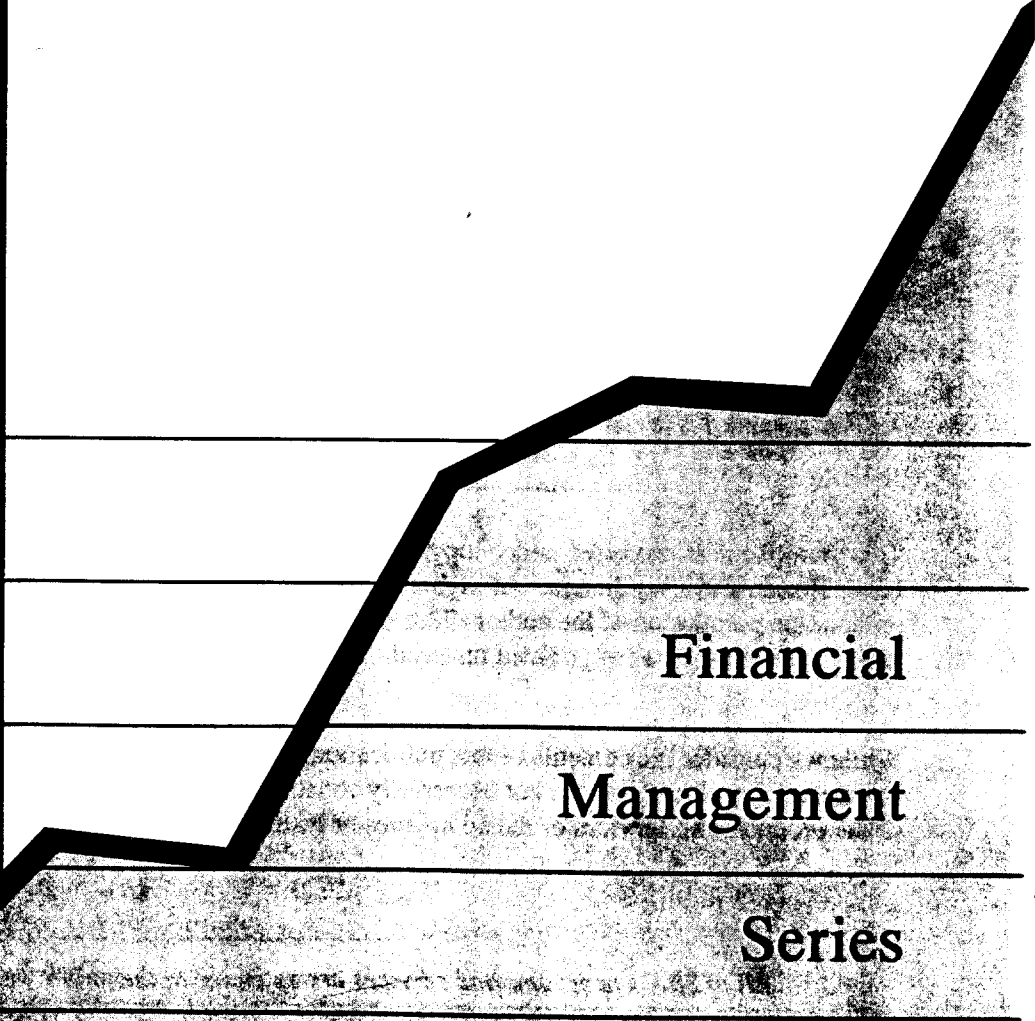


U nderstanding and Controlling Cash Flow

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INTRODUCTION

Opportunity knocks but you cannot answer. You are temporarily short of cash!

Small business owners may easily avoid this situation with good cash flow management. This publication outlines techniques to achieve this goal.

Cash is a component of a business' net working capital and is its most liquid current asset. To understand its role in and out of a business, we look first at the concept of current assets and current liabilities.

The working capital cash conversion cycle — also often called the cash flow cycle — is the length of time between the payment of what a business owes — payables — and the collection of what a business is owed — receivables. Businesses use several techniques to minimize the length of time funds are “tied-up” in order to reduce the amount of working capital needed for operations.

Before applying any techniques it is necessary to understand the components of working capital including:

- cash,
- marketable securities,
- accounts receivable,
- inventories,
- accounts payable and
- accrued wages and taxes.

We will also examine financial ratios. These help to determine the financial health of a business as compared to industry averages. They are calculated in the examples as appropriate. There also are suggestions for better management of receivables, inventories and payables.

As an important source of financing for small businesses, short-term bank loans will be examined. This includes tips for selecting a bank and suggestions on how to prepare for a successful loan application and interview. Moreover, since bank loans have many characteristics which affect true loan costs, as well as having other implications to the business, several of these traits are discussed.

Next, we will look at how businesses, without established credit ratings, can use accounts receivable and inventory financing to secure a loan. We'll discuss the rationale and the costs of pledging and selling receivables, as well as the three forms of inventory loans — inventory blanket liens, trust receipts and warehouse receipts.

Finally, we'll look at controlling cash flow by effectively managing working capital.

ACCOUNTING PROFITS VERSUS CASH FLOW

Earnings, including profits, and cash flow, although related, are two distinctly different concepts. Profits and earnings are created by accounting conventions and include non-cash items such as depreciation. Cash flow, on the other hand, is an analysis of the timing of cash receipts and cash disbursements over a specific time period.

Many financial analysts define operating cash flow as net income exclusive of depreciation. However, it is necessary to understand other income statement items in order to fully understand cash flow management.

For example, depreciation and amortization are accounting conventions for expensing (in the case of depreciation) and allocating (in the case of amortization of a loan) the cost of an asset over an arbitrary time period and, as such, affect annual net income. Cash flow, however, is not directly affected by these items. Moreover, prepaid items such as insurance, supplies, maintenance contracts, etc., are cash payments which are typically made in advance. While they impact cash flow, they are charged against earnings in a subsequent period.

WORKING CAPITAL MANAGEMENT

Net working capital is the difference between a business' current assets and its current liabilities. Working capital policy, then, refers to decisions related to types and amounts of current assets and the means of financing them. These decisions will necessarily involve:

- the management of cash and inventories,
- credit policy and collection of accounts receivables,
- short-term borrowing and other financing opportunities such as trade credit,
- inventory financing, and
- receivables financing.

Working capital management is primarily concerned with the day-to-day operations rather than long-term business decisions. For example, plans for introducing new products to the market and plans for obtaining the facilities and equipment necessary to produce them are strategic in nature, as are the long-term financing needs of the firm. On the other hand, working capital management policies target short-term concerns such as the:

- availability of raw material and inventories,
- continuous operation of the production line,
- granting credit to customers and collecting past-due accounts,
- taking advantage of credit purchases and the discounts for early payments, and
- the management of the cash account.

These factors help promote smooth operation of the business on a day-to-day basis.

Since the average firm has about 40 percent of its capital tied up in current assets¹, decisions regarding working capital greatly impact business success. This is especially true for smaller businesses which often minimize their investment in fixed assets by leasing rather than buying, but which cannot avoid investing in inventories, cash and receivables. Further, small businesses tend to have a limited number of financing

opportunities and less access to capital markets. This requires them to rely heavily on short-term credit such as accounts payable, bank loans and credit secured by inventories and/or accounts receivable. The use of any of these financing sources influences working capital by increasing current liabilities.

