

Reducing the Cash Gap by Factoring

*By: Daniel J. Borgia, Ph.D.
Deanna O. Burgess, Ph.D.*

Abstract

Growing firms often find themselves strapped for money. A gap in cash is created when bills are paid weeks before cash comes in from customers. The cash gap can be shortened by concentrating efforts on fast moving inventory, implementing a just-in-time inventory model, negotiating extended credit terms to suppliers, and getting cash out of customers through discount programs and credit card transactions. Only after exhausting these alternatives does factoring typically make sense.

Factoring provides quick access to cash through sales of receivables. The cash gap is shortened to the extent factoring brings in money earlier than receivables normally would. In general, firms that sell receivables immediately receive a percentage of the outstanding accounts sold. Once the receivables are paid, the factor forwards the balance of these collected accounts to the firm less a factoring fee. This article describes typical factoring arrangements and the costs/benefits of this form of financing. Fees can be high but may outweigh the costs of lost sales, ventures, opportunities, or at the extreme, going out of business.

A survey of small to medium sized businesses that use factoring provides a consumer profile of typical factoring arrangements. A majority of those surveyed are young, rapidly expanding organizations using factoring to support short-term entrepreneurial expansion efforts. Firms report that factoring typically provides access to seventy to ninety percent of cash tied up in receivables, with the balance provided within sixty to ninety days less a ten to twelve percent fee. In all, those that use factoring report high satisfaction, and often use the same factor on a repeat basis.

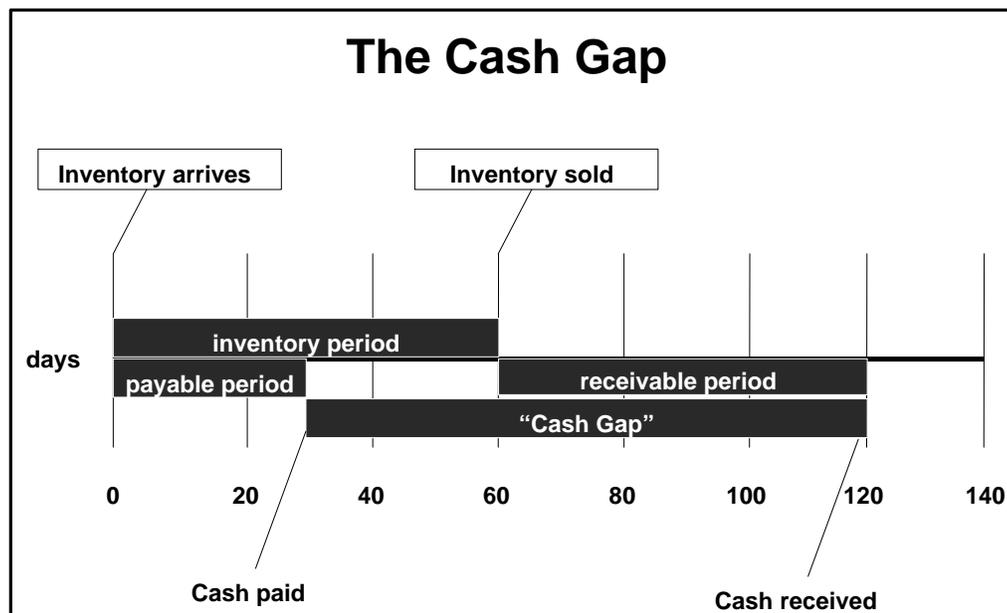
Spending Money to Make Money

It's not uncommon to hear about emerging companies that grow themselves right out of business. Cash demands often stall expansion efforts when bills are paid weeks before cash comes in from customers. Spending money to make money can be costly. The cash gap between payments deserves careful consideration. Rapidly expanding companies with excellent products and booming sales are hamstrung if receivables tie up cash

needed to fund operations and growth. Understanding the factors that affect the time between payments affords a closer look at managing the cash gap and alternative financing options.

