JOURNAL OF SMALL BUSINESS STRATEGY

CREDIT MANAGEMENT STRATEGIES FOR SMALL FIRMS

Frederick C. Scherr
West Virginia University

ABSTRACT

When a small firm sells goods or services to another firm, it generally grants trade credit to the buyer for these purchases. While the academic and practitioner literature on credit management for large firms is voluminous, there is little in this literature which suggests appropriate credit management strategies, given the particular characteristics of the small firm. Several characteristics of small firms can lead to advantageous credit policies which are different from larger firms. Among these are returns-to-scale problems in adopting several credit management strategies, management which has limited expertise in finance, and restricted access to outside financing. In this paper, the effects of these differences on trade credit strategy are considered. Four areas of credit strategy are analyzed: credit investigation and risk assessment, credit-granting decisions, collections, and bearing credit risk. The paper presents and critiques trade credit policies for the small firm in each of these areas, including policy alternatives which involve the outsourcing of one or more aspects of credit management.

INTRODUCTION

When one business sells to another, the buyer typically purchases on trade credit. The accounts receivable created when trade credit is granted is a major asset for those small firms who sell to other businesses, and the selection of appropriate strategies for the management of these receivables can enhance the firm's chances of survival and growth.

There is little in the literature to guide the small firm's owner/manager in the selection of advantageous credit management strategies. Articles in academic and practitioner small business journals usually outline the basics of credit management (for example, Atkinson, 1992; Knowles, 1989; and Faria, 1976) or describe the credit management methodologies used by larger firms, ignoring the important differences between large and small firms (for example, "Effective credit policies: Maximize sales and minimize bad debts," 1987). Further, texts in the financial management of small firms tend to treat credit management lightly, concentrating instead on the problems of raising funds and of evaluating capital investments.[3] In this

[1] For example, Walker and Petty, 1986, devote 10 pages to credit management, 122 pages to raising funds (exclusive of capital structure decisions, which are discussed separately), and 31 pages to capital budgeting.

normative paper, we present some prescriptions for advantageous credit management strategies for small firms, drawing from the larger literature on credit management for large firms and contrasting strategies between large and small. The paper deals entirely with the granting of credit rather than the management of credit received from other firms.

CHARACTERISTICS OF SMALL FIRMS WHICH INFLUENCE CREDIT POLICY

There are several differences between small firms and large which make small firms' credit policy decisions unlike those of larger firms. The first concerns a returns-to-scale problem in employing many credit management techniques. Credit management strategy largely concerns the control of credit-related costs. Two major types of credit-related costs are bad debt expense and accounts receivable carrying costs, both of which are proportional to the dollar value of the firm's receivables portfolio. Bad debt expense represents the portion of accounts receivable that go uncollected because customers default. The larger the accounts receivable portfolio, the greater the number of such defaults and the higher the dollar bad debt expense. Accounts receivable carrying costs represent the time value of money for investment in the accounts receivable asset, and are computed as a required return times the dollar investment in accounts receivable. Thus, the larger the portfolio, the greater are accounts receivable carrying costs. (For more discussion of these costs, see Scherr, 1989a, pp. 159-165.)

Many credit strategies reduce these costs but require that the firm bear other costs which are fixed in nature (a good example of this is the hiring of a professional credit manager to make credit decisions). Since the receivables portfolio of the small firm is smaller in dollar amount than that of the larger firm, the smaller firm is at a returns-to-scale disadvantage in reducing bad debt and accounts receivable carrying costs by employing credit strategies entailing such fixed costs (Mian & Smith, 1992).

The second difference concerns the expertise of the small firm's owner/manager. The owner/manager's knowledge is typically centered in the product or service sold. Few owner/managers of small firms have the level of financial expertise necessary to perform the type of credit analysis undertaken at large firms. This is partly because owner/managers seem to find the credit function particularly distasteful and avoid it (Grabowsky, 1976).

Finally, because of agency problems and problems in the transmission of information and in monitoring the firm, small firms will have higher costs of external capital than larger firms of the same business and financial risk. Owners of small firms have both a greater ability to alter the firm to benefit themselves to the detriment of outside investors and a greater incentive do so. Also, outside investors typically have less ability to assess the risk of the small firm than the larger firm because the small firm does not generate the plethora of audited financial statements and other reports that larger firms do. Investors must price these factors, and thus charge more for funds. (See Pettit and Singer (1985) and Ang (1991/1992) for literature reviews of these and other differences in financing large and small firms.)

