

ACCOUNTS RECEIVABLE MANAGEMENT FOR BUSINESS FIRMS

Part I. Managing Accounts Receivable

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Accounts receivable has been singled out as an important area that deserves close management attention because these accounts affect the day-to-day cash flow of a business. For many firms, accounts receivable balances can fluctuate during certain periods of the operating year as adjustments are being made in the overall operating environment. Effective management of working capital, including accounts receivable, requires short, intermediate, and long-term planning as changes occur in business conditions and forecasts. Use of credit in the sale of goods and services has been and will continue to be an important practice in the ordinary course of business.

The temptation to accept extremely large accounts receivable balances is always present. Good managers avoid being bankers to their customers and realize that their primary function is to make a profit by merchandising their products or services. Management's concern should revolve around the liquidity and profitability aspects of accounts receivable. Liquidity relates to the flow of or conversion of accounts receivable to cash. Profitability relates to the rate of profit on sales and on the investment carried in accounts receivable.

mers not always prepared to make payment in full at the point of sale;

- helps the firm to remain competitive in the market in terms of services offered;
- tends to level out highly seasonal product sales by encouraging purchases in advance of normal peak season times. This serves to shift warehousing requirements and product price risk.



Advantages of Extending Credit

Many reasons may be offered for extending credit to customers. These include:

- generates an increase in sales;
- increases the flow of operating revenue and profits when managed properly;
- builds up a clientele of regular customers;
- encourages the customer to buy higher quality merchandise and larger volumes;
- promotes goodwill through the convenience of an uncomplicated open account;
- adjustments on merchandise returns can be more easily made;
- increases the range of customers that your services appeal to, especially those custo-

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Disadvantages of Extending Credit

The extension of credit is an important decision that must be made by retail or service firms in light of some disadvantages. Some of these disadvantages include:

- capital is tied up in credit merchandise;
- interest expenses accrue to the business on borrowed money;
- credit customers may purchase beyond their ability to pay;
- some bad-debt losses will occur regardless of collection efficiency;
- credit customers are more likely to return merchandise than cash customers;
- credit sales add to the cost of doing business, since records must be maintained and periodic statements prepared and mailed;
- cost of trying to collect bad debts.

The Credit Manager/ Department

The credit manager and credit department performs several important functions on a continuous or intermittent basis. These tasks generally apply to both small firms, where a single individual is involved in credit management, and large firms with a credit department. These functions as depicted by Figure 1, include: communication of the credit program and policies; evaluation of credit capacity; recording credit transactions; collection of receivables; use of receivable funds and adaptation to changes in the credit environment.

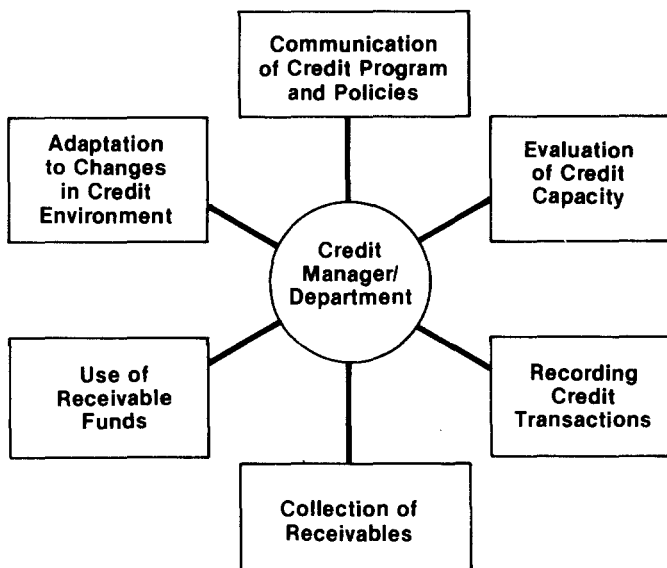


Figure 1. Functions of the Credit Manager/Department

Communication of the firm's credit policies and program performs several useful roles. First, it serves to make the credit service known to existing and potential customers. Details of the credit program could be summarized and compared with terms offered by competitors. An additional benefit of this communication step is that problems related to customer misunderstanding can be avoided if the credit program and policies are carefully explained when the credit application is taken. A second aspect of communication involves clarification of the firm's policies and procedures to credit department employees. This reduces the likelihood that the firm's credit policies will be misrepresented to customers.