The Cash Gap

Managing the cash gap¹ is illustrated in Exhibit 1. When a company pays its suppliers before it collects from its customers, the cash drain presents a financing need. The gap between payments is managed by getting cash out of inventory quickly all-the-while avoiding payment to suppliers as long as possible. Concentrating purchasing efforts on fast moving inventory, giving discounts to customers who pay early, and negotiating extended credit terms with suppliers all help to reduce the cash gap.



Robbing Peter to Pay Paul

Small cash gaps are best. When inventory is purchased, sold, and collected in the same amount of time it takes to pay for the goods the cash gap closes to zero. Even better, a negative cash gap is a modern day version of *robbing Peter to pay Paul*. Customer Peter advances payment before the inventory is paid to Paul supplier. For example, customers of E-commerce companies like amazon.com forward credit card payments for books brought in on a just-in-time basis and paid for under thirty-day credit terms following the sale. Under this scenario, amazon.com maintains a negative thirty-day cash gap. Likewise, in the specialty cement business, customers pay for goods six to eight weeks before they are manufactured and shipped. In this case, the negative cash gap of forty to sixty days provides an internal source of financing.

To illustrate how the cash gap works refer to Exhibit Two. If a company spends an average of \$10,000 per day on its operations, and it takes 100 days to convert its investment in the production process into cash (a 100 day cash gap), then this firm will require roughly \$1,000,000 in funding (on average) to support its operations

(\$10,000/day x 100 days). However, if this company can find a way to reduce its cash gap to say 50 days, then only \$500,000 in funding is required. Finally, if we assume the cost of financing is 10% annually, this company could reduce its annual financing costs from \$100,000 to \$50,000 per year.

ABC Company Cash Gap Analysis			
Annual Direct and Indirect Costs	\$	3,650,000	\$ 3,650,000
Costs Per Day (Annual Costs/365)	\$	10,000	\$ 10,000
Average Cash Gap Period (days)		100	50
Line of Credit Needed (cost/day x ACP)	\$	1,000,000	\$ 500,000
Line of Credit Interest Rate		10%	10%
Annual Financing (Interest) Costs	\$	100,000	\$ 50,000

Small Business Constraints

Unlike large, publicly traded firms, small businesses face a variety of operating and financial constraints that limit the extent to which they can close the cash gap. Many small firms face technological and managerial constraints that limit the ability to closely monitor (and hence reduce) inventory levels. Furthermore, small firms are more likely to lack the power that large corporations have in negotiating terms from suppliers. Finally, small businesses do not possess the same resources to devote toward the collection of accounts receivable. These small firms typically have limited access to short term financing alternatives to help short-term working capital needs. Obtaining working capital from banks can be difficult, time-consuming, and paper-intensive. Willing lenders are often hard to find.

Reducing the Cash Gap in Small Businesses

What options remain for small businesses interested in reducing the cash gap? One alternative is to turn the inventory/sales cycle upside down. Replicate the e-commerce model. Provide incentives for customers to pay cash upfront. Implement a just-in-time inventory system that affords the option of paying for inventory after the cash sale. In this way, the cash gap becomes negative.

A close second option that shortens the cash gap is to provide incentives for customers to charge their purchases using VISA or MasterCard. Credit card companies buy receivables for a one to five percent fee. If the customer factors (sells) the receivable by charging the purchase, little cost is involved, cash is obtained within days, and the cash gap shortens considerably. Cash discounts given to customers who pay early achieve a similar result.

Only when trade and industry expectations hamper efforts to accelerate customer payments should consideration be given to factoring existing receivables. Factoring receivables involves selling customer invoices to a third party at a discounted amount. Instant money is obtained without collateral or extensive corporate credit. The factor becomes the bill collector, assuming the majority of the risk of collecting payment. The

fee charged by the factor may be as high as five percent in the first month due to the lack of collateral or extensive credit review. Alternatively, if the receivables are sold with recourse, accomplished by a "validity guarantee," the factor may charge a smaller fee in exchange for the right to hold the corporation liable for uncollected receivables. Limited time is spent underwriting the credit of the business and its customers, examining the track record of the business' collection ability and the payment history of its customers. Audited financial statements are not obtained and the risk of fraudulent misrepresentation can amount to one-half to one percent of those factored. Understandably, many receivables are factored with recourse to mitigate the factor's risk and the resulting fees imposed.

