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# A Small Business Is Not a Little Big Business

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A traditional assumption among managers has been that small businesses should use essentially the same management principles as big businesses, only on a smaller scale. Underlying that assumption has been the notion that small companies are much like big companies, except that small businesses have lower sales, smaller assets, and fewer employees.

We would argue, though, that the very size of small businesses creates a special condition—which can be referred to as *resource poverty*—that distinguishes them from their larger counterparts and requires some very different management approaches.

Resource poverty results because of various conditions unique to smaller companies. For one thing, small businesses tend to be clustered in highly fragmented industries—wholesaling, retailing, services, job-shop manufacturing—that have many competitors which are prone to price-cutting as a way to build revenues. No matter that excessive price cutting quickly destroys profits.

Also, the owner-manager's salary in a small business represents a much larger fraction of revenues

than in a big company, often such a large fraction that little is left over to pay additional managers or to reward investors. Similarly, small businesses cannot usually afford to pay for the kind of accounting and bookkeeping services they need, nor can new employees be adequately tested and trained in advance.

In addition, external forces tend to have more impact on small businesses than on large businesses. Changes in government regulations, tax laws, and labor and interest rates usually affect a greater percentage of expenses for small businesses than they do for large corporations.

Such limitations mean that small businesses can seldom survive mistakes or misjudgments. For instance, a production unit of a New York Stock Exchange listed company not long ago installed an additional steam generating plant at a cost of \$3 million. On the first day of operation, the Environmental Protection Agency closed the new generator plant because of a fundamental design fault. It took several months and a million dollars to correct the flaw, but production continued unabated and local management was not even scolded. Few small businesses could survive such an error.

What can small businesses do to overcome the problems posed by resource poverty? Certainly no magical solutions exist. But we believe there are

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some special financial management tools available to small companies that can enable them to make the most efficient and practical use of their meager resources.

## Predicting Cash Flow

Small business owner-managers usually agree quite readily that growth requires investment. To them, however, the need for cash seems only temporary. Profitable growth will produce greater profits and hence, they conclude, more money. Nearly every owner-manager hears at some point the financial principle that cash flow equals net profit plus depreciation and other noncash expenses. Owner-managers of many fast-growing companies, however, cannot avoid the gnawing feeling that somehow the principle doesn't apply to them.

The following example may help explain the cash flow problem confronting many small companies.

*Exhibit I* forecasts the operations of Intercity Assembly Company, Inc. for the first seven months of the coming fiscal year. The company's owner-manager, Mr. Smith, is quite confident he can attain the forecasted sales. The cost of materials for a unit, whatever it may be, is a dollar, including freight. They are delivered in lots of 5,000 units. Labor costs to assemble each unit average 10 cents, and the work force is fully employed at that task. Mr. Smith does not hesitate to send the workers home when they have produced sufficient units to meet orders.

The company is on good terms with its suppliers. It purchases materials, advertising, brochures, and other general and administrative services on net 30-day terms. It buys brochures, however, in quantity, receiving a one-year supply in Month 1.

The company makes income tax deposits in the month following each quarter in an amount equal to the accrued liability for that quarter. It uses an estimated average income tax rate of 30%, based on a rough forecast of the coming year's earnings.