The second function of the credit manager is **evaluation of customer credit capacity**. A customer's

short-term credit carrying capacity is usefully evaluated in terms of the customer's cash flow plan. Ability to repay credit according to a predetermined schedule should be verified by the credit manager in advance of extending credit. A related part of this effort involves use of, and flexibility to authorize, special credit arrangements when the need arises.

Maintenance of **complete and current records of credit transactions** is undoubtedly the most time-consuming aspect of credit management. It is, however, one of the most important activities in implementing successful credit program. Without accurate and up-to-date records it would not be possible to monitor the credit program or evaluate how successful it has been. Good records are critical to the timely collection of receivables.

Collection of receivables involves monitoring the status of accounts on a frequent basis. This monitoring activity serves as an "early warning" system to identify accounts which have not been paid within the normal payment period. Some accounts will become delinquent even within a well-developed credit evaluation and collection system. The collection function involves procedures to follow in collecting overdue and delinquent accounts. (See Extension Circular 837.) It may require the development of special provisions for "work-outs" (developing plans for repayment) to recover funds from customers experiencing extraordinary financial problems.

Accounts receivable represent an investment of working capital for the firm. Consequently, the credit manager should evaluate the **use of receivable funds**. This can be accomplished by comparing the profit from credit sales as a result of additional capital invested in receivable versus the (profit) rate of return generated by investing this money in short-term savings instruments. Profit from credit sales must also be sufficient to cover the cost of borrowed capital tied up in accounts receivable. This evaluation may reveal that receivables policies need to be adjusted to bring the return on receivables up to an acceptable level.

Adjustments in the credit program and policies may be needed due to changes in the credit and economic environment of the firm and its customers. As customer payment performance changes or the credit environment becomes more competitive, adaptation of credit terms becomes an important task for the credit manager. If the manager recognizes that receivable funds have grown beyond desired levels, adjustment in policies and close monitoring of accounts can bring the volume of receivables back in line over time.



Evaluation of Business Environment

Business environment depends on the industry or line of business, size of firm, use of borrowed capital, and the cash flow of the business. All of these factors will generally affect both risk and profitability. How a manager or management team handles this trade-off depends to a large extent upon the financial strength of the firm, competition, industry practice, and economic climate. Sound financial management will attempt to strike a balance between risk and return in a manner that will serve to maximize profits that contribute to the wealth or equity of the firm.

The concept of presenting a competitive product or service to your customers and avoiding a costly tie-up of funds in accounts receivable is a task that warrants the attention of management. A sound, competitive and well managed policy must be able to increase profits sufficiently to justify the investment of the firm's capital in accounts receivable.

Financial Strength of the firm

If a firm is overcapitalized (sales low relative to investment in assets and to net worth), profitability will tend to be low. An overcapitalized firm could absorb some risk of writing off bad debts if there is adequate working capital. A less restrictive credit policy to increase sales volume might be pursued with a reduction in the percentage rate of profit.

A weak financial position or undercapitalized firm (sales volume is high relative to the investment in assets and to net worth) presents a different situation. This may result from capital withdrawal by the owners or continuing losses sustained by the business. Any extended time period needed in accounts receivable collections might place the firm in

a severe cash flow bind or on the brink of complete financial disaster.

Competition

Credit arrangements will be influenced by competition. Like many other business practices, credit terms tend to become standardized within industries and product lines. If the firm expects to survive in a competitive climate the firm's products, credit and service need to be competitive if customers are going to be attracted and retained. If credit terms deviate very far from industry standards, customers may demand additional services or lower prices. Unless there are other unique characteristics in the firm's products or services, it is usually more desirable to stay within reasonable bounds of industry norms.

Credit Standards and Evaluation

A majority of individuals and firms desire to maintain a current position on their outstanding bills and credit obligations. This is not a universal characteristic, however, and credit standards and credit evaluation are a necessary part of the management decision framework. Questions which must be raised concern: to whom should credit be extended, how much, and on what terms? The checklist on the following page can be used to evaluate your credit control procedures.

Many firms have turned to the five C's of credit as an evaluation program or a starting point for credit evaluation. These are commonly known as character, capacity, capital, collateral, and conditions.

Character centers on the customer's integrity, trustworthiness, and attitude toward honoring outstanding credit obligations (Is he or she honest? Does he or she intend to pay you?). Credit analysts identify character as one of the most important standards in credit evaluation because each credit transaction implicitly implies the promise to pay. To minimize losses, be diligent in asking for and following up on character references for any new credit customer.

Capacity deals with the individual's or firm's repayment ability. This is frequently evaluated on the basis of past history, income, and an in-depth credit analysis.