Factoring Industry

The basic need for factoring originated from the practice of merchants extending beneficial "trade credit" to purchasers of their product or service -- a concept that has been around for over 3,000 years. More specifically, the extension of credit occurs when a business sells merchandise to a purchaser, usually another business, but allows the purchaser time -- usually 30, 60, or 90 days -- in which to pay the bill. Unless the seller has sufficient funds in reserve during the "credit period," continued production efforts are hampered.

Although factors have existed for thousands of years, the impact of high interest rates on businesses in the 1970's generated renewed interest in factoring. Even after interest rates fell significantly, factoring continued to fill an ever-widening gap in the financial structure of our economy, especially with restricted bank financing. Because of the savings and loan debacle, lending institution loan portfolios are subject to greater scrutiny and stricter standards. As a result, the factoring industry has experienced rapid growth -- increasing from \$46 billion in factored receivables in 1993 to over \$100 billion in 1995.

The factoring industry can be divided into two broad groups that serve two distinctively different market segments. The first group consists of the factoring divisions of banks and other financial institutions such as Morgan Guarantee Trust Company, American Express, Citicorp, and Citibank, which provide receivables financing to their large corporate customers. These financial institutions will usually limit their purchases to \$1,000,000 or more per invoice and charge relatively low fees -- usually around 1 to 3 discount points. Numerous large Fortune 500 companies such as Western Digital, Honeywell, Georgia Pacific, and Scott Paper factor receivables through the factoring divisions of large financial institutions.

The second group of factors consists of small, privately owned financial services companies. These smaller factors generally fund new, rapidly growing companies that have exhausted their lines of credit and borrowing capacity at banks, and have few other working capital financing alternatives available to them. For these growth companies, factoring is an attractive means of raising capital. Small factors will purchase invoices as little as \$1,000 or as much as \$500,000.

Realistically, only those companies experiencing cash drains from growing sales typically utilize this type of financing strategy. However, struggling companies with cash flow problems also use factors in an attempt to increase cash flow. If a struggling company needs cash to begin turning its business around then this financing strategy may be effective. However, companies that are financially weak may have to sell their receivables at a greater discount than strong companies. Therefore, struggling companies often experience difficulty factoring in the long run. Also, factors will purchase only those receivables that they consider collectable. This means that companies with poorly managed receivables may find that factoring is not an option.

Factoring

In a typical factoring arrangement, a business sells its accounts receivable to a factor at a discount, receives between 60% and 90% of the face amount of the invoice up front, and pays the factor between one percent and five percent of the face value of the invoice per 30 days. The balance of the receivable is remitted when the factor recovers its cash outlay. For example if ABC company sells a \$10,000 receivable to a factor, ABC Company might receive \$7,000 cash immediately (70%). At the end of thirty days, assuming ABC's customer remits the balance to the factor, ABC will receive the remaining \$2,500 less a 5% (\$500) discount, which represents profit to the factor.

Factoring is a financing tool. The money can be used to purchase inventory needed for growing sales or perhaps to take advantage of supplier discounts by reducing payables early. Factoring also allows a company to increase its capital without taking on additional debt or selling more stock. Other benefits include improved credit ratings resulting from prompt debt repayment, internal cost savings by reducing the time and money committed to managing receivables which provides managers with more time to focus on growing the business. Companies that factor are often growing rapidly and have exhausted lines of credit and borrowing capacity at banks.

However, factoring has its drawbacks. Fees increase as the risk of noncollection escalates. Depending on the quality of the receivables, fees may reach five percent in the first month and higher in the weeks that follow. State usury laws regulating interest rate caps on borrowings, such as 18% in Florida or 24% in New York, do not apply. Factoring is considered a sale, not a loan. Factoring fees typically amount to ten to twelve percent on receivables paid within sixty to ninety days.

Despite the high fees, factoring benefits may outweigh the costs. For instance, losing out on 12% of the receivables to gain 88% immediately may be wise if cash is needed to accept a new contract promising repeat business or expansion into a new market that otherwise would have been forgone. For companies with strong receivables, losing out on 3% of receivables that typically take sixty days to collect may make sense if those receivables cost the company more than 3% in fees (interest, billing and collection) during the collection period.