The result is that, for small firms, internal cash flows are by far the least expensive source of financing; small firms follow the pecking order financing strategy described by

Myers (1984). However, unlike external financing, the amount of internal financing available is limited, as it comes from the firm's cash flow stream. The result is a considerably greater concern for safeguarding the cash flow stream, a concern which needs to be manifest in the firm's credit policies.

CREDIT STRATEGIES FOR SMALL FIRMS

Mian and Smith (1992) define credit management as involving the following functions:[2]

1. Credit investigation and risk assessment: who performs this and how investigation and assessment are performed (what sources of information are used, etc.).

2. Credit granting: who decides which applicants are granted credit, how this decision is made, how much credit is granted, and the terms under which credit is granted.

3. Collection: who performs it and how it is to be performed (what collection strategies are to be used and the timing of these strategies).

4. Bearing credit risk: who takes the loss if the customer defaults.

The selling firm has many alternatives in managing each of these functions. These alternatives are of two general types. The first are internal alternatives: different ways of performing the function in-house. The second are outsourcing alternatives: contracting out all or part of a particular function.

Mian and Smith (1992) consider the outsourcing alternatives. They point out that the outsourcing aspect of credit policy has to do with the costs and risks of credit-granting and who bears these costs and risks. The firm may choose to bear these or it may contract with an outside agent, paying the agent to bear them. Whether it is advantageous for the firm to do this depends on whether it has a comparative advantage in bearing the costs or risks itself. (That is, whether it can do the job more cheaply than an outsider.) The amount of this comparative advantage, we will argue, is greatly affected by the characteristics of small firms previously discussed.

Mian and Smith reason that the various institutional arrangements which surround trade credit are actually mechanisms for allocating costs and risk between the firm and outside contractors. They generate a very interesting table which relates some institutional outsourcing alternatives to the four credit functions previously discussed; these relationships are presented in Table 1.

[2] Mian and Smith also consider another dimension of credit management: who finances the accounts receivable asset. While financing considerations are important to the small firm, we wish to concentrate solely on the asset management rather than financing aspects of credit policy, and thus exclude such considerations from our analysis.

While these institutional strategies are familiar to most readers, this table is very useful for thinking about credit management policy decisions which involve outsourcing and their relationship to the firm's costs and risk. The polar opposites are "General Corporate Credit", for which nothing is outsourced (the seller performs all the functions and bears all the costs and risks) and "Non-Recourse Factoring," where everything is outsourced. Note also that some of these strategies are not mutually exclusive, and that the firm can combine them to change the allocation of costs and risk. For example, the firm can use a credit information firm to collect information and a credit insurance firm to bear risk while retaining the other functions. One important consideration in formulating credit policy regarding the four credit functions is whether to utilize an outsourcing alternatives or to employ an internal mechanism to manage the function.

CREDIT INVESTIGATION AND RISK ASSESSMENT

The first of the four functions is credit investigation and risk assessment, which involves the collection and evaluation of information relevant to the customer's ability to pay and its policies with respect to making payment. This information is accumulated, then analyzed to provide an assessment of likely payment time and credit risk.

Credit Investigation. To assess credit worthiness, data on the debtor's business acumen, payments to the trade, the financial health of the business and its owners, and so forth are collected. Some information of this sort will have been accumulated as part of the selling process; contacts between salespeople and the buyer allow the seller to acquire insight into the buyer's competency. This knowledge can come from the seller's intimacy with the marketing channel in which it operates (Smith & Schnucker, 1994), or because the salesperson visits the account regularly and is able to monitor its credit worthiness on a continuing basis (Mian & Smith, 1992).

Such knowledge can provide valuable clues regarding credit risk. When the seller knows that "They have to pay because their bank won't give them financing without seeing 'paid' invoices" or that "They have to come back because we have the best prices on sheet rock," credit risk is less than it would be otherwise.[3] However, when the amount of credit to be granted is large, it is advantageous to accumulate other data on the buyer, including information on financial health and payments to the trade. One alternative is for the seller to make inquiries directly to other suppliers, the buyer's bank, court records, and other information sources. Unlike information gleaned as a byproduct of the selling process, such efforts are costly in time and money. Large sellers frequently make such direct inquiries in the management of their credit risks.