The most meaningful measure of the ability to repay is a cash flow statement. Too often credit capacity is measured only by net worth or annual in-

CREDIT CONTROL POLICIES CHECK LIST

Credit Approval	Yes	No	Not Applicable
Does your firm extend automatic over-the-counter credit to all customers?	_____	_____	_____
Do you regularly use a credit application to screen new customers?	_____	_____	_____
Do you have a standard form for credit application?	_____	_____	_____
Is it completed personally by the applicant?	_____	_____	_____
Is it reviewed for completeness?	_____	_____	_____
Is all information verified for accuracy and timeliness?	_____	_____	_____
Are applicants checked out with a credit bureau?	_____	_____	_____
Does your evaluation consider:			
income?	_____	_____	_____
fixed obligations?	_____	_____	_____
job stability?	_____	_____	_____
residential stability?	_____	_____	_____
credit history?	_____	_____	_____
bank balances?	_____	_____	_____
other assets?	_____	_____	_____
Invoices			
Are invoices prepared promptly?	_____	_____	_____
Is invoice preparation always accurate?	_____	_____	_____
Are payment terms clearly stated?	_____	_____	_____
Are customers' special instructions followed carefully?	_____	_____	_____
Problems of Identification			
Do you determine your average collection period on a regular basis?	_____	_____	_____
Do you compare your collection period with industry averages?	_____	_____	_____
Do you compare your current collection period with your previous experience?	_____	_____	_____
Do you compare your collection period with your payment terms?	_____	_____	_____
Do you have a monthly aging of all outstanding accounts?	_____	_____	_____
When a problem is identified, is corrective action prompt and firm?	_____	_____	_____
Do you periodically review your credit policy?	_____	_____	_____

come. It is important to know the annual income and size of the firm; however, it is more important to know how much cash will become available during the year and how much of this cash is committed to

other obligations. Knowing something about the customer's income flow permits you to estimate when payment can be expected and what payment terms are reasonable.

Capital refers to the general financial position of a potential creditor with special emphasis placed on tangible net worth or financial health. Capital accumulation is also a general indicator of capacity. The larger the customer's capital in relation to the credit line you extend, the higher the probability that you will be paid if times get tough.

Capital should be evaluated relative to the age of the business and the circumstances under which it was accumulated (savings vs. inheritance). The financial strength of the firm should also be analyzed in terms of current assets (those that can readily be converted to cash) and long-term (permanent) assets. The larger the amount of the customer's capital tied up in long-term assets relative to current assets, the more difficult it will be to collect delinquent accounts through capital liquidation.

Collateral is represented by assets that a customer can pledge as security for credit that will be extended. It is essentially the value of the assets pledged as security should the customer not pay an obligation. A word of caution is in order at this point: if a credit manager expects to be forced to liquidate a customer's assets in order to collect on a credit sale, credit should not be extended. Collateral is usually taken as security on higher priced merchandise, equipment, etc.

Conditions refer to how dependent a particular customer's situation is on general economic trends and special developments (weather, business cycles, etc.). The higher a customer's dependence on external factors the higher the associated credit risk. Credit policies that are adequate when the local economy is strong may not be appropriate when the local economy is depressed. Credit will still be necessary when the economy is depressed, but the amount extended to individuals and the repayment period may have to be adjusted. It is important to minimize changes in credit terms and to change only when absolutely necessary.

Credit Application

The credit applicant is the first and most important source of information. If applicants are willing and able to provide the necessary basic personal information, the remainder of the investigation and evaluation can go much more quickly and smoothly. To obtain concise and accurate information from the applicant, a credit application form should be used. Certain standard credit forms can be obtained from trade or work organizations, wholesalers, credit bureaus, data processing firms, and business supply firms. Appendix A is a sample credit application. Credit applications vary considerably among businesses. A form appropriate to your type of business should be used. The application form usually will request the following information:

- current address and previous address if they have lived at their current address for a short period of time
- current position and applicant's previous occupation if time spent in the current position is relatively short
- salary and other income
- rent or mortgage payments
- major financial obligations
- credit references usually including at least one bank and one other line of credit (credit card or other charge account)
- number of dependents

The information provided on this form goes a long way in providing specific content to the five C's of credit worthiness. It also provides clues for the other steps in a complete investigation.

Applications are subject to equal credit and truth-in-lending laws. To avoid violation of these laws, it is useful to review applications with the bank with whom you do business or with somebody who is knowledgeable in credit applications. To comply with truth-in-lending laws, retailers who levy a finance charge for unpaid balances beyond a certain time period must provide information about these finance charges in detail on the application form.