Exhibit Three illustrates the benefits of factoring. For a company with \$1,800,000 in sales and \$1,620,000 in operating costs, receivables that are collected every two months carry

an average balance of \$300,000. A moderate factoring fee may be assumed if the receivables are assumed to be high quality (i.e. government contracts) and take little time to be paid in full. Using factoring rates advertised by 21st Capital (www.21stcapital.com), the factoring fee is \$27,000 or nine percent of the \$300,000 receivables. Annualized, this fee amounts to \$162,000, or nine percent of the \$1,800,000 sales.

Cost/Benefit Analysis of Factoring \$300,000 Receivables Six Times a Year	
	Annual Benefit/(Cost)
Factoring Costs (assume entire receivable paid at end of 60 days):	
Factoring Fee = \$300,000 receivable x 9% factoring fee = \$27,000	
Annual Factoring Cost = \$27,000 factoring fee x 6 receivable periods per year	(\$162,000)
Annual Interest Saved by Shortening Cash Gap by 60 Days through Factoring:	
Operating Costs/day = \$1,620,000/360 = \$4,500	
Reduced Financing Need = 60 days x \$4,500/day = \$270,000	
Reduced Financing Cost = \$270,000 x 10% cost of capital = \$27,000	
Adjustment: only 80% cash advance from factoring (80% x \$27,000) = \$21,600	\$21,600
Annual Savings in Accounts Receivable Clerk's salary:	\$30,000
Net Annual Cost of Factoring	(\$110,400)
Net Annual Factoring Fee % (\$110,400/\$1,800,000)	6.13%
Assumptions:	
(1) Business with \$1,800,000 annual sales, \$1,620,000 operating costs and 10% cost of capital	
(2) Average accounts receivable collection period is 60 days with average receivables of \$300,000	
(3) Receivables are factored six times a year. Eighty percent of the cash is advanced immediately. Remaining twenty percent is advanced when the receivables are collected at the end of sixty days.	
Cash advances and fees mirror those reported by factor 21st Capital Corporation (www.21stcapital.com)	

Factoring fees may be offset by the interest saved by shortening the cash gap. The portion of the cash gap related to receivable collection, sixty days, is shortened to the extent that cash is received early. The annual interest saved is \$21,600. The interest savings taken together with the savings in accounts receivable collection and billing functions estimated at \$30,000 provides a net annual cash outflow from factoring of \$110,400 or 6.13% of sales. In this example, the benefits of factoring may outweigh the costs to the extent factoring brings in cash needed to fund additional projects or growth in excess of 6.13% of sales.

If the company is in desperate need of cash and factoring is ignored, a business may be forced to employ its last alternative -- selling part of the business to outsiders. For many small business owners, selling part of a business may be difficult and an unacceptable alternative.

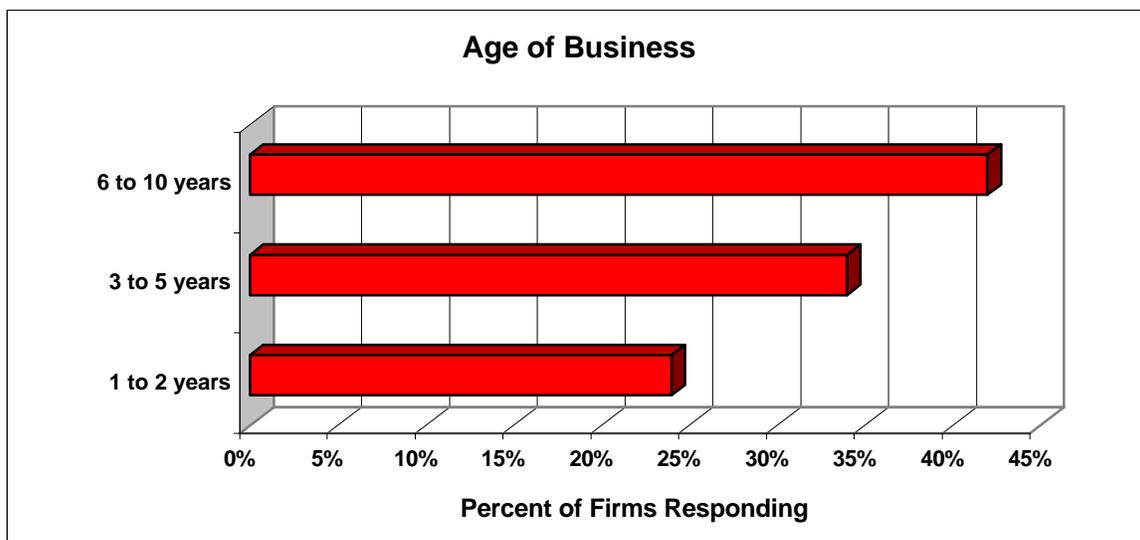
The Cost and Characteristics of Non-Bank Factoring Arrangements