Finally, there is a direct relationship between sales growth and current asset levels. For example, higher sales volume may be achieved only if production increases. Higher production, however, requires greater investment in inventories. Additionally, if a firm buys on credit, its accounts payable increase and when it sells on credit, its accounts receivable increase. Therefore, higher sales require a larger investment in current assets which, in turn, requires greater financing. Profits result from selling the product or the service. If the goal of the business is higher profits, the importance of effective working capital management becomes obvious.²

Three financial ratios allow a comparison of your business with your competitors and to industry averages. These ratios also play an important role in the granting or denial of loan requests. Small businesses should calculate and monitor these financial ratios as part of their working capital management policy.

$$\text{Current Ratio} = \frac{\text{Current assets}}{\text{Current liabilities}}$$

$$\text{Quick, or Acid, Ratio} = \frac{(\text{Current assets} - \text{Inventories})}{\text{Current liabilities}}$$

$$\text{Debt to Total Assets Ratio} = \frac{\text{Total debt}}{\text{Total assets}}$$

The current and quick ratios measure liquidity and reveal whether the firm can meet its maturing obligations. The debt-to-asset ratio shows the degree of financial leverage. Other financial ratios such as inventory turnover and average collection period will be introduced later.

1 *Financial Management: Theory and Practice*, Fourth Edition, Eugene F. Brigham, 1985, The Dryden Press, p. 731. Also cited as *FINANCIAL MANAGEMENT*.

2 Additional information on the basics of working capital management may be obtained from *Essentials of Managerial Finance*, Eighth Edition, J. Fred Weston and Eugene F. Brigham, 1987, The Dryden Press, chapter 10 (also cited as *ESSENTIALS*), or *FINANCIAL MANAGEMENT*, chapter 18

The Working Capital Cash Conversion Cycle

The working capital cycle involves the steps a business normally takes from the time it makes the first cash commitment toward providing a product or a service, to the point when it receives cash payment for its sales. The firm orders and receives the raw material, generating an account payable. It also hires additional employees to produce the goods and, since workers generally aren't paid the moment their work is performed, accrued wages are generated. Eventually, the product is sold which, if the product is purchased using credit, generates an account receivable. Firms will typically start the payment of their payables before collecting cash for receivables. This produces a net cash outflow. An individual cycle ends when the full cash amount for the sale is received. Each new transaction begins the cycle again.

The cash conversion cycle (CCC) is defined as the length of time between the payment of the payables and the collection of receivables.³ During this cycle a business' funds are unavailable for other purposes. Cash has been paid for purchases but cash has not been collected from sales. Short-term financing may be needed to sustain business activities for this period. Since there is always a cost to such financing, a goal of any business should be to minimize the cash conversion cycle. To achieve this goal three terms must be clearly understood:

- Inventory conversion period (ICP) refers to the length of time between purchase of raw material, production of the goods or service, and the sale of the finished product.
- Payable deferral period (PDP) is the time between the purchase of raw material on credit and cash payments for the resulting accounts payable.
- Receivable conversion period (RCP) is the time between the sale of the final product on credit and cash receipts for the accounts receivable.

The cash conversion cycle may be calculated by using the following formula:

$$\text{CCC} = \text{ICP} + \text{RCP} - \text{PDP}$$

For example, if it takes 35 days after orders are placed to receive and process the raw material into finished product, the ICP is 35 days. Assuming that 25 days after the arrival of raw material, the firm pays for them, the PDP is 25 days. Finally, if the firm receives cash payment for the sale of its

product or service in 30 days, the RCP is 30 days. The CCC is thus 35+30-25, or 40 days.

As mentioned before, the CCC represents the time in which working capital is "tied up" in covering production costs. If a business owner is able to shorten the CCC, the need for external financing and the resulting interest expense will be smaller, thus creating higher profits.

For example, assume a firm borrows working capital with a 10 percent simple interest rate for 40 days. The effective interest rate would be 10.46 percent annually.⁴ Borrowing \$100,000 for this period would cost \$1,162.22. However, if the firm shortens the cash conversion cycle to 20 days, the interest expense at the effective rate of 10.50 percent, would only be \$583.33.

The CCC may be shortened by:

- reducing the ICP — processing the raw material and producing the goods as quickly as possible;
- reducing the RCP — speeding up collections; or
- lengthening the payable conversion period — slowing payments.⁵

These three strategies are best utilized by the small business owner who is familiar with sound inventory, receivables and payables management techniques as well as the sources and costs of short-term financing.

Figure 1 presents a few tips for shortening the CCC through faster cash collection and slower cash disbursement. We then examine techniques for managing the various components of current assets such as cash, marketable securities, accounts receivable and credit management, and inventories. Following this we'll examine the use of short-term liabilities as a means of financing operations.

Short-term liabilities include:

- accruals,
- accounts payable,
- short-term bank loans, as well as
- short-term credit secured with accounts receivable and inventories.

3 See Verlyn D. Richards and Eugene J. Laughlin, "A Cash Conversion Cycle Approach to Liquidity Analysis" *Financial Management*, Spring 1980, 32-38

4 Thorough explanation of various interest rate scenarios and the calculation of the effective rate of interest based on the nominal or stated rate is presented later in this publication.

5 For additional information on the cash conversion cycle model, see *ESSENTIALS*, pp 346-349, and *FINANCIAL MANAGEMENT*, pp 734-736

Figure 1. Suggestions for shortening of the cash conversion cycle.

1. Synchronize cash flows: forecast the timing of receipts based on the past and arrange to pay suppliers accordingly.
2. For more efficient collections consider:
 - a. lockbox services: post office boxes where customers may mail their payments which are then collected by the bank.
 - b. pre-authorized checks: the customer signs an authorization form allowing a bank to draw checks against his account at regular intervals.
 - c. concentration banking: centralize the receiving locations at one bank.
 - d. depository transfer checks (DTC): ask the customers to pay with this simple and relatively inexpensive method of transferring funds.⁶
 - e. automated clearing houses (ACH): electronic transfer of funds from your customers' account to yours.
3. For more efficient payments consider:
 - a. trade credit discounts for early payment: compare the cost of not taking the discount (as explained later) to the benefits of using your cash elsewhere.
 - b. pre-authorized checks, depository transfer checks and automated clearing houses: you may also use these methods to pay as late as possible without passing the discount or the credit period.
 - c. float: mail checks from more remote areas, then evaluate and take advantage of the time it takes the supplier to process the payment and the time it may take the bank to clear the check. You can use your cash for other purposes in the meantime.
 - d. zero-balance accounts: funds are automatically transferred to these accounts by the bank when they are needed for clearance of checks.

Cash and Marketable Securities

Cash is needed for many purposes, for example, payment of wages, raw materials and taxes. The amount of cash held to cover day-to-day transactions is called transaction balances. Additional cash may be necessary to take advantage of special bargains, such as a supplier's clearance sale of raw materials. The cash held for such purposes is called speculative cash balances. Moreover, a business may desire to hold some extra cash as precautionary balances for emergencies or unexpected outflows of funds. Finally, compensating balances may be maintained to help compensate lenders for their services. For example, a

bank may require the small business to maintain a checking account with a minimum deposit equal to some percentage of the loan amount. Since this requirement generates additional revenues for the lender it is often included in financing packages.

Additional advantages to holding adequate cash balances include the opportunity to take trade discounts offered by suppliers for early payment of invoices. This improves the business' credit rating by keeping financial ratios in line with competitors, thus allowing the business to obtain credit.