<b>Exhibit I Intercity Assembly Company, Inc. pro forma Income Statement</b>		<b>Month 1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>Revenue</b>	Units sold	40,000	42,000	44,000	47,000	50,000	53,000	55,000
	Sales	\$80,000	\$84,000	\$88,000	\$94,000	\$100,000	\$106,000	\$110,000
<b>Expense</b>	Direct materials	40,000	42,000	44,000	47,000	50,000	53,000	55,000
	Direct labor	4,000	4,200	4,400	4,700	5,000	5,300	5,500
	Overhead	4,000	4,000	4,000	4,000	4,000	4,000	4,000
	<b>Cost of goods sold</b>	<b>48,000</b>	<b>50,200</b>	<b>52,400</b>	<b>55,700</b>	<b>59,000</b>	<b>62,300</b>	<b>64,500</b>
	<b>Gross profit</b>	<b>32,000</b>	<b>33,800</b>	<b>35,600</b>	<b>38,300</b>	<b>41,000</b>	<b>43,700</b>	<b>45,500</b>
<b>General and administrative</b>	Salaries	6,900	7,450	7,500	8,350	8,350	9,000	9,000
	Rent	2,000	2,000	2,000	2,000	2,000	2,000	2,000
	Insurance	500	500	500	500	500	500	500
	Depreciation	170	170	170	170	170	170	170
	Other general and administrative	3,000	4,100	4,550	5,500	6,600	7,050	7,850
<b>Marketing</b>	Advertising	9,750	9,800	10,200	11,000	11,600	12,500	13,000
	Brochures	450	450	450	450	450	450	450
	<b>Total expense</b>	<b>70,770</b>	<b>74,670</b>	<b>77,770</b>	<b>83,670</b>	<b>88,670</b>	<b>93,970</b>	<b>97,470</b>
	<b>Taxable income</b>	<b>9,230</b>	<b>9,330</b>	<b>10,230</b>	<b>10,330</b>	<b>11,330</b>	<b>12,030</b>	<b>12,530</b>
<b>Income taxes</b>		2,769	2,799	3,069	3,099	3,399	3,609	3,759
	<b>Net profit</b>	<b>\$ 6,461</b>	<b>\$ 6,531</b>	<b>\$ 7,161</b>	<b>\$ 7,231</b>	<b>\$ 7,931</b>	<b>\$ 8,421</b>	<b>\$ 8,771</b>

**Exhibit II Intercity Assembly Company, Inc. pro forma  
Statement of Receipts and Disbursements**

	Month 1	2	3	4	5	6	7
<b>Receipts</b>							
Sales	\$74,000*	\$ 77,000*	\$80,000	\$84,000	\$88,000	\$94,000	\$100,000
Common stock	—	175,000	—	—	—	—	—
<b>Total receipts</b>	<b>74,000</b>	<b>252,000</b>	<b>80,000</b>	<b>84,000</b>	<b>88,000</b>	<b>94,000</b>	<b>100,000</b>
<b>Disbursements</b>							
Direct materials	40,000*	40,000	45,000	45,000	50,000	55,000	55,000
Direct labor	4,000	4,200	4,400	4,700	5,000	5,300	5,500
Overhead	1,300	1,300	1,300	1,300	1,300	1,300	1,300
Manufacturing equipment	—	180,000	—	—	—	—	—
Salaries	6,900	7,450	7,500	8,350	8,350	9,000	9,000
Rent	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Insurance	6,000	—	—	—	—	—	—
Office equipment	—	3,000	—	—	—	—	—
Other general and administrative	2,800*	3,000	4,100	4,550	5,500	6,600	7,050
Advertising	9,000*	9,750	9,800	10,200	11,000	11,600	12,500
Brochures	—	5,400	—	—	—	—	—
Taxes	11,000*	—	—	8,637	—	—	10,107
<b>Total disbursed</b>	<b>83,000</b>	<b>256,100</b>	<b>74,100</b>	<b>84,737</b>	<b>83,150</b>	<b>90,800</b>	<b>102,457</b>
<b>Total cash flow</b>	(9,000)	(4,100)	5,900	(737)	4,850	3,200	(2,457)
<b>Beginning balance</b>	1,100	(7,900)	(12,000)	(6,100)	(6,837)	(1,987)	1,213
<b>Ending balance</b>	\$(7,900)	\$(12,000)	\$(6,100)	\$(6,837)	\$(1,987)	\$ 1,213	\$ (1,244)

\*From operations during prior periods.

The "overhead" item contains, among other things, the depreciation on expensive production equipment. The company will install this new equipment in Month 1 at a cost of \$180,000. It depreciates the equipment at \$2,700 per month by the straight-line method. The company's investors guarantee payment for the equipment and will provide most of the cash through a purchase of \$175,000 worth of common stock in Month 2.

Customers of Intercity are quite reliable in their payment patterns. In the past, units shipped in any month were promptly paid for 45 days after the end of the month, plus or minus a few days. Intercity management confidently began the seven-month period knowing that it had reliable customers and strong, sympathetic investors to buy the new equipment. The minimal bank balance of \$1,100 at the beginning of Month 1 was not a concern in view of the anticipated growth in profits.

