: Borrow the money from Bank Corvobianco, which has offered to lend the firm £200,000 for one month at an APR of 12%. The loan has a 1% origination fee.

Which alternative should the company choose? Explain why.

8) Which of the following statements is FALSE?

A) A firm should always pay on the latest day allowed.

B) The lower the discount percentage offered, the greater the cost of forgoing the discount and using trade credit.

C) A firm should choose to borrow using accounts payable only if trade credit is the cheapest source of funding.

D) A firm should strive to keep its money working for it as long as possible without developing a bad relationship with its suppliers or engaging in unethical practices.

9) Occasionally, a company will encounter circumstances in which cash flows are temporarily negative for an unexpected reason. We refer to such a situation as:

A. a liquidity shock.

B. a negative cash flow shock.

C. a negative liquidity shock.
D. a cash crunch.

10) Which of the following statements is FALSE?

A) Firms with seasonal cash flows may find themselves with a surplus of cash during some months that is sufficient to compensate for a shortfall during other months. However, because of timing differences, such firms often have short-term financing needs.

B) A company forecasts its cash flows to determine whether it will have surplus cash or a cash deficit for each period.

C) Like seasonalities, positive cash flow shocks can create short-term financing needs.

D) When sales are concentrated during a few months, sources and uses of cash are also likely to be seasonal.

11) Which of the following statements is FALSE?

A) If a company anticipates an ongoing surplus of cash, it may choose to increase its dividend payout.

B) Seasonal sales can create large short-term cash flow deficits and surpluses.

C) The first step in short-term financial planning is to forecast the company's future net working capital.

D) Deficits resulting from investments in long-term projects are often financed using long-term sources of capital, such as equity or long-term bonds.

12) A written, legally binding agreement that obliges the bank to lend a firm any amount up to a stated maximum, regardless of the financial condition of the firm (unless the firm is bankrupt) as long as the firm satisfies any restrictions in the agreement is called:

A) a bridge loan.

B) a single, end-of-period-payment loan.

C) a short-term mortgage loan.

D) a committed line of credit.

13) Which of the following statements is FALSE?

A) The matching principle indicates that the firm should finance permanent working capital with short-term sources of funds.

B) Following the matching principle should, in the long run, help minimize a firm's transaction costs.

C) In a perfect capital market, the choice of financing is irrelevant; thus, how the firm chooses to finance its short-term cash needs cannot affect value.

D) A portion of a firm's investment in its accounts receivable and inventory is temporary and results from seasonal fluctuations in the firm's business or unanticipated shocks.

14) Which of the following statements is FALSE?

A) Because investment in permanent working capital is required so long as the firm remains in business, it constitutes a long-term investment.

B) Because temporary working capital represents a short-term need, the firm should finance this portion of its investment with short-term financing.

C) Temporary working capital is the difference between the lowest level of investment in short-term assets and the permanent working capital investment.

D) The matching principle states that short-term needs should be financed with short-term debt and long-term needs should be financed with long-term sources of funds.

15) Which of the following one-year £1000 bank loans offers the lowest effective annual rate?

a. A loan with an APR of 6%, compounded monthly

b. A loan with an APR of 6%, compounded annually, that also has a compensating balance requirement of 10% (on which no interest is paid)

c. A loan with an APR of 6%, compounded annually, that has a 1% loan origination fee

16) The Needy Corporation borrowed £10,000 from Bank Ease. According to the terms of the loan, Needy must pay the bank £400 in interest every three months for the

three-year life of the loan, with the principal to be repaid at the maturity of the loan. What effective annual rate is Needy paying?

17) Which of the following is NOT a specific financing option for temporary working capital?

A) Treasury bills
B) Secured financing
C) Bank loans
D) Commercial paper

18) Consider the following three companies and their short term financing arrangements.

a) Kinston Industries has an average accounts payable balance of £220,000. Its annual cost of goods sold is £5,475,000, and it receives terms of 2/10, net 30 from its suppliers. Kinston chooses to forgo this discount. Is Kinston managing its accounts payables well?
b) Manchester Copper has borrowed £5 million for six months at a stated annual rate of 10%, using inventory stored in a field warehouse as collateral. The warehouse charges a £25,000 fee, payable at the end of the six months. Calculate the effect annual rate on this loan.
c) Lancaster Mining is offered a £6 million pound loan for six months at an APR of 11%. If this loan has an origination fee of 1.5%. Calculate the effective annual rate (EAR) for this loan .
d) Which company has the best arrangement: Manchester Copper or Lancaster mining?

19)SuperTires is considering several options to cover for their short-term financial needs using *secured financing*.

Calculate the effective annual rate for the offers in (a) and (b):

a) Borrow £4 million for three months at a stated annual rate of 8%, using inventory stored in a field warehouse as collateral. The warehouse charges a quarterly fee of £10,000.
b) SuperTires is considering using a public warehouse loan as part of its short-term financing. The firm will require a loan of £2 million for three months. Interest on the loan will be 12% (APR, compounded quarterly) to be paid at the end of the quarter. The warehouse charges 1% of the face value of the loan, payable at the beginning of the quarter.

i) Considering the alternatives above, which one would you advise SuperTires to take? Explain why.

ii) Can you suggest to SuperTires two alternative forms of secured financing that don't involve using inventories as a collateral?

20) Which of the following statements is FALSE?

A. If a factoring arrangement is with recourse, the factor will pay the firm the amount due regardless of whether the factor receives payment from the firm's customers.

B. In a factoring of accounts receivable arrangement, the firm sells receivables to the lender (i.e., the factor), and the lender agrees to pay the firm the amount due from its customers at the end of the firm's payment period.

C. Businesses can also obtain short-term financing by using secured loans, which are loans collateralized with short-term assets—most typically the firm's accounts receivables or inventory.

D. Both the interest rate and the factor's fee vary depending on such issues as the size of the borrowing firm and the dollar volume of its receivables.

21) Which of the following statements is FALSE?

A. A public warehouse is a business that exists for the sole purpose of storing and tracking the inflow and outflow of the inventory.

B. A warehouse arrangement is the riskiest collateral arrangement from the standpoint of the lender.

C. Because the warehouser is a professional at inventory control, there is likely to be little loss due to damaged goods or theft, which in turn lowers insurance costs.

D. A field warehouse is operated by a third party, but is set up on the borrower's premises in a separate area so that the inventory collateralizing the loan is kept apart from the borrower's main plant.

Lecture revision questions:

A) Discuss the three different arrangements under which a firm may use inventory to secure a loan.

B) Explain factoring of accounts receivables and the difference between factoring with and without recourse.

C) What is the difference between pledging accounts receivable to secure a loan and factoring accounts receivable?

D) Explain Commercial Paper.

E) Explain the motives for a firm to hold cash.

F) Explain what is a line of credit and how does a committed line of credit work.

G) Explain temporary working capital and permanent working capital.