Customer Evaluation

After all the information has been gathered, you can decide on the applicant's credit worthiness. Figure 2 is a simple summary form that can be used to grade or score a credit applicant. A grade should be checked (1, 2, or 3) for each of the qualities and the numerical value entered in the first column. The grade average is calculated to determine the grade for the overall appraisal.

This form summarizes the credit manager's judgment on each of the credit qualities of the applicant and can be used along with other available information to evaluate credit worthiness. A maximum grade or score should be established. Customers who receive grades above this level using the scoring form of Figure 2 should not be extended credit. The decision to grant credit will depend on your personal evaluation of the applicant's ability to meet obligations as well as how much risk the firm is willing to accept. An upper limit on the dollar amount of credit that an individual customer can have on the books at any one time may be established.

Figure 2. Credit Customer Grading Form

Credit Qualities	Grade Value*	Grade		
		Good 1	Fair 2	Poor 3
Cash Flow or Income	_____	_____	_____	_____
Size of Operation	_____	_____	_____	_____
Residence	_____	_____	_____	_____
References	_____	_____	_____	_____
Net Worth	_____	_____	_____	_____
Payment Record	_____	_____	_____	_____
Reputation	_____	_____	_____	_____
Grade Total	_____			
Summary-overall appraisal (average) _____ Grade average = grade total ÷ 7.				
Decision: Accept _____ Refuse _____				
Limit \$ _____				
Comments: _____				

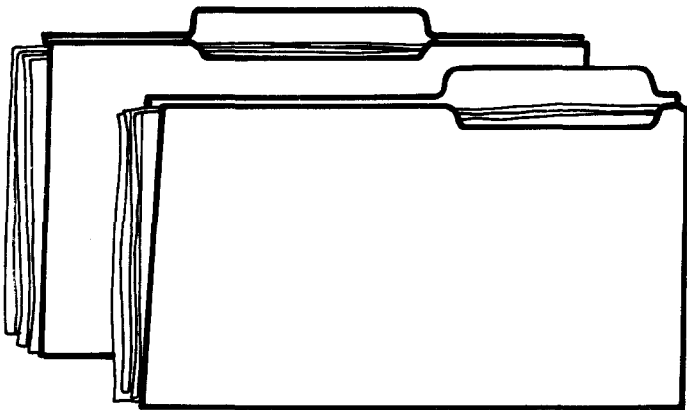
*Enter numerical grade value in this column.

1. Exact name(s) of the customer(s) and any other individual(s) authorized to use the account.
2. Account number and/or social security number.
3. Line of credit/credit limit on the account.
4. Security requested or taken.
5. Guarantees or co-signors.
6. Renewal date and any other special circumstances.

The creditor should maintain a ledger on receivables which contains a record of invoices and payments which corresponds with this account information and shows the date of each transaction. The ledger entries become the basic source of information for subsequent monitoring of the credit program. Credit payments and credit outstanding by account can then be quickly assembled by age of those accounts to provide for an analysis of all receivables of the firm. An alternative to a single ledger on receivables is to maintain a file copy of the current account information under the customer's name/account number and another file copy under the billing date.

Implementation of credit procedures requires that the customer be invoiced properly. The invoice should include name(s) of buyer(s), invoice and shipment dates, proper terms clearly stated, correct quantities, and prices. Invoices should bear the customer's signature to provide proof of delivery, which may be extremely important when additional measures need to be taken for collection. Prompt invoicing signals the customer that the firm is concerned about timely payment. A lax invoicing procedure conveys the message to the customer that the firm is not overly concerned about prompt credit collection.

Additional effort may be required to maintain an up-to-date credit file. Increased mobility of the population, larger trade areas, and more customers demanding credit all increase the need for additional current information. Firms which have been highly successful in reducing delinquent accounts maintain a credit file which is frequently supplemented by financial statements (e.g., balance sheet, earnings statement, cash flow summary), rating reports, courthouse investigations and credit references, and field appraisals by sales or credit personnel.



Accounts Receivable File_____

One of the initial steps in successfully implementing a credit program is to develop a system for obtaining accurate and current account information. Problems with receivables management can frequently be traced back to problems with the accounting, billing, and collection procedures. An accurate credit file is one of the keys to a successful credit management effort. Successful systems record several types of individual account information.