Intercity's owner-manager realizes that it is important to know how the company's bank balance is doing. Management thus prepared an additional forecast showing when checks would have to be written and when deposits could be expected (see *Exhibit II*). To determine when checks were to become due to the materials supplier, and in what amount, the company prepared a small subsidiary forecast, shown in *Exhibit III*.

## The Cash Flow Illusion

During the seven months, the bank balances caused dismay at Intercity. In only one month of the seven was there a positive bank balance. Cash flow was negative in four out of the seven months. Mr. Smith then decided to prepare a table comparing cash flow as it should have been, according to cash flow

**Exhibit III Materials Inventory Schedule (Calculated in Units) and Purchases Overview**

	Month 1	2	3	4	5	6	7
Beginning inventory	43,500	43,500	46,500	47,500	50,500	55,500	57,500
- Shipments (out)	40,000	42,000	44,000	47,000	50,000	53,000	55,000
+ Purchases (received)	40,000	45,000	45,000	50,000	55,000	55,000	55,000
Ending inventory	43,500	46,500	47,500	50,500	55,500	57,500	57,500
<b>Purchases overview</b>							
Value of purchases (received)	\$40,000	\$45,000	\$45,000	\$50,000	\$55,000	\$55,000	\$55,000
Cash disbursements (net 30)	\$40,000*	\$40,000	\$45,000	\$45,000	\$50,000	\$55,000	\$55,000

\*From a transaction in a prior period.

theory, and as it will appear at the bank. The comparison is shown in *Exhibit IV*. It only confirmed the owner-manager's gnawing feeling of doubts about the value of the theory.

Where did the money go? The owner-manager did not get it. The banker did not get it, as the company shows no loans. It is in the boxes in the warehouse and in little pieces of paper in the front office. At the end of Month 7, there are \$14,000 worth of boxes in the warehouse filled with the company's product that weren't there at the beginning of Month 1. And in the front office, there is \$65,000 in outstanding invoices, not cash. The problem is that not all of the cash has flowed yet. When the boxes and the little pieces of paper are converted to cash, it will flow.

The cash consumed by growth is even greater than depicted by *Exhibit II*. The materials supplier, the advertising agent, and the other vendors of general and administrative services have increased their credit lines extended to the company by \$24,050. Had they not done so, the bank balance at the end of Month 7 would have been overdrawn by \$25,294

and the cash flow for the seven months would have been a negative \$26,394 (ending balance minus beginning balance).

Suppose the investors purchase an additional \$25,000 in common stock of the company. That would cover the negative cash flow for a while. But if whatever is happening in Intercity continues as it has been, will the company consume that additional \$25,000? Of course it will, because growth requires cash. Adequate capitalization is momentary and fleeting. *Exhibit V* shows the normal relationships among sales, profits, and cash flow for a growing business.

**Big & Small Company Differences**

In big businesses the rates of change and annual growth are normally small; thus their financial statements describe a system in approximate equilibrium. The principle that cash flow equals net profit plus

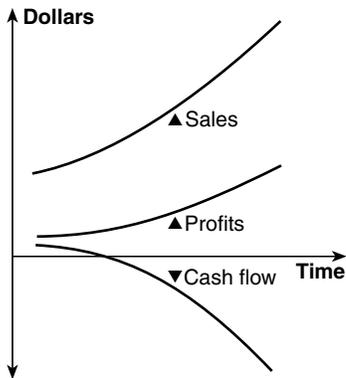
**Exhibit IV Comparison of Estimated Cash Flow**

Month	Net profit from income statement	Total depreciation from income statement	Estimated cash flow net profit and depreciation	Cash flow from receipts and disbursements statement
1	\$6,461	\$(2,700 + 170)	\$ 9,331	\$(9,000)
2	6,531	(2,700 + 170)	9,401	(4,100)
3	7,161	(2,700 + 170)	10,031	5,900
4	7,231	(2,700 + 170)	10,101	(737)
5	7,931	(2,700 + 170)	10,801	4,850
6	8,421	(2,700 + 170)	11,291	3,200
7	8,771	(2,700 + 170)	11,641	(2,457)
Cumulative			\$72,597	\$(2,344)

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**Exhibit V    The Relationships Among Sales, Profits, and Cash Flow for a Growing Business Under Normal Conditions**

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depreciation and amortization is correct for a system in perfect equilibrium. Small differences from equilibrium do not significantly distort the underlying principle.