A survey of smaller businesses utilizing accounts receivable factoring as a source of financing was conducted to assess the nature, costs, and characteristics of non-bank factoring arrangements. The survey was mailed in October 1999 to small businesses that

used the services of factors within the past three years. The list and mailing addresses of businesses using factoring services was obtained from the client-lists of three Florida-based non-bank factors. The survey was designed to assist in creating a profile of businesses that utilize factoring. In addition, the survey explored the level of satisfaction businesses have with their factoring companies as well as the costs relative to other sources of short-term working capital financing. A total of 633 surveys were mailed and 59 were returned resulting in a response rate of 7.9%.

Sample Firm Characteristics

Most of the respondents to this factoring survey (58%) have been in business for five years or less (see Exhibit Four). This appears to be consistent with the notion that startup firms with short track records and operating histories have difficulty getting bank financing and turn to factoring. When asked directly whether they had problems obtaining traditional bank financing, Exhibit Five shows that 64% of respondents reported they had approached three or more banks for lines of credit and 54% reported being rejected for bank financing three or more times. Only 9% of those surveyed reported they had not been turned down for a loan or line of credit at least once. In general, the responses suggest many small, young businesses that factor receivables are considered risky candidates for traditional financing sources.



Problems Obtaining Bank Lines of Credit (LOC)		
	No. of Banks Approached for a LOC (% of Firms)	No. of times rejected for a LOC (% of Firms)
Zero	5%	9%
One	12%	14%
Two	19%	23%
Three	32%	27%
More than Three	32%	27%

Sample firms reported average sales levels of approximately \$800,000 in 1996, \$1,000,000 in 1997 and an \$1,800,000 projection for 1998. A majority of these firms (64%) operate in a main facility that is less than 5,000 square feet, while thirty percent are housed

in facilities 5,000-10,000 square feet and only six percent occupy spaces in excess of 10,000 sq. ft. Small businesses that factor have small facilities and are experiencing sales growth.

Consistent with an increasing sales trend, respondents report high expectations of growth (Exhibit Six). Nearly sixty percent of the respondents plan to add new products or services, forty eight percent expect to enter new markets, and thirty nine percent anticipate adding operating space to their facility. These businesses that factor fit a startup entrepreneurial profile.