Although there are many advantages to holding sufficient cash balances, the fact that these balances do not earn an explicit return concerns many small business owners. As an alternative, you may hold part of your liquid funds in short-term marketable securities. These instruments earn interest and can be very

⁶ For a detailed explanation of DTCs, see *Contemporary Cash Management*, second edition, by Paul J. Beehler, 1983, John Wiley and Sons, Inc.

easily converted to cash. Several examples of such securities are:⁷

- **Treasury Bills (T-Bills)**— short-term obligations of the United States government with a smallest denomination of \$10,000 and maturing in less than one year. Sold at a discount, the buyer pays an amount less than the face value of the bill which he/she receives when the security matures. T-bills are sold quite frequently by the Treasury through public auctions. Most small investors are advised to buy them in the secondary market through a U.S. T-bill dealer/broker.
- **Commercial Paper**— unsecured promissory notes of large corporations with high and well-established credit ratings. Maturities of commercial paper are typically between 15 to 45 days, but may range from 1 to 270 days. There are no secondary markets for commercial paper, but issuers generally provide liquidity by standing ready to buy back the security before it matures.
- **Certificates of Deposit (CD)**— popular short-term instruments issued by commercial banks. The negotiable CD is issued in minimum denominations of \$100,000 and may be traded in the secondary market. CD holders feel safe knowing their investment is insured by the Federal Deposit Insurance Corporation (FDIC).

Accounts Receivable and Credit Management

The profitability of a business is dependent upon its ability to successfully sell its products for more than it costs to produce them. Selling on credit generally attracts customers and increases sales volume. There are, however, direct and indirect costs to extending credit which must be weighed against any potential benefits. A successful credit policy is one in which the costs of granting credit are offset by the benefits of higher sales.

When the firm ships the goods or performs the services without receiving cash, an account receivable (AR) is generated. The dollar amount of receivables is determined by the volume of sales and the average

length of time between a sale and receipt of full cash payment, and may be calculated based on the following simple formula:

$$AR = \text{Credit sales per day} \times \text{Length of collection period}^8$$

For example, if a business has credit sales of \$1,000 per day and allows 20 days for payment, it has a total of \$1,000 x 20 or \$20,000 invested in receivables at any given time (assuming the firm's operations are stable). Any changes in the volume of sales or the length of the collection period will change the receivable position.

A credit policy refers to the actions taken by a business to grant, monitor and collect the cash for outstanding accounts receivable. Four specific factors must be considered in establishing an effective credit policy:

- credit worthiness standards,
- credit period,
- collection policy, and
- discounts for early payment.⁹

First, the credit worthiness of a buyer must be evaluated. Most small businesses measure credit quality and evaluate a customer's probability of default by examining the five Cs of credit:

- character,
- capacity to repay,
- capital,
- collateral, and
- conditions.

A customer's character refers to his/her acknowledgement of a moral obligation to pay the debt as promised. It may be evaluated by examining the customer's previous payment habits. Relevant information may be requested from the customer's bank, previous suppliers or from credit reporting agencies. The capacity to repay is the subjective judgment of customer's ability to repay the loan. An examination of the financial statements and the

⁷ Detailed explanation of short-term financial market instruments is presented in *Securities Markets* by Kenneth Garbade, 1982, McGraw-Hill. A less academic approach may be found in *Cash Management: Corporate Strategies for Profit*, Mary C. Frisco, 1983, John Wiley and Sons, pp 195-204

⁸ *ESSENTIALS*, page 396

⁹ Credit policy, including the 5 Cs system, credit scoring systems to evaluate "credit worthiness," and sources of credit information are presented in *FINANCIAL MANAGEMENT*, pp 844-852

business plan of the credit buyer may aid in making the correct judgment. The analysis of financial ratios, especially risk ratios such as the debt-to-asset and the current ratios, will help in measuring capital. Finally, special attention should be paid to the collateral which the customer may offer as security and to the general economic as well as specific geographical and industry conditions.

Credit period is the length of time allowed before the credit buyer must pay for credit purchases. Collection policy refers to actions that the business is willing to take to collect slow-paying accounts. The length of time a firm is willing to extend credit to its customers and the "toughness" of the firm in collecting its receivables may influence sales and, ultimately, its profits, while a "relaxed" collection policy may increase the percentage of bad debt.

The receivable position must be monitored closely by calculating the average collection period (ACP) according to the following formula and comparing it to the industry average.¹⁰

$$\text{ACP} = \frac{\text{Receivables}}{\text{Daily sales}}$$

For a business with a receivables position of \$1,500 and annual credit sales of \$50,000, the average collection period is $(\$1,500)/(\$50,000/360)$, or approximately 11 days. This means the firm must wait an average of 11 days before collecting cash for sales.

Moreover, an aging schedule must be constructed to show how long accounts receivable are outstanding by dividing the receivables position in age categories and showing the percentage of receivables in each age group. Then, the small business owner must decide what actions are appropriate for collecting the past due accounts. Usually, a letter is sent to remind the credit buyer that the account is past due, followed by a telephone call if payment is further delayed. Finally, the services of a collection agency may be necessary.

The collection process may be expensive both in terms of out-of-pocket expense and the loss of business relations. Therefore, making the decision to grant

credit is an important and delicate business function requiring careful handling. Advice from other business owners and professionals is often helpful.

The last element of the credit policy, cash discount, may be considered as an incentive for credit customers to pay early and it may reduce the average collection period. It may also attract new customers who look at cash discount as a form of price reduction. These benefits, however, must be weighed against the dollar cost of the discount before any decisions are made. Figure 2 contains suggestions to help you better manage your firm's receivables.

Inventory Management

A firm's profitability depends on the successful sale of its product or service. For non-service oriented businesses, sufficient inventories must be available to meet demand. In determining an optimal level of goods in inventory, sales must be forecast and developed. Since sales depend on many factors outside of a business' control, inventory management can be very challenging. Holding inventory levels at less than what is needed to support sales will cost the firm business. On the other hand, since holding inventory involves costs such as storage and insurance expenses, excess inventory must also be avoided if minimal cost and maximum profits are desired.

Typical questions in determining optimal inventory levels include:

- how many units of particular products must the firm hold in stock?
- how many units must be ordered or produced at a given time? and
- when should the order be placed?

As mentioned before, in determining how many units to have in stock, sales must be predicted and sufficient inventories held to satisfy the expected demand. Moreover, to prepare for potential sales increases, some level of "safety stocks" must also be held. The amount of safety stock is determined by comparing the cost of maintaining this additional inventory against potential sales losses. The following ratios

10 There are several sources of information for industry-wide financial ratios. For example, *Industry Norm and Key Business Ratios* may be borrowed from your local library, and Robert Morris Association's figures for your industry are available in many banks.

11 See the "monitoring of receivables position" in *FINANCIAL MANAGEMENT*, pp 837-844. In addition to the AC and the aging schedule, the payment pattern approach and the use of computers are discussed and descriptive examples are presented

Figure 2 Suggestions for more effective management of accounts receivable.

1. Monitor the dollar amount of your receivables position on an ongoing basis.
2. Calculate the percentage of total sales that are sold on credit.
3. Evaluate the "credit worthiness" of your customers, using the 5 Cs of credit.
4. Establish the credit period, discount percent for early payments, the discount period and surcharge for late-payers.
5. Calculate and evaluate your average collection (AC) period. As a rule of thumb: if the AC is more than one-third larger than the credit period, i.e., credit period of 30 days and an AC of more than 40 days, there may be a problem.¹²
6. Age your receivables. Identify and pursue slow-paying customers.
7. Identify prompt-paying customers. Maintain and search for more like them by informing them of the discount for early payment and of any special sales.
8. Send invoices immediately after the sale, rather than waiting until the end of the month.
9. Identify and evaluate accelerating techniques for collecting your cash, such as lockbox services, pre-authorized checks and concentration banking.

should help in determine the optimal number of each product in your inventory.

$$\text{Inventory Turnover Rate} = \frac{\text{Cost of goods sold}}{\text{Inventory}}$$

$$\text{Inventory Turnover Days} = \frac{\text{Number of days in a period}}{\text{Inventory turnover rate}}$$

$$\text{Ideal Inventory} = \frac{\text{Cost of goods sold}}{\text{Industry average turnover rate}}$$

For example, last year your business sold goods which cost \$100,000 and your average inventory for the year was worth \$10,000. The inventory turnover rate for last year was \$100,000/\$10,000, or 10 times. Furthermore, the business' inventory turnover days were 360 days/10 or 36 days. These numbers indicate that during the past year, your inventory turned over 10 times and, on average, it took 36 days to sell the entire inventory. When compared to industry averages, the relative strength of your business' inventory management will be revealed. A low inventory turnover rate could indicate overstocking, while high inventory turnover days can represent slow sales.