Developing a Credit Control System_____

Sound business management requires that the firm's accounts receivable be monitored on a

periodic basis to evaluate credit quality and provide credit control. The control system needs to be designed and implemented to monitor the credit program in a cost effective way. It should also allow the credit manager to identify needs and types of change which will be effective in attaining the firm's objectives or maintaining desired credit standards. One aspect of control is the establishment of credit limits on individual accounts. Secondly, monitoring and evaluating accounts receivable may involve aging of accounts and credit ratio analysis.

Credit Limits

How much credit can/should a firm extend to a particular customer? No single piece of information can fully answer that question. Rather, the credit limit placed on each customer must reflect an analysis of the customer's current and anticipated financial situation and the level of credit the firm desires to extend in aggregate.

Individual lines of credit should be established using sound business management practices. The line of credit may be based on a percentage of your firm's equity capital. Alternatively, the credit limit for an individual customer could be at some percentage of the firm's anticipated profit. Both alternatives are designed to limit your firm's exposure to delinquencies and bad debt losses.

Credit limits based on a customer's equity may be set by limiting all customers to a constant percentage of equity capital or by classifying customers according to credit quality and establish lower credit limits (lower percentages of equity) for low quality, high risk accounts. Similar methods could be used to base credit limits on firm profits. Use of firm profits as the base for credit limit determination may be a better planning approach to controlling firm exposure to losses during periods of anticipated declining business activity or reduced profitability.

Aging of Accounts

Many businesses monitor their credit program by use of an aging schedule for accounts and notes receivable. This simply involves listing credit ac-

counts and corresponding volumes outstanding according to due dates. The basic structure of the aging schedule is illustrated in Table 1. The "total due" column contains the total credit sales by account. The "current" column lists payments made during the period immediately following the sale within which no carrying charges are applied (net 20 or net 30 days). The remaining columns contain the balance of the outstanding volume depending on whether it is overdue or payable according to a schedule.

If it is used, the aging method should be tabulated monthly for management review and at year end to serve as a summary of progress in the collection effort. If it is done on a regular basis (monthly) the aging of receivables indicates both when cash will be flowing into the firm from past credit sales, and how much credit has been extended to individual customers and when payment is expected. For an in-depth aging analysis, see Appendix B.

Credit Ratio Analysis

The simplest method of monitoring accounts receivable is to compute various credit ratios. The average collection period (ACP), also known as days sales outstanding (DSO), is an approximate average time (in days) required to collect receivables. The ACP is computed in two steps.

$$(1a) \quad \text{Average credit sales/day} = \frac{\text{Total credit sales for the period}}{\text{Length of the period (in days)}}$$

$$(1b) \quad \text{ACP} = \frac{\text{Gross accounts receivable (less) bad debt loss}}{\text{Average credit sales/day}}$$

When the ACP is calculated for an entire year the ratio is,

$$(2) \quad \text{ACP} = \frac{\text{Net accounts receivable at end of year}}{\text{Net credit sales (or billings) during the year}} \times 365 \text{ days}$$

The standard for comparison of the ACP is the credit terms granted by the firm. For example, if credit terms are net 30 days and the ACP ratio is 30 days or less, the credit program is working effectively. A rule of thumb which is frequently used is that the collection period should be no more than one-third greater than the net selling terms. Therefore, if the net sell-

Table 1. Aging of Accounts Receivable.

Acct. No.	Customer's Name	Total due	Current	Aging Past Due			
				1-30 da.	30-60 da.	60-90 da.	Over 90 da.
	J. Williams	\$ 2,140	\$ 1,300		\$ 840		
	R. Johnson	1,520	520	\$1,000			
	O. Richards	\$11,200	\$ 6,200	2,200	1,300	\$1,100	\$400
	L. Johnstone	1,750	1,750				
	K. Gilson	5,000	450	3,200		1,350	
	Totals	\$21,610	\$10,220	\$6,400	\$2,140	\$2,450	\$400
	Percent	100	47.3	29.6	9.9	11.3	1.9

ing term is set at 30 days, the collection period should be approximately 40 days. The ratio can also be compared with industry averages. Differences in the ratio between firms may result from variations in sales/billing cycles and/or seasonal fluctuations in sales. A major benefit of ACP is not the actual number at any point in time, rather an indication of trends in collection of receivables.

The ratio of credit sales to total sales can be used by the firm to follow changes in the level of credit

$$(3) \frac{\text{Credit sales volume for the period}}{\text{Total sales volume for the period}}$$

over time. This ratio can be compared to the firm's desired level of credit sales as a proportion of total sales volume and used to indicate a need to limit or expand credit sales activity.