Big business analysts usually apply the principle to long time periods. Short-term variances during the year are small compared to the overall result. A big company's short-term borrowing capacity can readily accommodate those variances.

Small businesses are seldom in equilibrium, or even near it. Even with uniform growth and earnings, Intercity Assembly Company's bank account is subject to very significant short-term fluctuations compared with the overall cash flow. Despite the excellent performance displayed in Exhibit I and the good quality accounts receivable, the banker will surely be pointing out that Intercity lacks an extensive track record. The owner-manager's signature will have to be affixed to any short-term loans against either the receivables or the equipment.

Small businesses are also frequently subject to seasonal variations in sales, which lead to successive periods of rapid growth and contraction. During seasonal periods of high sales, small businesses consume cash, as Intercity did. During the off-season, they often find that cash flows into the bank since it is not consumed by growth. Unfortunately, many owner-managers see this cash build-up as spendable. All too often a new car or a vacation trip consumes this war chest, which will be sorely needed for the next period of high sales.

How can owner-managers cope with their cash flow problems? A small business must respond to large, often severe, short-term fluctuations in every aspect of the business. Cash in the bank is the fore-

most concern of the owner-manager. One of the most understandable ways to monitor cash needs and cash availability, from that person's perspective, is to show the future operations of the business in a simultaneous portrayal of the income statement and the statement of receipts and disbursements over successive short time intervals for the coming 6 to 12 months. (See Exhibits I and II.) A small business should update this forecast at the end of each time period, at least monthly.

The differences between cash and profit over short periods result from the many different cycles of payments. Salaries and wages may be paid weekly, biweekly, monthly, and semimonthly. Some tax deposits are made monthly, some quarterly. Only a few expenses fall into the uniform monthly cycle portrayed by the income statement.

The accrual presentation of the income statement was devised to resolve the problems created by the various cycles in the flow of cash. By ignoring when cash actually flows, the accrual method provides a more orderly picture of profit. Profit, by the accrual calculation, is a mathematical concept. You can't get a bagful of profit. Cash, as owner-managers perceive it, is tangible. For the small business manager, who must worry about this week's payroll, profit is not cash, and profit plus depreciation is not the available cash flow.

## The Elusive Break-Even Point

A classical method for determining the sales needed to support a new business, a new product, a new sales outlet, or a new plant is break-even analysis. Conceptually it is easy to grasp. Sales rise in proportion to the number of units shipped or services performed. Expenses are of two kinds, fixed and variable.

The fixed expenses—like rent and the boss's salary—are, of course, those incurred whether there are sales or not. And variable expenses are the labor, materials, and other outlays connected with the product or service. They are very nearly in direct proportion to the units shipped. The sum of the fixed and variable expenses is the total expenses.

This information may be plotted on coordinates, with dollars on the vertical axis and the units shipped per accounting period (usually per month) on the horizontal axis. The result is two straight lines rising to the right with different slopes. Their intersection defines the necessary number of units shipped per accounting period to make the revenue equal the expenses.

We observed this break-even analysis in action. The first sales in a new business came in March,

nine months after the business was founded. Then sales grew from \$3,000 in April to \$20,000 in September. Management calculated that by maintaining spartan facilities and a pittance in salaries it could establish \$3,000 per month as the break-even level of sales. But the financial statement for April, received in mid-May, indicated a substantial loss.

The manager and a member of the founding team decided to determine the real break-even point. With quick strokes and a little calculation, they found that the fixed and variable expenses required \$9,000 in sales. Then, in June, the company generated \$9,000 worth of sales, with much work and even more luck.

During the first half of July, management waited confidently for the financial report describing June. When it arrived, the manager was astonished to discover that it showed a substantial loss. Apparently the break-even point had moved. By quickly changing the graph to include the previously nonexistent new expenses on the income statement, the manager determined that the break-even point was now \$15,000.