Alternatively, the seller may employ credit information vendors (such as Dun and Bradstreet or TRW) to collect all or parts of this information. For the small firm, this strategy is likely to be less costly than accumulating this information in-house (for discussion, see

[3] These and other examples of small business credit practice used in this paper were suggested by an anonymous reviewer.

Golob, 1987). There are huge returns to scale in credit data gathering, making the per-unit costs of data gathering by the small firm considerably higher than for the commercial data vendor or for the large firm with many customers to investigate. However, information collected by credit information vendors is neither as timely nor as need-specific as when the small firm itself collects information at the time the credit decision is being made. Blending specific credit information with that obtained from credit information vendors may be necessary to offset these inadequacies.

Risk Assessment. This process turns credit information into an assessment of credit risk. Internally, the owner/manager can perform this task or can hire a credit professional to perform it. Again, returns-to-scale are an important consideration. Professional credit managers turn credit information into a risk assessment by applying reasonably sophisticated analysis (Christie & Bracuti, 1986). In general, the owner/manager will not have this expertise, and will make errors in credit decisions that someone with this expertise would not make. These errors are costly in terms of bad debt loss and accounts receivable carrying cost, both of which are proportional to the size of the receivables portfolio. The smaller the receivables portfolio, the less likely that expenditure of the fixed cost of employing a credit analysis is advantageous. (If this is so, smaller firms should recognize the tradeoff and bear greater bad debt costs and carrying costs than larger firms. There is empirical evidence that such costs are, in fact, higher for smaller firms; see Grabowsky, 1976.)

If a credit manager is not hired, the owner/manager or some other internal employee can perform the risk assessment task. However, there is an outsourcing alternative: some commercial suppliers of credit information also provide indices of credit risk which are intended to summarize the information they provide into a single risk score. (Good examples of this are the Dun and Bradstreet "Paydex" score or Dun and Bradstreet rating.)

By employing these indices as assessments of credit risk, the small firm avoids the problem of inexpert in-house risk assessment.[4] However, there are two difficulties in basing the firm's assessment of credit risk on these commercial indices. First, these indices are only rough indicators of credit risk. Errors in credit risk assessment (relative to what would be best for the firm if a complete credit analysis were performed), and consequently in credit decision-making, are a likely result. Second, when risk assessment is outsourced, there is no direct way for the owner/manager to incorporate the special knowledge gained during the selling process into the risk assessment.

CREDIT GRANTING DECISIONS

Credit granting decisions are based on the tradeoff between the costs and risk of granting credit (credit risk and accounts receivable carrying costs) and the benefits of making the sale. These benefits may include short-term profitability considerations ("They are buying

[4] See "The impact of online business information on the commercial user" (1987) for a case study of a small firm's credit approval system based on such indices. Note that non-recourse factoring also performs the credit investigation and assessment functions, but also requires that the firm give up other credit functions. We defer discussion of non-recourse factoring to a special section later in this paper.

last year's model and we need the warehouse space") or longer-term benefits ("We haven't sold in that region before, and we can talk about it to other customers"). The firm must decide whether credit is to be granted, how much credit is to be granted (the "credit line" or "credit limit"), and the terms under which credit is to be granted.

Who gets credit and how much credit is granted. During this step of the credit evaluation process, the risk assessment is turned into an assessment of credit-worthiness. Like risk assessment itself, the professional credit manager is likely to make more advantageous decisions than the small firm's owner/manager, but at a substantial fixed cost.

However, there are strategies which allow the seller to effectively outsource the credit-granting decision. Numerous PC-based commercial decision support systems are now available to aid decision-makers in making credit-granting and credit-line decisions.[5] These systems vary greatly in complexity; some utilize expert systems technology to replicate the judgment of an experienced credit manager (for discussion see Srinivasan & Kim, 1988) or give results based on previously-developed statistical credit-scoring models (such as Altman's Z score; Altman, 1968). Some require extensive credit investigation, while others employ only a few pieces of credit information in their decision methodology.