The index of change in credit sales volume is another useful trend indicator. An index greater than 100 means

$$(4) \frac{\text{Credit sales for current period}}{\text{Credit sales for a previous period}} \times 100$$

that credit sales are on the increase from prior levels. An index less than 100 corresponds to a decline in credit sales over time. This index has no standard for comparison but does indicate period-to-period fluctuations.

The percentage change in accounts receivable outstanding indicates the trend in uncollected receivables.

$$(5) \frac{\text{Accounts receivable outstanding (end of current period)}}{\text{Accounts receivable outstanding (end of previous period)}} \times 100$$

If this ratio is greater than 100 and/or illustrates an increasing trend, the indication may be that collections are not keeping pace with collections in prior periods. The credit manager would need to determine if the increase is attributable to increases in total sales and credit sales or is in fact a reflection of collection problems.

A bad debt ratio is a potentially useful indicator of the efficiency of credit acceptance standards and collection efforts. Since bad debts are frequently written off considerably later than the period in which the credit sale occurred, the usefulness of this ratio is in period-to-period comparisons or comparisons with industry averages.

$$(6) \frac{\text{Bad debts (current period)}}{\text{Total credit sales during the period}} \times 100$$

Evaluation of Credit

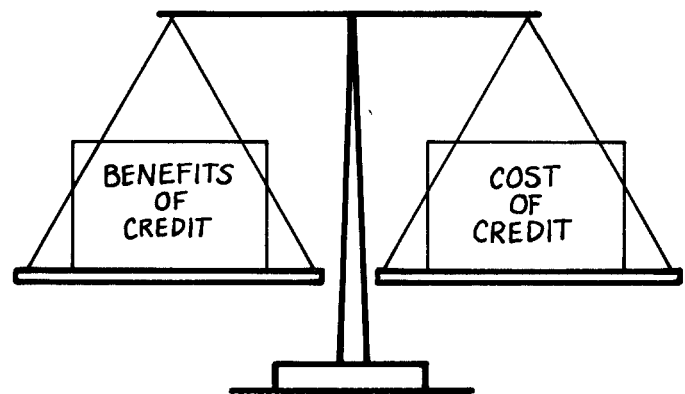
The benefits of granting credit are mainly the extra business obtained. If all competitors are conveniently located and grant credit, it is safe to assume that you would lose a large proportion of the business that is transacted on credit if you had a no-credit policy. Alternatively, if only a small proportion of your business is credit business, there would be relatively little benefit from offering credit.

The benefit you derive from offering credit is a judgment that you have to make based on the conditions in your business. A simple formula for calculating the benefits of offering credit is as follows:

$$\left[\text{Benefit of Offering Credit} \right] = \left[\text{Amount of Business Which Credit Alone Brings} \right] \times \left[\text{Percent of Net Profit Made on That Business} \right] - \left[\text{Cost of Providing Credit} \right]$$

The costs of providing credit include:

- costs of billing customers, including costs of mailing statements, data processing costs, or wholesaler charges for these services;
- cost of credit checks or reference checks;
- cost of credit losses;
- cost of money tied up in credit.



Cost of borrowed capital and the time required to collect accounts influences the profitability of the firm's existing accounts receivable program through the collection period. This is especially important to consider when interest rates are high and/or rising. The erosion of profits generated through credit sales as the length of the collection period is extended for three different interest rates on borrowed money is illustrated in Table 2. Other assumptions used in the computations are a 6 percent net profit margin on sales and a credit policy of net 30 days.

Table 2. The Effect of Interest Rates and Collection Periods on Net Profit Based on \$100 of Credit Sales and a 6% Net Profit Margin

Length of Collection Period	Net Profit ^a for Selected annual Interest Rates on Borrowed Capital		
	9%	12%	15%
1 month	\$ 5.25 ^b	\$ 5.00	\$ 4.75
2 months	4.50	4.00	3.50
3 months	3.75	3.00	2.25
6 months	1.50	0.00	-1.50
9 months	-0.75	-3.00	-5.25
12 months	-3.00	-6.00	-9.00

^aFinance charges on accounts receivable are not included.

^bEffective Net Profit

= Sales × [Net Profit Margin - (Monthly Interest Rate × Number of Months)]

= \$100 × [6% - (.75 × 1)]

= \$5.25

The monthly interest rate is calculated by dividing the annual interest rate by 12.