Finally, if the average industry turnover rate is 12 times, your business' ideal inventory levels for the year should have been \$100,000/12, or \$8,333. To the

extent that both your operations and the industry's operations remain stable, this figure may be used as a guideline for determining inventory levels during the current year.

The optimal order size and the frequency of order placement can be determined by the economic ordering quantity (EOQ) model. Since the goal of inventory management is to provide a sufficient amount of inventory to meet the sales demand and to maximize profitability, the EOQ model pays special attention to inventory costs.

In general, economies of scale means operating on a larger scale to lower the average operational costs. This principle also applies to inventory management. Usually, lower per unit costs of goods, raw materials and equipment are obtained if they're ordered in single large orders rather than if purchased in many smaller orders. However, ordering more than is needed to support current sales increases carrying costs and exposes the business to other risks such as obsolete inventory, inventory spoilage and theft.

Total inventory costs include the time value of the capital tied up in inventories, storage and handling

¹² *CASH FLOW CONTROL GUIDE*: A handbook to help you manage your business' cash flow for profit improvement, David H. Bangs, Upstart Publishing Co., 1987

expenses, as well as insurance, taxes and obsolescence costs. These costs are generally referred to as the inventory carrying costs. Carrying costs always increase as inventory levels rise. Ordering costs, on the other hand, include the administrative costs of placing, tracking, shipping, receiving and paying for an order. These costs are fixed for every order and remain the same regardless of an order's size.¹³

The economic ordering quantity (EOQ) model states that given certain reasonable assumptions, the order quantity that minimizes total inventory cost may be found using the following formula:

$$EOQ = \sqrt{\frac{(2 \times F \times S)}{(C \times P)^{14,15}}$$

where F is the cost of placing and receiving an order; S is the annual sales in units; C is carrying costs expressed as a percentage of inventory value; and P is the purchase price the firm must pay per unit of inventory.

For example, assume sales are 10,000 units per year, the purchase price is \$5 per unit, fixed costs per order are \$500 and carrying costs are 20 percent of the inventory value. According to the EOQ model the amount that the firm should order each time is:

$$EOQ = \sqrt{\frac{(2 \times \$500 \times 10,000)}{(.2 \times 5)}} = 3,162 \text{ units}$$

Consider the following inventory management guidelines in Figure 3.

¹³ For a graphical representation to total inventory cost, see *ESSENTIALS*, page 427

¹⁴ *ESSENTIALS*, page 428

¹⁵ The EOQ model is derived in *Intermediate Financial Management*, chapter 17, by Eugene Brigham and Louis Gaperski

Figure 3 Suggestions for more effective inventory management.

1. Determine the ideal inventory level based on historical sales patterns and on projected future sales.
2. Calculate EOQ — the “economic ordering quantity.”
3. Determine the lag order time and the optimal safety stock.
4. Determine the average inventory turnover rate for the industry.
5. Identify and maintain good business relations with all suppliers.
6. Forecast inventory purchase price. If possible, lock-in a favorable price by entering a supply contract.
7. Calculate the inventory turnover rate for your business: the average number of times your inventory is sold within a specific period of time.
8. Set a markdown policy for the times when a product doesn't move quickly enough at normal price levels.
 - a. Be able to recognize what part of your inventory needs to be marked down.
 - b. Record the mark-downs as soon as the need is recognized.

In addition to the cash flow management analysis discussed above, breakeven analysis is another useful

tool in defining relationships between cost, profit and volume. See Appendix B.

SHORT-TERM CREDIT

Short-term credit is any liability with an original payment period of less than one year. Major sources of short-term credit include:

- accrued wages and taxes,
- trade credit,
- loans from commercial banks and
- loans secured with business inventories or accounts receivable.¹⁶

There are both advantages and disadvantages to using short-term credit.

Speed, flexibility and lower costs are potential advantages of short-term credit. Increased risk to the borrower is considered a disadvantage. Generally, obtaining a longer term loan requires a longer period of time because of the need for a more thorough examination of the borrower's financial statements. Short-term credit, however, usually can be obtained fairly quickly. Moreover, small businesses with seasonal or cyclical needs for credit, will find short-term financing more suitable since it doesn't require long-term borrower commitments nor does it place constraints on the firm's future actions as might be the case in a long-term credit agreement. Finally, short-term credit generally commands a lower rate of interest which is more cost effective than long-term debt.

Even though short-term debt is often less expensive than long-term debt, short-term borrowers face the possibility of paying higher interest rates as their need for new loans develops. Consequently, borrowing in short-term subjects the borrower to uncertain interest expenses as compared with borrowers of long-term funds with locked-in interest rates. Additionally, temporary business setbacks can subject the short term borrower to undue risk if the lender is not willing to extend the loan.

Accruals

Firms generally pay employees at regular intervals rather than as work is performed. Similarly, Social Security and income taxes withheld from employee payroll, sales taxes collected by the firm, as well as the estimated business income taxes are also paid periodically. The business has the use of such funds from the time taxes are collected or work is performed until payments are made. Since there is no explicit interest expense involved, the firm in essence, receives a form of credit which is "free." In addition, accruals generally increase as business activities rise, thereby creating a "spontaneous" source of credit which grows along with the firm's needs. However, since the timing of accruals is dependent upon contractual agreements or statutes, business owners have little control over the level of this type of "debt," although they may predict it fairly accurately. A business should take advantage of all the accruals it can without viewing them as a controllable source of financing.

Accounts Payable

Purchasing equipment and raw materials for a small manufacturing firm, or the purchase of office equipment and supplies for a service-oriented business, represents a large portion of total operating expenses. The cost of goods sold is between 70 to 74 percent of sales for a typical small retailer, and closer to 75 percent for most wholesale businesses. Similarly, a small manufacturing firm may spend in excess of 75 percent of total sales purchasing raw materials and converting them into finished goods.¹⁷ In light of this information, the importance of "intelligent purchasing" should be clear to every small business owner.

Figure 4 presents a few suggestions which should help you make a better buys.

¹⁶ The use of commercial paper as a source of short-term credit is omitted in this publication since small businesses typically have a limited access to this market. "Larger," "stronger" firms, however, should consider this source of credit

¹⁷ *Cash Traps: Small Business Secrets for Reducing Costs and Improving Cash Flow*, Jeffrey P. Davidson and Charles W. Dean, 1992, John Wiley & Sons, page 46

Figure 4 Suggestions for purchasing goods on more favorable terms.

1. **NEGOTIATE!**
2. Develop multiple sources of supply.
3. Take advantage of discounts for early payment.
4. Do not buy more than you need, or more than you expect to sell regardless of how favorable the sale or the credit terms may be at the time.
5. If possible, negotiate for more favorable terms with your suppliers in return for buying during their "slow-selling" periods.
6. If you have available cash, offer partial and/or advance payments in return for additional discounts.
7. Set up a system to send checks on time, but just before they are due.
8. Delay payments only if it does not harm the relationship with suppliers.