Because the company had the good fortune to be selling a superior product against a weak competitor in a growing market, its sales for August exceeded \$15,000. This time, management anxiously awaited the mid-September financial report.

Once again, the manager was disappointed: the company was still operating at a loss. The break-even point had grown to \$18,000. Not until mid-October did the company learn that it had achieved break-even in September with sales of \$20,000.

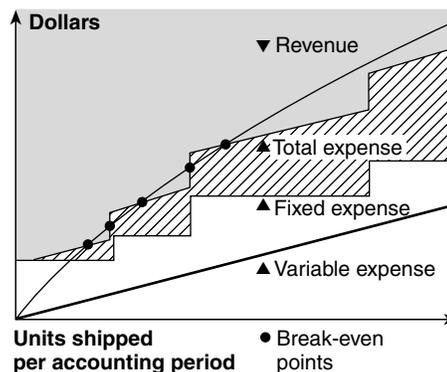
## Behind the Problem

A subsequent examination of the detailed monthly income statement revealed the difficulty. The so-called fixed expenses were anything but fixed; they grew in a stair-step pattern. The variable expenses grew with the sales, but not in the smooth proportionality of the break-even graph. And sales did not follow a straight line, growing from zero in direct proportion to the units shipped.

The company achieved rapid sales growth in large part by offering discounts, making contract deals, providing bonuses, and supplying potential customers with impressive quantities of free samples. The actual plot of fixed and total expenses, along with sales, is characterized on the graph in *Exhibit VI*. It has multiple break-even points.

During the initial growth of this company, the production facility operated at capacity and the direct expense per unit held fairly steady. The front office expense held constant except for the several addi-

## Exhibit VI Break-Even Graph for a New or Small Business



tional people needed to process orders and issue invoices. The biggest growth occurred in expenses for warehousing and materials handling. For instance, quantities of corrugated boxes preprinted with the company logo occupied a surprisingly large space.

How does break-even analysis differ in big businesses? For one thing, in a big business, the additional break-even operation is usually small compared with the size of the whole business. When a big business starts a new project, it can draw on the services of planners, designers, and analysts with access to historical data on indirect expenses. When launched, the new project may be sized for ongoing operations well beyond the break-even.

Because owner-managers of small businesses have few, if any, staff people to prepare plans and analyses, decisions to launch new projects are typically based more on hunch, necessity, or desire than on cold and extensive analysis. The company probably has little experience on which to draw for predictions of indirect expenses. Even if it does have experience, data are likely to be scarce.

## Getting More from Break-Even Analysis

Small businesses seldom have large and stable operations from which to launch a new endeavor. Typically, financial troubles at the new operation threaten the existence of the basic business.

A break-even graph plotted on broad assumptions about fixed and variable expenses can be misleading. The accuracy of the break-even analysis depends on detailed and conservative planning.

Planning for growth by small businesses is often superficial. That the small business can afford little more is cold comfort when a new endeavor begins to go awry.

**Exhibit VII Forecast Income Statement**  
in thousands

		Month 1	2	3	4
<b>Units shipped</b>		20	22	24	26
<b>Revenues</b>	Sales (cash)	\$ 40	\$ 44	\$ 48	\$ 52
	Sales (credit)	—	—	—	—
	<b>Total revenues</b>	<b>40</b>	<b>44</b>	<b>48</b>	<b>52</b>
<b>Expenses</b>	Direct materials	16.0	17.6	19.2	20.8
	Direct labor	8.0	8.8	9.6	10.4
	Overhead, general and administrative, and marketing				
	Paid current	7.0	7.7	8.4	9.1
	Paid net 30 days	5.0	5.5	6.0	6.5
	<b>Total expenses</b>	<b>36.0</b>	<b>39.6</b>	<b>43.2</b>	<b>46.8</b>
<b>Profit before income tax</b>		4.0	4.4	4.8	5.2
	<b>Cumulative profit</b>	<b>\$ 4.0</b>	<b>\$ 8.4</b>	<b>\$13.2</b>	<b>\$18.4</b>

Owner-managers embarking on a new project or product can benefit from visualizing the future operations in great detail. They can portray operations in the income statement format of Exhibits I and II, changing the numbers to reflect a variety of contingencies and deciding how to handle these various situations in advance.

