

past the credit period date should not be a normal business practice and should only happen when financial resources are not available to make a timely payment. The chapter concludes by noting that the balance fraction method is preferred over payable turnover measures when monitoring use of trade credit since the latter are influenced by seasonal purchasing trends.

Useful Web Sites

Online marketplace example: www.tradecard.com

Payables articles: www.treasury.pncbank.com

Questions

1. What role do payables play in the working capital or cash cycle? Explain how payables represent spontaneous sources of financing.
2. When should firms take cash discounts?
3. How long should accounts payable be held before payment is made?
4. What is the conceptual relationship between the firm's investment rate, the late payment penalty fee, and the discount rate in determining the appropriate date to make payment?
5. What are the tangible costs related to late payment and what are some of the intangible costs?
6. Discuss trends in firms' use of accounts payable.
7. How does the balance fraction approach to monitoring payments improve accuracy of the monitoring information compared to the payables turnover approach?

Problems

1. For the following set of terms, state whether you should take the cash discount or pay at the end of the credit term period assuming your investment rate is 10 percent.
 - a. 1.5/20, net 80
 - b. 1/5, net 60
 - c. 2/10, net 45
 - d. 2/10, net 30
2. You are currently re-evaluating your payables policy. Your current suppliers offer terms of 1.5/10, net 40 with a late payment fee of 1.5 percent per month. A supplier wanting your business is willing to offer terms of 2.5/5, net 60 with no stated late payment fee. Your annual borrowing rate is 18 percent. Assume a 365 day year.
 - a. How long should you delay payment given the terms of your current suppliers? Prove your answer by relating the annualized cost of the discount to your investment or borrowing rate.
 - b. How long should you delay payment given the terms of the competing supplier? Prove your answer by relating the annualized cost of the discount to your investment or borrowing rate.
 - c. Based on an average invoice of \$100,000, which supplier should you purchase from, i.e., which set of terms results in the minimum net present value cost?
3. You are currently re-evaluating your payables policy. Your current suppliers offer terms of 3/10, net 30 with a late payment fee of 1.5 percent per month. A supplier wanting your business is willing to offer terms of 1/5, net 60 with a late payment fee of 1.5 percent per month. Your annual

borrowing rate is 16 percent. Assume a 365 day year. Base your analysis on an assumed \$100,000 purchase.

- How long should you delay payment given the terms of your current suppliers? Prove your answer by relating the annualized cost of the discount to your investment or borrowing rate.
 - How long should you delay payment given the terms of the competing supplier? Prove your answer by relating the annualized cost of the discount to your investment or borrowing rate.
 - Based on an average invoice of \$100,000, which supplier should you purchase from, i.e., which set of terms results in the minimum net present value cost?
4. Collen Avenue Bakery purchases flour from a mill on a regular basis. The monthly purchase scheduling and ending payables is provided below.

	DEC	JAN	FEB	MAR	APR	MAY	JNE
Purchases	25	45	80	120	100	90	50
Ending Payables		50	60	80	85	70	50

- Calculate the days purchases outstanding for March, April, May, and June using quarterly purchases to calculate the average daily purchases.
- What is your conclusion regarding the firm's payment behavior?
- Below is presented a table showing the amount of payables remaining in successive months for purchases made during the January through June period of operations. Convert the table to a balance fraction matrix and discuss the firm's payment pattern as represented by the balance fraction table.
- What is your conclusion about the firm's payment pattern?

ACCOUNT PAYABLES BALANCES

	PURCHASES	JAN	FEB	MAR	APR	MAY	JNE
Jan	45	20	22				
Feb	80		38	20			
Mar	120			60	30		
Apr	100				55	17	
May	90					53	15
Jne	50						35
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		NA	60	80	85	70	50

5. Wycliff Contractors, Inc has the following monthly purchasing schedule and ending accounts payable.

	DEC	JAN	FEB	MAR	APR	MAY	JNE
Purchases	400	375	350	325	400	500	650
Ending Payables		342	320	297	345	430	555

- Calculate the days payables outstanding for March, April, May, and June using quarterly purchases to calculate the average daily purchases.
- What is your conclusion regarding the firm's payment behavior?
- Below is presented a table showing the amount of payables remaining in successive months for purchases made during the January through June period of operations. Convert the table to a balance fraction matrix and discuss the firm's payment pattern as represented by the balance fraction table.
- What is your conclusion about the firm's payment pattern?

ACCOUNT PAYABLES BALANCES

	PURCHASES	JAN	FEB	MAR	APR	MAY	JNE
Jan	375	262	75				
Feb	350		245	70			
Mar	325			227	65		
Apr	400				280	80	
May	500					350	100
Jne	650						455
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		NA	320	297	345	430	555

REFERENCES

- Biais, B. and C. Gollier, "Trade Credit Rationing and Credit Rationing," *Review of Financial Studies* 10, 903-937.
- Cunat, V., "Trade Credit: Suppliers as Debt Collectors and Insurance Providers," *Review of Financial Studies* 20, 491-527.
- Giannetti, M., M. Burkart, and T. Ellingsen, 2011, "What You Sell is What You Lend? Explaining Trade Credit Contracts," *Review of Financial Studies* 24, 1261-1298.
- Ferris, S., 1981, "A Transactions Theory of Trade Credit Use," *The Quarterly Journal of Economics* 96, 243-270.
- R. Flandez, "It Just Isn't Working? Some File for Customer Divorce," *Wall Street Journal*, November 9, 2009.
- James A. Gentry and Jesus M. De La Garza, "Monitoring Accounts Payable," *The Financial Review*, Vol. 25 No. 4, (November 1990), pp. 559-576.
- Hill, M., G.W. Kelly, and B. Lockhart, 2012, "Downstream Value from Upstream Finance," *Financial Review*, forthcoming.
- Ned Hill, William Sartoris, and Daniel Ferguson, "Corporate Credit and Payables Policies: Two Surveys," *Journal of Cash Management*, (July-August 1984), pp. 56-62.
- E. Maltby, "How Firms Cope with Slow Payers," *Wall Street Journal*, November 11, 2011.
- Petersen, M. and R. Rajan, 1994, "The Benefits of Lending Relationships: Evidence from Small Business Data," *Journal of Finance* 49, 3-37.
- Petersen, M. and R. Rajan, 1997, "Trade Credit Theories and Evidence," *Review of Financial Studies* 10, 661-691.
- Smith, J., 1987, "Trade Credit and Informational Asymmetry," *Journal of Finance* 42, 863-871.
- Mary L. Woodell, "Fraud? Imagine You're in the Spotlight," *New York Times* (November 24, 1991), F11.