These decision support systems are not without their drawbacks. The major cost of employing these systems to make credit decisions is not the system's acquisition or application, but the cost of the inappropriate decisions that sometimes result from these systems, relative to what a competent credit manager would recommend. A wide variety of types of information can be relevant to credit-granting decisions, but any credit decision support system must inevitably incorporate assumptions to limit this domain. These assumptions may or may not be appropriate for specific decisions, and these systems have no "common sense" to make the necessary adjustments (Coats, 1988).

Credit terms. While the small business must generally meet its competition in terms of the number of days it allows buyers to take before payment, a major question is whether the seller should offer a "cash" discount for payment made in a shorter length of time (for example, a two percent discount for payment made in 10 days).[6] Two differences between small and large firms argue that small firms should find the use of cash discounts to be more attractive than larger firms, despite the very high cost of such discounts (the yearly cost of the discount for terms of 2 percent 10 days net 30 days is over 40 percent).

The first difference has to do with the small firm's greater reliance on internal cash flows. Because external financing is very expensive, the small firm needs to recoup cash from

[5] For recent reviews of five such systems, see "Credit scoring and analysis: 1995 software reviews," 1995. Meall (1993) also presents overviews of several computer-based systems intended to assist small businesses with credit-granting decisions and other credit functions.

[6] "Getting customers to pay on time: How to increase your cash flow and profits," 1990, suggests that offering cash discounts is an advantageous strategy for small firms.

sales as quickly as possible to finance itself. Therefore small firms should be more willing to bear the substantial cost of the cash discount than larger firms. Second, when lacking the expertise of a credit manager, the small firm's assessment of buyers' credit risk is less accurate, and the taking or skipping of the cash discount provides an important and useful signal concerning the buyer's true credit risk (Smith, 1987).

COLLECTION DECISIONS

In practice, the collection function is dichotomized into two types of collections: routine collections from ongoing customers and collections from accounts which are no longer purchasing from the seller and for whom standard collection efforts (telephone calls, letters, etc.) have failed (see Christie and Bracuti, 1986, pp. 495-499).

Unlike many of the other credit functions, where financial expertise, returns to scale, or cash flow considerations are important, routine collections can usually be economically performed by the small firm, and only in special cases is it cost effective to outsource this function. There are a few special collection methods that sometimes produce better results, but most of the basic collection techniques are straightforward (for description, see Christie & Bracuti, 1986, pp. 479-514).

However, once standard collection techniques have been exhausted, it is advantageous for the small firm to utilize a collection agency in further attempts to collect the debt. When routine collection efforts fail, the next steps generally involve special expertise in collections (visiting the debtor to press for payment, etc.) or suing the debtor for payment. Most small firms do not have the legal and collection expertise necessary to perform these functions in-house, but collection agencies specialize in such matters. (For more on collection agencies and what they do, see Christie and Bracuti, 1986, pp. 497-499 and 513-514.)

BEARING CREDIT RISK

Of all the contrasts between appropriate credit policies for large and small firms, the greatest difference occurs with respect to bearing credit risk. Because their costs of external capital are so much higher than large firms, small firms must rely more heavily on cash inflows from sales, which come to the firm via the collection of trade receivables. The default of a debtor reduces these collections. The small firm should therefore be much more averse to credit risk than the large firm.

Thus, while the large firm may choose simply to bear the credit risk, the small firm should be more inclined to find a hedge against this risk. Both external and internal hedging strategies are available. Externally, the firm can outsource the bearing of this risk by purchasing credit insurance. Credit insurance is available for the firm's entire receivables portfolio or for specific customers, though such insurance is costly (Mian & Smith, 1992).

Another alternative is to accept business purchasing credit cards or personal credit cards in payment for trade purchases. Acceptance of these cards is predominant in retailing, where most small firms have adopted them in lieu of other credit arrangements.

While the credit card issuer bears the credit risk and pays quickly, the principal disadvantage of these cards is their cost, which is typically 1.75-2.5 percent of sales for business purchasing credit cards (Bleakley, 1995) and 3-4 percent of sales for personal credit cards ("Credit cards and small business," 1987). Accepting these cards for purchases is equivalent to advance non-recourse factoring, a topic to be discussed in detail later in this paper.