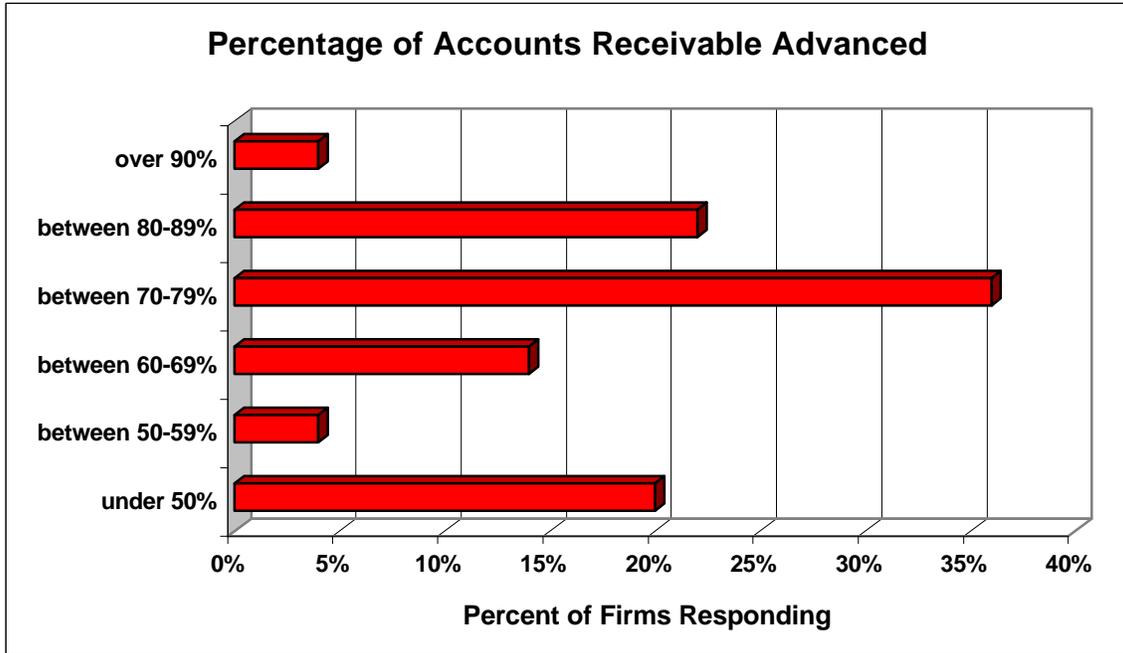
Measures of Sample Company Growth Expectations (% of Firms)					
	Very Unlikely	Unlikely	Unsure	Likely	Very Likely
Add New Products	6%	9%	11%	15%	59%
Enter New Markets	13%	6%	16%	17%	48%
Add Operating Space	23%	18%	12%	12%	35%
Expand Distrib. Channels	17%	17%	15%	12%	39%
Expand Advert. And Promotion	19%	6%	18%	18%	39%
Acquire New Equipment	9%	9%	21%	24%	37%
Expand Facilities	23%	11%	23%	13%	30%
Downsize	63%	21%	6%	6%	4%
Seek Equity Financing	20%	8%	15%	11%	46%
Seek Debt Financing	23%	13%	10%	10%	44%

The Factoring Relationship

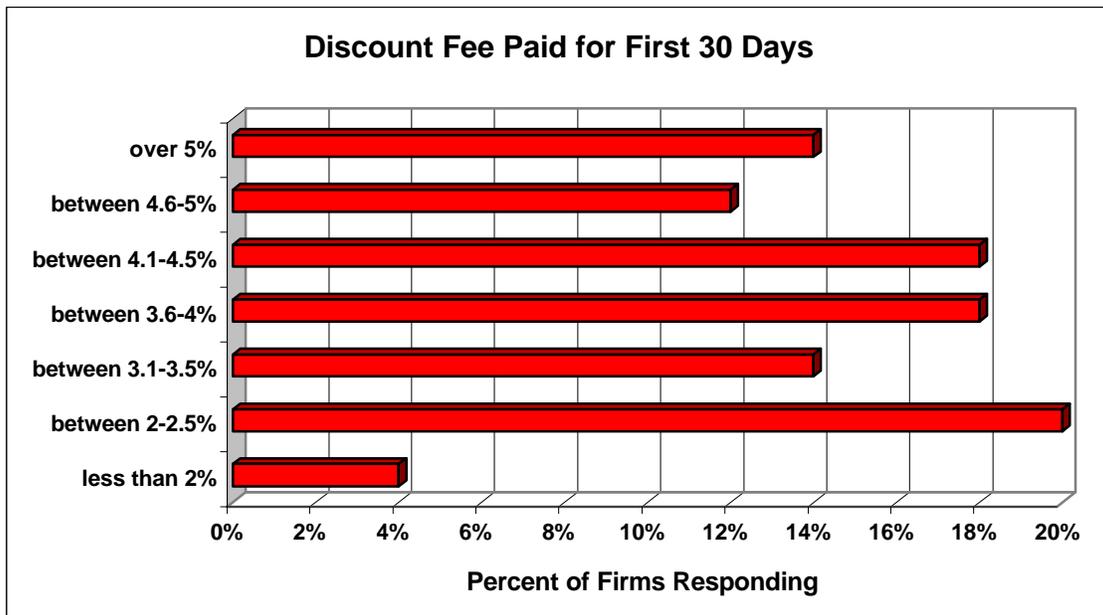
Given the drains on cash from sales growth, the respondents were asked how frequently they factor. The responses indicate factoring is used almost equally as a short term or long term financing alternative. One third of the firms reported using factoring less than six months, thirty-eight percent factored for six months to a year, and twenty-nine percent factored for more than a year. Most firms (83%) use one factor. Respondents in need of a factoring arrangement often do so repeatedly with the same financing source. As anticipated, Exhibit Seven illustrates that factoring serves a strong need for growing companies. A large number of firms report factoring kept them from bankruptcy (31%) or from turning down sales (39%).