The normal \$6.00 profit on a sale of \$100 is reduced to \$5.25 one month after the account is due. The important point to notice from the table is that with a 12 percent interest rate, profits generated by the sale are halved by the end of three months and completely eliminated by the end of six months. Interest rates are a significant factor to consider in monitoring profitability of the credit program or considering adjustments in the credit program to preserve profits.

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CHARGE ACCOUNT APPLICATION

Name and address in which account is to be carried Courtesy titles optional <input type="checkbox"/> Mr <input type="checkbox"/> Mrs <input type="checkbox"/> Miss <input type="checkbox"/> Other _____											
(PLEASE PRINT) FIRST NAME		MIDDLE INITIAL			LAST NAME			PHONE NO			
ADDRESS				CITY		STATE		ZIP			
IF APPLICANT'S SPOUSE IS AUTHORIZED TO USE THE ACCOUNT, PRINT NAME HERE _____											
IF OTHERS ARE AUTHORIZED TO USE THE ACCOUNT, PRINT NAMES HERE _____											
SOCIAL SECURITY NUMBER		NUMBER OF DEPENDENTS		AGE		HOW LONG AT PRESENT ADDRESS		<input type="checkbox"/> OWN <input type="checkbox"/> RENT	<input type="checkbox"/> BOARD	MONTHLY RENT OR MORTGAGE PAYMENTS	
FORMER ADDRESS (IF LESS THAN 2 YEARS AT PRESENT ADDRESS)				HOW LONG		EMPLOYER					
ADDRESS		CITY		STATE		ZIP		HOW LONG		OCCUPATION	ANNUAL SALARY
FORMER EMPLOYER (IF LESS THAN TWO YEARS WITH PRESENT EMPLOYER) _____											
OTHER INCOME IF ANY AMOUNTS		NOTE: Income from alimony child support or separate maintenance payments need not be disclosed unless relied on as a basis for credit				SOURCE OF OTHER INCOME					
CREDIT REFERENCES	NAME OF BANK		ADDRESS			CITY		BANK ACCOUNT	<input type="checkbox"/> SAVINGS <input type="checkbox"/> CHECKING	<input type="checkbox"/> LOAN	
	NAME OF BANK		ADDRESS			CITY		BANK ACCOUNT	<input type="checkbox"/> SAVINGS <input type="checkbox"/> CHECKING	<input type="checkbox"/> LOAN	
	OTHER ACCOUNTS	CREDITOR (NAME AND ADDRESS)		ACCOUNT NUMBER	NAME IN WHICH ACCOUNT IS CARRIED			BALANCE	MONTHLY PAYMENT		

RETAIL INSTALLMENT CREDIT AGREEMENT

The undersigned customer ("Buyer") hereby agrees with the Store identified below ("Seller") that all purchases of goods and services under buyer's charge account with Seller ("Account") shall be subject to the following terms:

- Buyer agrees to pay in full all purchases charged to the account and all other amounts, including finance charges, due under this agreement. All charges will be billed on a monthly basis and are due and payable upon receipt of the billing statement. Each billing statement will include all charges and payments and other credits received during the monthly billing period ending on the billing date shown on the statement.
- In order for Buyer to avoid a FINANCE CHARGE, payment for every charge, including finance charge, must be received by Seller within _____ month(s) after the billing date shown on the billing statement on which the charge was first billed to Buyer.
- The balance subject to finance charge ("Finance Balance") shown on a billing statement will consist of charges, including finance charge incurred _____ month(s) or more before the billing date shown on the billing statement less payments or credits received by Seller by said billing date.
- On each billing statement on which a Finance Balance appears, a FINANCE CHARGE will be imposed on the Finance Balance at the periodic rate(s) of _____ % per month (ANNUAL PERCENTAGE RATE of _____ % for the Finance Balance up to \$ _____ and _____ % per month (ANNUAL PERCENTAGE RATE of _____ % of any excess, subject to a minimum FINANCE CHARGE of \$ _____ per month.
- Seller may at any time amend any of the terms of this agreement upon written notice mailed or delivered to Buyer in accordance with applicable law, and any amendment may apply to balances then outstanding. Seller may limit or terminate Buyer's right to use the Account without prior notice.
- If any amount due and payable under this agreement is referred for collection to an attorney not a salaried employee of Seller, Buyer will be charged and agree to pay reasonable attorney's fees and costs not exceeding the maximum amount permitted by applicable law.
- Seller hereby waives any security interest in or lien (other than judgment lien) upon any real property used as a principal residence of Buyer, unless expressly reserved in writing at the time of sale.
- The law of the State where Buyer resides shall govern this agreement.