There are also internal policy mechanisms that can be used to limit credit risk. The most common is to impose a credit limit on each debtor and enforce this limit by requiring payments if the debtor's balance exceeds the limit.[7] The cost of this strategy is lost sales. If a debtor places an order which results in its balance exceeding its credit limit, even though the debtor's account is not past due, enforcement of the credit limit requires that the debtor make a payment to reduce the balance. From a cash flow standpoint, rather than make the payment the debtor is better off ordering from a competitor, and frequently does. When the amounts of these lost sales are large (as when the debtor is a major customer but entails substantial credit risk), the purchase of credit insurance may offer more advantage than enforcing the credit limit, even allowing for the cost of this insurance.

When the buyer is incorporated, another mechanism which can be used to limit risk is to obtain a personal guarantee of the debt from the owner. This guarantee enhances the likelihood of collecting the debt and increases the recovery if the buyer defaults. (See Scherr, 1989b, for analysis of the effects of personal guarantees and similar strategies on credit-granting.)

ON NON-RECOURSE FACTORING

Prior discussion suggested that, while there are internal strategies which will achieve many of the same results, there are advantages to the small firm in outsourcing all credit functions except routine collections. Using non-recourse factoring outsources all of these functions (though routine collections are also passed on to the factor). Yet only a tiny fraction of small non-retailing firms use factoring.[8]

Why don't more small firms use non-recourse factoring? One possibility is that small firms may find advantage in retaining some credit functions but not others. Another explanation is that, because the factor's margin on the sale is less than the selling firm's, the factor can bear less credit risk. As a result, factors' credit-granting policies may be too conservative for many sellers.

---

[7] See Beranek and Scherr (1991) for discussion of the various types of credit limits and their use by large firms and Scherr (1992) for discussion of credit limits strategy and development of a mathematical model for setting credit limits.

[8] The Federal Reserve's Annual Statistical Bulletin estimates that only $38 billion in receivables, which is a very small fraction of total business receivables, were factored in 1985; see Mian and Smith, 1992, p. 198.

Still another explanation may lie with the reputation of factoring as a high-cost strategy (Farringer, 1986). When factoring is discussed, the costs typically quoted are for advance non-recourse factoring. In advance factoring, in addition to performing credit functions, the factor buys the receivable on a discounted basis and pays immediately, providing financing for the firm. The fees for this financing function, along with fees for credit functions, result in fairly large total costs (see Smith & Schnucker, 1994, for discussion of this point). However, the relevant cost for credit management services only is much lower; Farringer (1986) estimates that the typical factor's fee for credit functions is only one percent of the face value of the receivable. Despite the problems in differing incentives and consequent credit-granting decisions between the firm and the factor, this is a reasonably attractive level of cost for many small firms in return for performing credit investigation and risk assessment, making credit granting decisions, performing collections, and bearing credit risk.

IMPLICATIONS FOR PRACTICE

Several factors make the small firms' choice of credit strategies quite different from that of larger firms. Small firms have limited expertise in financial analysis, face returns-to-scale disadvantages in managing credit, and have more difficulty in raising funds externally than do large firms. The challenge to the small firm's owner/manager is to formulate an effective credit strategy that reflects these factors. This strategy can utilize mechanisms internal to the firm or can combine these with outsourcing alternatives.

This article generates policy recommendations for small firms based on the trade credit literature. The resulting recommendations, minus their rationales (which are given in the body of the paper), are presented in Table 2. This table assumes that the seller does not employ a professional credit manager and that the seller chooses not to accept corporate credit cards or utilize non-recourse factoring, each of which externalizes all credit functions. 'In any case, the small firm needs to consider carefully the benefits and costs of alternative credit management policies in developing its credit strategy.

Table 1

Institutional Outsourcing Alternatives for Credit Management

Credit Management Strategy	Who Does Credit Investigation and Risk Assessment?	Who Makes Credit Granting Decisions?	Who Does Collections?	Who Bears Credit Risk?
General Corporate Credit	Firm	Firm	Firm	Firm
Use of a Credit Information Firm	Credit Information Firm	Firm	Firm	Firm
Use of a Collection Agency	Firm	Firm	Collection Agency	Firm
Use of a Credit Insurance Company	Firm	Firm	Firm	Credit Insurance Company
Recourse Factoring	Firm	Firm	Factor	Firm
Non-Recourse Factoring	Factor	Factor	Factor	Factor

Source: Adapted from Mian and Smith (1992).