## The ROI Strategy Trap

A popular business premise is that the primary objective of management is to maximize the return on invested capital to the benefit of the owners. This seems a reasonable premise for a small business, since the owner-manager is one of the owner-beneficiaries.

Return on investment can be defined in a variety of ways. Most often, of course, ROI is expressed as a fraction with earnings as the numerator. The denominator varies according to what is considered to be the investment. While additional investment is hard to obtain and existing investment is hard to change, the numerator is subject to the manager's control. To increase ROI, you increase profits.

*Exhibit VII* portrays four months in the life of a thriving small business. Sales, at \$2.00 per unit, are growing, and pre-tax profits are a healthy 10% of sales. Labor expense is 40 cents per unit. The owner-manager has held the cost of materials to 80 cents per unit by taking advantage of a quantity price break for pur-

chasing units in lots of 15,000 and for payment in the month the materials are received. It is the manager's policy to have enough on hand at the end of the month to take care of next month's anticipated sales.

*Exhibit VIII* shows what can be expected to happen at the bank. Balances are growing nicely, although an income tax deposit of more than \$5,000—to accommodate the 30% tax rate—will reduce them somewhat. The materials purchasing schedule in *Exhibit IX* is needed to determine the disbursements for materials.

The owner-manager concluded that the numerator of the ROI ratio could be improved by raising sales. It might be hard to increase cash sales, but if the product were offered on credit, sales could rise dramatically. The manager decided to change the forecast to reflect a best guess of what would happen if terms of net 30 days were offered. That forecast saw monthly sales increasing by an additional 4,000 units each month.

The revised forecast income statement is shown in *Exhibit X*. Profit improved dramatically. The manager then changed Exhibits VIII and IX to reflect this new performance. At the bank, things did not look very comfortable. The company forecasted negative cash flow and overdrafts in three of the four months, as shown in *Exhibit XI*. A quarterly income tax deposit of more than \$7,000 at the 30% tax rate will make the overdrafts even worse.

The materials supplier offered what appeared to be a way out of this dilemma. The next quantity

**Exhibit VIII Forecast Receipts and Disbursements**  
in thousands

		Month 1	2	3	4	
<b>Receipts</b>	Sales (cash)	\$ 40	\$ 44	\$ 48	\$ 52	
	Sales (credit)	—	—	—	—	
<b>Total receipts</b>		<b>40</b>	<b>44</b>	<b>48</b>	<b>52</b>	
<b>Disbursements</b>	Direct materials	12.0	24.0	24.0	12.0	
	Direct labor	8.0	8.8	9.6	10.4	
	Overhead, general and administrative, and marketing	Paid current	7.0	7.7	8.4	9.1
		Paid net 30 days	4.5*	5.0	5.5	6.0
<b>Total disbursed</b>		<b>31.5</b>	<b>45.5</b>	<b>47.5</b>	<b>37.5</b>	
<b>Cash flow</b>		8.5	(1.5)	0.5	14.5	
<b>Beginning cash balance</b>		5.0	13.5	12.0	12.5	
<b>Ending cash balance</b>		\$13.5	\$12.0	\$12.5	\$27.0	

\*From transactions in a prior period.

**Exhibit IX Materials Purchasing Schedule**  
in thousands

	Month 1	2	3	4
Beginning inventory	30	25	33	39
Units shipped	20	22	24	26
Units received	15	30	30	15
Ending inventory	25	33	39	28
Disbursements for units received	\$12	\$24	\$24	\$12