Trade Credit

Trade credit is a "spontaneous" source of financing which arises when businesses purchase on credit from one another. For a typical, non-financial business, accounts payable are the largest component of current liabilities, usually about 40 percent of total, short-term debt. The percentage is often higher for smaller businesses due to the unavailability of other sources of financing.¹⁸

Typically, when a firm purchases goods on credit, it's offered the option of taking a discount off the purchase price for early payment or making payment in full by the end of the credit period. For example, terms of 3/10, net 50, mean that if payment is made within 10 days after the invoice date, a 3 percent discount may be deducted from the invoice price. Otherwise, full payment must be made on or before the 50th day. Thus the two components to trade credit are:

- the free trade credit arising in the discount period, and
- the trade credit which arises during the remainder of the credit period where the implicit cost is the foregone discount.

Short-Term Loans

As a business grows, its needs for "non-spontaneous" sources of credit will grow as well. Commercial banks are major providers of short-term financing to small businesses. When applying for a short-term loan, select a bank or other lender that best serves your needs, and then prepare for a successful loan application interview. Figure 5 presents some criteria to consider when selecting a bank. Figures 6 and 7 outline some of the areas that financial institutions examine when evaluating a loan application.

¹⁸ *ESSENTIALS*, page 442

Figure 5 Criteria for selecting a lender to best serve your needs.

1. **Bank's riskiness:** generally smaller banks in smaller communities tend to be more conservative in their lending practices and investment returns.
2. **Availability of FDIC deposit insurance:** covers up to \$100,000 of a customer's accounts.
3. **Maximum loan size:** usually limited to 10 percent of the bank's capital account to any single customer.
4. **Review the interest rate paid on your deposits and the effective rate charged on the loan.**
5. **Are compensating balances required?**
6. **Specialization:** generally larger banks have separate departments specializing in different types of services.
7. **Loyalty to customers:** will the bank pressure your business to liquidate the loan during an economic downturn?
8. **Other services:** wire transfers, electronic banking, foreign currencies, lockbox services, etc.

In "polling a number of bankers," Sol Postyn and Jo Kirschner Postyn found that "the following information will command the bankers' attention"¹⁹:

Figure 6 Factors your lender may use in evaluating your loan application.

1. Your character, integrity and overall management skills.
2. Your company's track record, i.e. its sales and profits.
3. Your product and its relative importance to the market.
4. Your financial statements, preferably accompanied by a CPA's statement.
5. A description of the purpose of the loan.
6. Your company's ability to provide data to the bank both accurately and timely.
7. The primary and alternative sources of repayment.

Furthermore, they surveyed bankers regarding what was considered a risky or bad loan and found the following areas of concern.²⁰

¹⁹ *Raising Cash: A Guide to Financing and Controlling Your Business*, Sol Postyn and Jo Kirschner Postyn, 1982, Lifetime Learning publications, page 174, page 442

²⁰ *Raising Cash*, Postyn and Postyn, page 175

Figure 7 Factors your lender may look upon negatively in approving your loan.

1. Accounts receivable past due, indicating that cash is coming too slowly.
2. Accounts payable abnormally extended.
3. Poor inventory operation, such as low turnover and large back orders.
4. High debt-equity ratio, signifying large outstanding loans.
5. Large withdrawals of profits by company officers/owners.
6. Attempts to borrow short-term funds to meet long-term needs.
7. Insufficient financial data.
8. Poor credit rating for principal business owners/officers.
9. Personal problems of executives.

The provisions of a loan agreement must be clearly understood by the borrower if they are to know the true costs of the loan. Loan terms can include hidden costs or restrictions on business practices.

Next, we'll examine and explain some of the terms associated with short-term bank loans with different characteristics.²¹

A line of credit is an informal understanding between a bank and a borrower that a specific amount of funds is available for future financing purposes. A revolving credit account is a formal line of credit offered to larger businesses in exchange for up-front fees and standard interest payments. In return, the bank has the legal obligation to fulfill its commitments under the formal agreement. Some banks require their borrowers to maintain compensating balances, which are an average demand deposit equal to a certain percentage of the loan amount. Finally, a lender can require a borrower to pledge collateral as security to ensure repayment of the loan's principal and interest.

The interest rate specified in a loan agreement is generally one of the three forms:

- simple,
- discount or
- add-on (installment).

Depending on which rate scenario is agreed upon, the true cost of the loan may be higher than the stated or nominal interest rate. Moreover, since interest rates

are usually quoted on an annual basis, loans obtained for shorter periods of time may have higher actual costs than the nominal stated costs.

Accounts Receivable Financing

This is a method of obtaining secured loans for businesses which lack other collateral for short-term funds. Accounts receivable financing may take the form of:

- pledging receivables as collateral to obtain a short-term loan, or
- factoring or selling receivables at a discount in return for cash.

Pledging of accounts receivable provides a lender with a claim against the borrower's receivables as well as giving them recourse to the borrower: if the account receivable becomes uncollectible, the borrower is responsible for repaying the loan and incurring the resulting loss. As a result, the risk for loss on the receivables remains with the borrower. The lender's function is simply providing short-term funds.

Factoring, or selling accounts receivable, involves actual purchase of a firm's receivables by a third party factor, who then assumes the risk of loss if the receivable becomes uncollectible. The purchaser is normally notified of the sale of the receivables and is required to make payments directly to the "factor" or the lender. Before buying the receivables, the factor generally checks the quality of the receivables thus, performing three functions:

- credit checking,

²¹ *ESSENTIALS*, pp 448-458

- risk bearing and
- lending.

The first two functions normally cost between 2 to 3 percent of the receivables and the lending rate is usually the prime rate plus 2 or 3 percentage points.

Inventory Financing

The existence of inventories may be enough reason for a financial institution to provide an unsecured loan to a small business. Other firms, with unestablished credit history, may use inventories as collateral to obtain a loan in one of the following three forms:

The inventory blanket lien, which gives the lender claim against part or all of the borrower's inventories, although the borrower is free to continue to use and sell the inventories. The value of the security, thus, diminishes as sales and operations continue.

A trust receipt is to certify that certain goods are held in trust for the lender and are segregated from other portions of the inventory. If any of the trust goods are sold, the borrower is required to immediately forward the proceeds to the lender. With the issuance of a trust

receipt on specific goods, a lender must regularly check the borrower's inventory to ensure compliance with the agreement. To meet this need, a public or field warehouse may be established.

A warehouse receipt is similar to a trust receipt in that it gives the lender claim to the borrower's inventory. The goods, however, are kept on a separate part of the borrower's premises, or at a field warehouse with an independent third party warehousing company, acting as the supervising agent. Alternatively, a public warehouse may be established where the goods are kept by an independent third party.

The fixed costs of warehousing arrangements are relatively high, often making this type of financing unsuitable for smaller businesses. A typical cost of a field warehouse is \$5,000 plus 1 to 2 percent of the amount of credit extended to the borrower. Moreover, the lending institution charges interest of 2 to 3 percent over the prime rate for the loan. Generally, an efficient warehousing arrangement requires at least \$1 million dollars of inventories.

CONCLUSION

Investments in current assets represent a substantial portion of a small business' total assets: up to two-thirds of total business spending may be used for purchases of supplies, and raw materials. Additionally, about 40 percent of a typical firm's capital is represented by its current assets value. Therefore, proper management and use of current assets and

current liabilities is crucial to the health and survival of any small business.