NOTICE TO THE BUYER

- DO NOT SIGN THIS CREDIT AGREEMENT BEFORE YOU READ IT OR IF IT CONTAINS ANY BLANK SPACES.
- YOU ARE ENTITLED TO A COMPLETELY FILLED IN COPY OF THIS CREDIT AGREEMENT.
- YOU MAY AT ANY TIME PAY YOUR TOTAL INDEBTEDNESS UNDER THIS AGREEMENT.
- NOTICE: SEE ACCOMPANYING STATEMENT FOR IMPORTANT INFORMATION REGARDING YOUR RIGHTS TO DISPUTE BILLING ERRORS.

Date _____

(Authorized Signature)

(Store Name)

(Store Street Address)

(Store City and State)

(Store Phone Number)

BUYER ACKNOWLEDGES RECEIPT OF THE ATTACHED COPY OF THIS CREDIT AGREEMENT AND THE ACCOMPANYING STATEMENT REGARDING BUYER'S RIGHTS TO DISPUTE BILLING ERRORS.

(Signature of Buyer)

(Buyer's Street Address)

(Buyer's City and State)

Form No 941
8/23/77

DIRECT INQUIRIES ABOUT YOUR ACCOUNT TO THE STORE'S ADDRESS INDICATED ABOVE.
WHITE COPY ORIGINAL COPY YELLOW COPY CUSTOMER COPY

APPENDIX B

In-Depth Aging Analysis

For many businesses, a simple aging analysis and credit ratio analysis may be all that is necessary. However, an in-depth aging analysis of the credit program of the firm over the full preceding year may be helpful. It involves: 1) summing up customer accounts receivable by month, 2) categorizing sales and outstanding receivables (at month-end) according to quarters, and 3) computing the average collection period, the aging schedule, and a payment pattern indicator (Appendix Table B1). The age schedule (cols. 5, 6) and average collection period (col. 4) are influenced by the monthly pattern of sales within quarters even though total quarterly credit sales are constant during the year. If the pattern of

monthly sales within quarters were constant and the payment pattern was constant (col. 7), the collection period (40 days) and the age of receivables would be identical as in quarters 1 and 4. When the sales pattern is reversed as in quarters 2 and 3 (column 1) the collection period (column 4) and age of receivables (column 6) will vary considerably even though the payment pattern indicator shows that the pace of repayment is identical across quarters. For these reasons, it is useful to look at several indicators of credit program activity over the year to reduce the likelihood of concluding that collection has changed when seasonal variability in sales is the underlying factor. The payment pattern indicator matches accounts receivable to credit sales in the month of origin and is, therefore, not influenced by changes in the monthly volume of sales.

Appendix Table B1. Annual Summary of Credit Program Activity

Qtr.	Month	Credit Sales (Col. 1)	Acct. Rec. by Month (End of Qtr.) (Col. 2)	Ave. Daily Credit Sales (90 da. period) (Col. 3)	Ave. Collection Period (Col. 4)	Age Class (days past due) (Col. 5)	Age Class (%) (Col. 6)	Payment Pattern Indicator (Col. 7 Col. 2) = Col. 1)
1	Jan	\$ 5,000	\$ 1,250	4.1	40	60-90	8% ^a	.25
	Feb	10,000	6,000			30-60	41	.60
	Mar	10,000	7,500			0-30	51	.75
		<u>\$25,000</u>	<u>\$14,750</u>					
2	Apr	\$ 3,000	\$ 750	4.1	43	60-90	5%	.25
	May	8,000	4,800			30-60	30	.60
	Jun	14,000	10,500			0-30	65	.75
		<u>\$25,000</u>	<u>\$16,050</u>					
3	Jul	\$14,000	\$ 3,500	4.1	29	60-90	33%	.25
	Aug	8,000	4,800			30-60	45	.60
	Sep	3,000	2,250			0-30	22	.75
		<u>\$25,000</u>	<u>\$10,550</u>					
4	Oct	\$ 5,000	\$ 1,250	4.1	40	60-90	8%	.25
	Nov	10,000	6,000			30-60	41	.60
	Dec	10,000	7,500			0-30	51	.75
		<u>\$25,000</u>	<u>\$14,750</u>					

^aMonthly accounts receivable outstanding divided by the total for the quarter (Column 2). For example:

$$\frac{\$1,250}{\$14,750} = 8\% \text{ (rounded).}$$