Without the Aid of Factoring, The Business Would Have...	
	(% of Firms)
Found another source	46%
Grown more slowly	39%
Gone bankrupt	31%
Lost a new customer	8%
Lost existing customers	10%
Lost reputation	10%

The benefits of factoring are evidenced in the survey results that indicate 60% of firms received an up front cash advance ranging from 70% to 90% of the value of the receivables factored (see Exhibit Eight). Less than five percent received over 90%. Surprisingly, nearly twenty percent of firms received less than 50% against the value of receivables.



Factoring fees experienced by the respondents are provided in Exhibit Nine. While the largest percentage of surveyed firms paid two to two-and-one-half discount points per 30 days, this is still an expensive source of capital. While there might be a tendency to view this fee on an annualized basis (2.5% for 30 days amounts to nearly 35% on a compound annualized basis), recall that typical fees are paid over two to three months on decreasing receivable balances. A compounded fee for the year at 35% would be incurred only in the unlikely scenario that the same receivable remains uncollected for twelve months with imposition of the 2.5% rate compounded monthly throughout that time.



Despite the cost, a majority of firms appear to be quite satisfied with their factoring relationship. Seventy percent of the firms reported they were satisfied with their factoring relationship, while only 14% found this relationship to be unsatisfactory.

Summary and Conclusions

Growing firms often find themselves strapped for cash. When bills are paid weeks before cash comes in from customers, the cash gap between payments represents a financing need. The cash gap can be shortened by concentrating efforts on fast moving inventory, implementing a just-in-time inventory model, negotiating extended credit terms to suppliers, and getting cash out of customers through discount programs and credit card transactions. Only after exhausting these alternatives does factoring typically make sense. Factoring provides quick access to cash through sales of receivables. The cash gap is shortened to the extent factoring brings in cash earlier than receivables normally would. This article describes typical factoring arrangements and the costs/benefits of this form of financing. Fees can be high but may outweigh the costs of lost sales, ventures, opportunities, or at the extreme, going out of business.

A survey of businesses that use factoring reports many are young, rapidly expanding companies using factoring as a short-term financing alternative. Factoring typically affords companies access to seventy to ninety percent of cash tied up in their receivables, with the balance provided within sixty to ninety days less a ten to twelve percent fee. In all, those that use factoring report high satisfaction, and often use the same factor on a repeat basis.

Daniel J. Borgia, Ph.D.
Assistant Professor of Finance
College of Business
Florida Gulf Coast University
10501 FGCU Blvd. South
Fort Myers, Florida 33965-6565
(941) 590-7371
dborgia@fgcu.edu

Deanna O. Burgess, Ph.D.
Assistant Professor of Accounting
College of Business
Florida Gulf Coast University
10501 FGCU Blvd. South
Fort Myers, Florida 33965-6565
(941) 590-7371
dburgess@fgcu.edu

End Notes

¹ From Germain Boer, "Managing the Cash Gap," *Journal of Accountancy*, October 1999, 27-32, and Lawrence J. Gitman, *Principles of Managerial Finance*, Ninth Edition, Addison Wesley Longman, Inc., 1999, 663-667.