Figure 8 summarizes some recommendations for good management:

22 *ESSENTIALS*, page 462

23 A more detailed discussion of account receivables financing is presented in *FINANCIAL MANAGEMENT*, pp 757-761

24 Inventory financing is introduced and evaluated in *ESSENTIALS*, pp 463-466

25 *FINANCIAL MANAGEMENT*, page 763

Figure 8 Summary of recommendations:

1. Understand the components of working capital and know what portion of your total assets are invested in each type of current asset.
2. Calculate the appropriate financial ratios and compare to the industry average to evaluate the relative health of your business.
3. Figure out the cash conversion cycle for your business, and try to shorten it following the guidelines presented in this report. Aim at faster collection of receivables and slower disbursement of payables.
4. Grant credit only to credit-worthy customers. Use the 5 Cs of credit to evaluate "credit worthiness."
5. Set a sound credit policy by determining the credit period, collection policy and the discount for early payment. Follow the policy.
6. Monitor your receivables position using the average collection period and the aging schedule. Pursue slow-paying customers.
7. Determine your ideal inventory level and monitor the position of your inventory through the inventory turnover ratio.
8. Order the optimal number of goods based on the equilibrium ordering quantity model. Be aware of order lead time and maintain some safety stock at hand.
9. Be a smart shopper. Follow the suggestions in Figure 4.
10. Consider all sources of short-term credit such as accruals, trade credit, bank loans and loans secured with your receivables and inventories.
11. Calculate the explicit and implicit costs of short-term financing. Compare the costs carefully before making a decision on the available choices.
12. If you decide to borrow from a lender, choose one who may best serve your business' needs.
13. Prepare for the loan interview. Know the factors which "command the bankers attention" (Figure 6), and what they may view negatively (Figure 7.)
14. Read the "fine print" in the loan agreement. Make sure you understand the exact interest rate scenario. Calculate or ask about the effective cost of the loan.

By following these suggestions,

- asking for advice from your local chapter of the Service Corps of Retired Executives (SCORE), the Small Business Institute or Small Business Development Center,
- talking to other business owners with experience in your industry, and
- reading and educating yourself about your business

you can learn to run your firm successfully and profitably. In addition, you'll never be short of cash and will be able to take advantage of any opportunity that knocks at your door.

APPENDIX A: GLOSSARY

Accounts payable — see “payables”

Accounts receivable — see “receivables”

Add-on interest rate or installment loan — one in which the amount of interest is added to the principal and repaid by the borrower in equal periodic payments

Amortization — gradual reduction of term debt by periodic payment sufficient to pay current interest and to eliminate the principal at maturity.

Capital — (1) assets less liabilities, representing the ownership interest in a business; (2) a stock of accumulated goods, especially at a specified time and in contrast to income received during a specified time period; (3) accumulated goods devoted to the production of goods; (4) accumulated possessions calculated to bring income.

Carrying costs — inventory costs associated with capital, storage, handling expenses, insurance, taxes and obsolescence.

Cash conversion cycle — the length of time between the payment of payables and collection of receivables.

Cash discount — incentive for credit customers to pay early

Certificates of deposit (CD) — short-term instruments issued by commercial banks.

Collateral — property pledged by a borrower to assure repayment of a loan

Collection policy — actions a business takes to collect slow-paying accounts.

Commercial paper — unsecured promissory notes of large corporations.

Compensating balances — requirements to help compensate lenders for their services.

Credit period — length of time allowed before the credit buyer must pay for credit purchases.

Credit policy — actions taken by a business to grant, monitor and collect the cash for outstanding accounts receivable.

Discount interest rate — one in which the amount of interest is deducted from the face value of the loan with the borrower receiving the remainder

Five Cs of credit — evaluation of a potential borrower's, character, capacity to repay, capital and collateral, as well as other conditions of a loan.

Fixed costs — those costs of doing business such as rent, utilities, depreciation, taxes, etc., that remain generally the same regardless of the amount of sales of goods or services.

Inventory conversion period (ICP) — time between purchase of raw material, production of the goods or service and the sale of product.

Installment loan — see add-on interest rate loan

Interest — amount paid a lender for the use of funds.

Line of credit — an informal understanding between a bank and a borrower related to specific amounts of funds available for future financing purposes.

Maturity — the date when payment of principal on a loan is due.

Ordering costs — administrative costs of placing, tracking, shipping, receiving and paying for an order.

Payables — what a business owes

Ratios

Current Ratio — Current assets divided by current liabilities

Quick, or Acid, Ratio — Current assets less Inventories divided by current liabilities

Debt to Total Assets Ratio — Total debt divided by total assets

Payable deferral period (PDP) — time between purchase of raw material on credit and cash payments for the resulting accounts payable.

Precautionary balances — cash held for emergencies or unexpected outflows of funds.

Receivables — what a business is owed

Receivable conversion period (RCP) — time between sale of the final product on credit and cash receipts for the accounts receivable.

Revolving credit account — a formal line of credit offered to larger businesses in exchange for up-front fees and standard interest payments.

Simple interest rate loan — one which provides the borrower the face value of the loan; the borrower repays the principal plus interest at maturity

Speculative cash balances — cash necessary to take advantage of special opportunities.

Transaction balances — cash held to cover day-to-day transactions.

Treasury Bills (T-Bills) — short-term obligations of the U.S. government

Variable costs — those costs of doing business, such as raw materials, cost of goods, shipping, handling and storage, sales commissions, etc., which are directly related to the sales of goods or services.

APPENDIX B: BREAKEVEN ANALYSIS

This appendix was written by Robert H. Farias, Farias Jett & Company, Glendale, California and James Ries, Ries Business Services, Fond du Lac, Wisconsin.

Part of understanding cash flow and how it affects the business, comes in knowing the inter-relationships between the various assets and liabilities of the business and the concept of breakeven analysis.

Breakeven analysis is a basic planning tool which is used to effectively establish the company's pricing policy, project the effects of changes in operations and calculate the increase in sales necessary to justify expansion or major purchases. Through breakeven analysis, we define the relationship between cost, profit and volume.

Breakeven is the point at which sales equals cost or sales minus cost equals no profit.

$$\text{Sales} = \text{Cost}$$

or,

$$\text{Sales} - \text{Cost} = 0$$

Understanding sales is simple. If you sell 100 units at \$5.00 each, you have sales of \$500. Two hundred units result in sales of \$1,000 and 300 in sales of \$1,500.

However, the cost side is a bit more complicated, particularly as volume increases. One hundred units may cost \$700, 200 may cost \$950 and 300 may cost \$1,200. The per unit cost keeps changing. For 100, they cost \$7.00 each, for 200, \$4.75 each and for 300, \$4.00 each.

This total cost is actually made up of two factors:

- the fixed cost and
- the variable cost.

Fixed costs are the bills you have to pay whether you sell anything or not. Examples of fixed costs include rent, insurance, and depreciation.

Variable costs are based solely on the amount you sell, such as cost of goods, storage and handling costs, sales commissions, etc. The total cost is the two factors added together.

Since variable costs, by definition, are directly related to sales, we can express variable cost as a percentage of sales. For example, if variable cost is \$750 and sales are \$1,500, the equation would look like this:

$$\$750/\$1,500 = .50 \text{ or } 50\%$$

Thus, the variable cost is 50 percent of sales.