Table 2

Trade Credit Policy Recommendations for Small Firms

Policy	Recommendation
1. Credit Investigation and Risk Assessment	
A. Investigation	Purchase credit information from commercial credit information vendors whenever possible.
B. Risk Assessment	Use a commercial index (D&B rating, Paydex, etc.) to summarize many aspects of credit risk.
2. Credit Granting	
A. Who Gets Credit	Use commercial decision software to make credit-granting decisions and to assign credit limits, but beware of the limited domain of these systems.
B. Credit Terms	Use cash discounts, even if larger competitors do not, to speed collections and provide information on the credit worthiness of buyers.
3. Collections	
A. Routine Collections	Perform these in-house.
B. Collections from Defaulted Buyers	Outsource these to collection agencies.
4. Bearing Credit Risk	Employ credit limits to limit losses in default. However, when enforcing a credit limit results in lost sales from a major customer, use credit insurance instead. Consider requiring incorporated buyers to provide personal guarantees.

REFERENCES

Altman, E.I., (1968). Financial ratios, discriminant analysis and the prediction of corporate bankruptcy. Journal of Finance, September, 589-609.

Ang, J.S. (1991/1992). On a theory of finance for privately held firms. Journal of Small Business Finance, 1(3), 185-203.

Atkinson, J.A. (1992). Giving credit where it's due. Small Business Reports, June, 15-19.

Beranek, W.B., & F.C. Scherr (1991). On the significance of trade credit limits. Financial Practice and Education, Fall/Winter, 39-44.

Bleakley, F.R. (1995, June 14). When corporate purchasing goes plastic. Wall Street Journal, B-1, B-9

Christie, G.N., & A.E. Bracuti (1986). Credit Executives Handbook. Columbia, Md.: Credit Research Foundation.

Coats, P.K. (1988). Why expert systems fail. Financial Management, Autumn, 77-86.

Credit cards and small business (1987). Credit Management, February, 29-31.

Credit scoring and analysis: 1995 software reviews (1995). Business Credit, May, 20-23.

Effective credit policies: Maximize sales and minimize bad debts (1987). Small Business Reports, July, 50-53.

Faria, A.J. (1976). Reducing bad-check losses: Some practical guidelines. Journal of Small Business Management, January, 7-11.

Farringer, E. (1986). Factoring accounts receivable. Journal of Cash Management, March/April, 38-42.

Getting customers to pay on time: How to increase your cash flow and profits (1990). Profit-Building Strategies for Small Business, July, 5-7.

Golob, A. (1987). The credit domino. Credit Management, December, 29-30.

Grabowsky, B.J. (1976). Mismanagement of accounts receivable by small business. Journal of Small Business Management, October, 23-28.

Knowles, D.W. (1989). Collection programs fuel cash flow. Small Business Reports, July, 45-47.

Meall, L. (1993). Taking the pain out of debt collecting. Accountancy, September, 59-62.

Mian, S.I., & C.W. Smith Jr. (1992). Accounts receivable management: Theory and evidence. Journal of Finance, March, 169-200.

Myers, S. (1984). The capital structure puzzle. Journal of Finance, July, 575-592.

Pettit, R.R., & R.F. Singer (1985). Small business finance: A research agenda. Financial Management, Autumn, 47-60.

Scherr, F.C. (1989a). Modern Working Capital Management: Text and Cases. Englewood Cliffs, N.J.: Prentice-Hall.

Scherr, F.C. (1989b). Bargaining in trade credit granting: A preliminary analysis. Journal of the Midwest Finance Association, Volume 18, 29-36.

Scherr, F.C. (1992). Credit-granting decisions under risk. Engineering Economist, Spring, 245-262.

Smith, J.K. (1987). Trade credit and informational asymmetry. Journal of Finance, September, 863-872.

Smith, J.K., & C. Schnucker (1994). An empirical examination of organizational structure: The economics of the factoring decisions. Journal of Corporate Finance, March, 119-138.

Srinivasan, V., & Y.H. Kim (1988). Designing expert financial systems: A case study in credit management. Financial Management, Autumn, 32-44.

The impact of online business information on the commercial user (1987). Credit Management, February, 18-20.

Walker, E.W., & J.W. Petty II (1986). Financial Management of the Small Firm. Englewood Cliffs, N.J.: Prentice-Hall.