This is all the information we need to calculate breakeven. The formula for breakeven was sales - cost = 0. For this example it is further determined the fixed costs are \$450. The total cost thus becomes \$450 (the fixed cost) and 50 percent sales (the variable cost). Our formula now becomes:

$$\text{Sales} - \$450 - .50 \text{ sales} = 0$$

Solving our equation we add \$450 to each side:

$$\text{Sales} - .50 \text{ sales} = \$450$$

Multiply each side by ten to get rid of the decimal fraction:

$$10 \text{ sales} - 5 \text{ sales} = \$4,500$$

Subtract 5 sales from 10 sales:

$$5 \text{ sales} = \$4,500$$

Divide each side by 5:

$$\text{Sales} = \$900$$

Sales of \$900 is the breakeven point. Since the units sell for \$5.00 each, we must sell \$900/\$5, or 180 units to breakeven.

However, breakeven analysis does not stop here. Most people are in business to make money, not to just breakeven. It is a tool for profit planning.

There are basically four ways to increase profits:

- raise the per unit selling price. Assuming you can raise the price of units by \$1 to \$6 each and still sell 300, you could make an additional \$300.
- decrease variable cost. If you could lower variable cost to 40 percent of sales, you could increase profit by \$150.
- decrease fixed cost. If you decreased fixed cost by \$50, you gain \$50 profit.
- increase volume. If you could sell 100 more units, you could increase profit by \$250.

PRACTICAL EXAMPLES

Part 1

Wanda Cell, a computerized widgets expert for Conglomerate Inc., would like to open a small store selling computerized widgets. She plans to hire one full time employee to operate the store so she is free to make outside calls to sell and install widgets. She estimates she can achieve annual sales of 150 widgets

at \$1,000 (W in the calculations below). Each widget costs \$500 and Wanda estimates the direct set-up and delivery cost to be \$100 each. The annual operating expenses are estimated as follows:

Rent	\$12,000
Telephone	3,400
Utilities	2,000
Salary	16,000
Depreciation	2,000
Interest	3,000
Insurance	600
Supplies	2,000
Advertising	5,000
Total	\$46,000

Should Ms. Cell start the business?

Breakeven would be calculated as follows:

$$\begin{aligned}
 1,000W - 46,000 - 600W &= 0 \\
 1,000W - 600W &= 46,000 \\
 400W &= 46,000 \\
 W &= 115
 \end{aligned}$$

Thus, Wanda would have to sell 115 widgets the first year to breakeven. She feels she can easily do this.

However, Wanda would like to make a profit of at least \$40,000, which is her salary at her present job. To calculate a \$40,000 profit:

$$\begin{aligned}
 1,000W - 46,000 - 600W &= 40,000 \\
 1,000W - 600W &= 86,000 \\
 400W &= 86,000 \\
 W &= 215
 \end{aligned}$$

Through this analysis, Wanda finds that she must sell 115 widgets to breakeven and sell 215 widgets to earn what she does now. If she feels she can only sell between 150 and 175 widgets the first year, she must decide if she is willing to take that large a pay cut. As you can see, breakeven analysis does not answer your business questions. It is merely a tool to make better informed decisions.

Part 2

Wanda Cell opened her store and has done quite well. Al Fastalk from Slick Advertisers tells Wanda she can sell more widgets if she places a \$10,000 ad in Slick Publications. How many more widgets must Wanda sell?

New advertising is essentially a fixed cost because you pay the money and hope you get results. Therefore, Wanda would increase her fixed cost by \$10,000. By plugging this figure into the breakeven formula we can get the breakeven point of how many widgets must be sold to cover the new advertising.

$$\begin{aligned}
 1,000W - 56,000 - 600W &= 0 \\
 1,000W - 600W &= 56,000 \\
 400W &= 56,000 \\
 W &= 140
 \end{aligned}$$

Since her old breakeven was 115 widgets, she must sell 25 more widgets to pay for the additional advertising.

Part 3

Buy More Corp. is interested in buying 250 customized widgets from Wanda and they want her to quote a price.

Wanda figures it will cost \$300 per widget to customize. However, Wanda does not have room to customize and store extra widgets. She will need to rent and furnish additional space at a fixed cost of \$35,000. Wanda feels she should make at least \$40,000 profit to compensate her for her expertise and increased business risk associated with expansion.

Use the formula sales equals unit price (P) times volume (250). The fixed expense is \$35,000. The variable costs are: \$500 purchase price, \$100 delivery and setup and \$300 customization. The total variable cost is \$900 per widget. The desired profit is \$40,000.

$$\begin{aligned}
 250P - 35,000 - 900 \times 250 &= 40,000 \\
 250P - 35,000 - 225,000 &= 40,000 \\
 250P - 260,000 &= 40,000 \\
 250P &= 300,000 \\
 P &= 1,200
 \end{aligned}$$

Thus, the quoted price would be \$1,200 per widget for the minimum desired profit.

Breakeven analysis is not a method of heavy duty business quantitative analysis that leads to precise answers.

It is a method of getting a general feel for a business' cost structure. It is very useful in setting specific profit and sales goals and an excellent screening device for weeding out poor investments.

APPENDIX C: MONTHLY CASH FLOW PROJECTION

Year	Month	Name of business		Address		Owner		Type of business						Prepared by		Date	
		Pre-start-up position		1		2		3		4		5		6		Total Columns 1-6	
		Estimate	Actual	Estimate	Actual	Estimate	Actual	Estimate	Actual	Estimate	Actual	Estimate	Actual	Estimate	Actual	Estimate	Actual
		1. Cash on hand (beginning of month)															
		2. Cash receipts															
		(a) Cash sales															
		(b) Collections from credit accounts															
		(c) Loan or other cash injection (specify)															
		3. Total cash receipts (2a + 2b + 2c = 3)															
		4. Total cash available (before cash out) (1 + 3)															
		5. Cash paid out															
		(a) Purchases (merchandise)															
		(b) Gross wages (excludes withdrawals)															
		(c) Payroll expenses (taxes, etc.)															
		(d) Outside services															
		(e) Supplies (office and operating)															
		(f) Repairs and maintenance															
		(g) Advertising															
		(h) Car, delivery and travel															
		(i) Accounting and legal															
		(j) Rent															
		(k) Telephone															
		(l) Utilities															
		(m) Insurance															
		(n) Taxes (real estate, etc.)															
		(o) Interest															
		(p) Other expenses (specify each)															
		(q) Miscellaneous (unspecified)															
		(r) Subtotal															
		(s) Loan principal payment															
		(t) Capital purchases (specify)															
		(u) Other start-up costs															
		(v) Reserve and/or escrow (specify)															
		(w) Owner's withdrawal															
		6. Total cash paid out (5a through 5w)															
		7. Cash position (end of month) (4 minus 6)															
		Essential operating data (non-cash flow information)															
		A. Sales volume (dollars)															
		B. Accounts receivable (end of month)															
		C. Bad debt (end of month)															
		D. Inventory on hand (end of month)															
		E. Accounts payable (end of month)															

INSTRUCTIONS FOR MONTHLY CASH FLOW PROJECTION

1.	Cash on hand (beginning of month)	Cash on hand same as (7), Cash position, previous month
2.	Cash receipts	
(a)	Cash sales	All cash sales. Omit credit sales unless cash is actually received.
(b)	Collections from credit accounts	Amount to be expected from all credit accounts.
(c)	Loan or other cash injection	Indicate here all cash injections not shown in 2(a) or 2(b) above.
3.	Total cash receipts (2a + 2b + 2c = 3)	
4.	Total cash available (before cash out) (1 + 3)	
5.	Cash paid out	Merchandise for resale or for use in product (paid for in current month)
(a)	Purchases (merchandise)	Base pay plus overtime (if any)
(b)	Gross wages (excludes withdrawals)	Include paid vacations, paid sick leave, health insurance, unemployment insurance, etc. (this might be 10 to 45% of 5(b))
(c)	Payroll expenses (taxes, etc.)	This could include outside labor and/or material for specialized or overflow work, including subcontracting
(d)	Outside services	Items purchased for use in the business (not for resale)
(e)	Supplies (office and operating)	Include periodic large expenditures such as painting or decorating
(f)	Repairs and maintenance	This amount should be adequate to maintain sales volume
(g)	Advertising	If personal car is used, charge in this column, include parking
(h)	Car, delivery and travel	Outside services, including, for example, bookkeeping
(i)	Accounting and legal	Real estate only (See 5(p) for other rentals)
(j)	Rent	
(k)	Telephone	Water, heat, light and/or power
(l)	Utilities	Coverages on business property and products (fire, liability); also worker's compensation, fidelity, etc. Exclude executive life
(m)	Insurance	(include in 5(w))
(n)	Taxes (real estate, etc.)	Plus inventory tax, sales tax, excise tax, if applicable
(o)	Interest	Remember to add interest on loan as it is injected (See 2(c) above)
(p)	Other expenses (specify each)	Unexpected expenditures may be included here as a safety factor
		Equipment expended during the month should be included here (non-capital equipment)
		When equipment is rented or leased, record payments here
(q)	Miscellaneous (unspecified)	Small expenditures for which separate accounts would not be practical
(r)	Subtotal	This subtotal indicates cash out for operating costs
(s)	Loan principal payment	Include payment on all loans, including vehicle and equipment purchases on time payment
(t)	Capital purchases (specify)	Nonexpensed (depreciable) expenditures such as equipment, building, vehicle purchases and leasehold improvements
(u)	Other start-up costs	Expenses incurred prior to first month projection and paid for after start-up
(v)	Reserve and/or escrow (specify)	Example: insurance, tax or equipment escrow to reduce impact of large periodic payments
(w)	Owner's withdrawal	Should include payment for such things as owner's income tax, social security, health insurance, executive life insurance premiums, etc.
6.	Total cash paid out (5a through 5w)	
7.	Cash position (end of month) (4 minus 6) Essential operating data (non-cash flow information)	Enter this amount in (1) Cash on hand following month.
A.	Sales volume (dollars)	This is basic information necessary for proper planning and for proper cash flow projection. In conjunction with this data, the cash flow can be evolved and shown in the above form.
B.	Accounts receivable (end of month)	This is a very important figure and should be estimated carefully, taking into account size of facility and employee output as well as realistic anticipated sales (actual sales, not orders received).
C.	Bad debts (end of month)	Previous unpaid credit sales plus current month's credit sales, less amounts received current month (deduct "C" below)
D.	Inventory on hand (end of month)	Bad debts should be subtracted from (B) in the month anticipated
E.	Accounts payable (end of month)	Last month's inventory plus merchandise received and/or manufactured current month minus amount sold current month
F.	Depreciation	Previous month's payable plus current month's payable minus amount paid during month
		Established by your accountant, or value of all your equipment divided by useful life (in months) as allowed by Internal Revenue Service

APPENDIX D: INFORMATION RESOURCES

U.S. Small Business Administration (SBA)

The SBA offers an extensive selection of information on most business management topics, from how to start a business to exporting your products.

This information is listed in The Small Business Directory. For a free copy contact your local SBA office.

SBA has offices throughout the country. Consult the U.S. Government section in your telephone directory for the office nearest you. SBA offers a number of programs and services, including training and educational programs, counseling services, financial programs and contract assistance. Ask about

- **Service Corps of Retired Executives (SCORE)**, a national organization sponsored by SBA of over 13,000 volunteer business executives who provide free counseling, workshops and seminars to prospective and existing small business people.
- **Small Business Development Centers (SBDCs)**, sponsored by the SBA in partnership with state and local governments, the educational community and the private sector. They provide assistance, counseling and training to prospective and existing business people.
- **Small Business Institutes (SBIs)**, organized through SBA on more than 500 college campuses nationwide. The institutes provide counseling by students and faculty to small business clients.

For more information about SBA business development programs and services call the SBA Small Business Answer Desk at **1-800-U-ASK-SBA (827-5722)**.

Other U.S. Government Resources

Many publications on business management and other related topics are available from the Government Printing Office (GPO). GPO bookstores are located in 24 major cities and are listed in the Yellow Pages under the bookstore heading. You can request a Subject Bibliography by writing to **Government Printing Office, Superintendent of Documents, Washington, DC 20402-9328**.

Many federal agencies offer publications of interest to small businesses. There is a nominal fee for some, but most are free. Below is a selected list of government

agencies that provide publications and other services targeted to small businesses. To get their publications, contact the regional offices listed in the telephone directory or write to the addresses below:

Consumer Information Center (CIC)

P.O. Box 100
Pueblo, CO 81002

The CIC offers a consumer information catalog of federal publications.

Consumer Product Safety Commission (CPSC)

Publications Request
Washington, DC 20207

The CPSC offers guidelines for product safety requirements.

U.S. Department of Agriculture (USDA)

12th Street and Independence Avenue, SW
Washington, DC 20250

The USDA offers publications on selling to the USDA. Publications and programs on entrepreneurship are also available through county extension offices nationwide.

U.S. Department of Commerce (DOC)

Office of Business Liaison
14th Street and Constitution Avenue, NW
Room 5898C
Washington, DC 20230

DOC's Business Assistance Center provides listings of business opportunities available in the federal government. This service also will refer businesses to different programs and services in the DOC and other federal agencies.

U.S. Department of Health and Human Services (HHS)

Public Health Service
Alcohol, Drug Abuse and Mental Health Administration
5600 Fishers Lane
Rockville, MD 20857

Drug Free Workplace Helpline: 1-800-843-4971.
Provides information on Employee Assistance Programs. **National Institute for Drug Abuse Hotline: 1-800-662-4357.** Provides information on preventing substance abuse in the workplace.

The National Clearinghouse for Alcohol and Drug Information: **1-800-729-6686** toll-free. Provides pamphlets and resource materials on substance abuse.

**U.S. Department of Labor (DOL)
Employment Standards Administration**
200 Constitution Avenue, NW
Washington, DC 20210

The DOL offers publications on compliance with labor laws.

**U.S. Department of Treasury
Internal Revenue Service (IRS)**
P.O. Box 25866
Richmond, VA 23260
1-800-424-3676

The IRS offers information on tax requirements for small businesses.

**U.S. Environmental Protection Agency (EPA)
Small Business Ombudsman**
401 M Street, SW (A-149C)
Washington, DC 20460
1-800-368-5888 except DC and VA
703-557-1938 in DC and VA

The EPA offers more than 100 publications designed to help small businesses understand how they can comply with EPA regulations.

**U.S. Food and Drug Administration (FDA)
FDA Center for Food Safety and Applied Nutrition**
200 Charles Street, SW
Washington, DC 20402

The FDA offers information on packaging and labeling requirements for food and food-related products.

For More Information

A librarian can help you locate the specific information you need in reference books. Most libraries have a variety of directories, indexes and encyclopedias that cover many business topics. They also have other resources, such as

- **Trade association information**

Ask the librarian to show you a directory of trade associations. Associations provide a valuable network of resources to their members through publications and services such as newsletters, conferences and seminars.

- **Books**

Many guidebooks, textbooks and manuals on small business are published annually. To find the names of books not in your local library check *Books In Print*, a directory of books currently available from publishers.

- **Magazine and newspaper articles**

Business and professional magazines provide information that is more current than that found in books and textbooks. There are a number of indexes to help you find specific articles in periodicals.

In addition to books and magazines, many libraries offer free workshops, lend skill-building tapes and have catalogues and brochures describing continuing education opportunities.