**Exhibit X Forecast Income Statement with Addition of Credit Sales**  
in thousands

		Month 1	2	3	4	
<b>Units shipped</b>		20	26	32	38	
<b>Revenues</b>	Sales (cash)	\$ 40	\$ 44	\$ 48	\$ 52	
	Sales (credit)	—	8	16	24	
<b>Total revenues</b>		<b>40</b>	<b>52</b>	<b>64</b>	<b>76</b>	
<b>Expenses</b>	Direct materials	16.0	20.8	25.6	30.4	
	Direct labor	8.0	10.4	12.8	15.2	
	Overhead, general and administrative, and marketing	Paid current	7.0	9.4	11.8	14.2
		Paid net 30 days	5.0	6.0	7.0	8.5
<b>Total expenses</b>		<b>36.0</b>	<b>46.6</b>	<b>57.2</b>	<b>68.3</b>	
<b>Profit before income tax</b>		<b>4.0</b>	<b>5.4</b>	<b>6.8</b>	<b>7.7</b>	
<b>Cumulative profit</b>		<b>\$ 4.0</b>	<b>\$ 9.4</b>	<b>\$16.2</b>	<b>\$23.9</b>	

**Exhibit XI Forecast Receipts and Disbursements with Addition of Credit Sales**  
in thousands

		Month 1	2	3	4	
<b>Receipts</b>	Sales (cash)	\$ 40	\$ 44	\$ 48	\$ 52	
	Sales (credit)	—	—	8	16	
<b>Total receipts</b>		<b>40</b>	<b>44</b>	<b>56</b>	<b>68</b>	
<b>Disbursements</b>	Direct materials	24.0	24.0	24.0	36.0	
	Direct labor	8.0	10.4	12.8	15.2	
	Overhead, general and administrative, and marketing	Paid current	7.0	9.4	11.8	14.2
		Paid net 30 days	4.5*	5.0	6.0	7.0
<b>Total disbursed</b>		<b>43.5</b>	<b>48.8</b>	<b>54.6</b>	<b>72.4</b>	
<b>Cash flow</b>		(3.5)	(4.8)	1.4	(4.4)	
<b>Beginning cash balance</b>		5.0	1.5	(3.3)	(1.9)	
<b>Ending cash balance</b>		\$ 1.5	\$ (3.3)	\$ (1.9)	\$ (6.3)	

\*From transactions in a prior period.

price break for purchase in multiples of 40,000 was an additional 10%. Since materials were the largest item of expense, this reduction would improve the operating results, instead of paying 80 cents per unit, the company would pay only 72 cents.

The owner-manager revised the forecast one more time. The results of the three forecasts are compared in *Exhibit XII*. Each move to improve ROI resulted in trading liquidity for profit. Thus, additional financing through debt or equity or a combination of the two was required.

### Liquidity, Liquidity...

A small business can survive a surprisingly long time without a profit. It fails on the day it can't meet a critical payment. In a small company, the cash flow is more important than the magnitude of the profit or the ROI. Liquidity is a matter of life or death for the small business.

Owner-managers who are aware of the profit and cash flow relationships expressed in Exhibits VII through XII will recognize that the priority is to maintain liquidity. There must, of course, be some profit, but the efficiency with which profit is produced—the ROI—is secondary. To grow you must survive.

When it comes to ready access to external financing, big businesses have it and small businesses don't. Borrowing negotiations are very personal. The lender looks to the owner-manager for repayment and recalls past experience with small borrowers. Many commercial loan officers have observed that a client had record sales during the month that the company folded.

Businesses have a hierarchy of needs that are related to their sizes and their resources. At the lowest level, management is occupied with making a sale and producing the required product or service. As these events occur, the next needs arise—to generate profit and cash flow. Once these are accomplished

**Exhibit XII Forecast Operating Results**  
in thousands

	Ending cash balance				Total profit
	Month 1	2	3	4	
Continue present operations	\$13.5	\$ 12.0	\$ 12.5	\$ 27.0	\$18.4
With addition of credit sales	1.5	(3.3)	(1.9)	(6.3)	23.9
With credit sales and quantity purchasing	\$(3.3)	\$(12.9)	\$(16.3)	\$(13.5)	\$33.2

with some regularity, management can devote time and energy to the next need, which is to improve the efficiency with which profit is generated. In most small businesses the manager is confined to the middle tier in this hierarchy.

## The Debt-Equity Impasse

Lenders usually have a list of criteria for identifying good prospective clients. One of the criteria high on their list is a low debt-equity ratio. Typically, lenders want the total debt-equity ratio to be no more than 2 after the proceeds of the loan are incorporated into the balance sheet. Most successful big businesses have debt-equity ratios of 2 or less.

When the stockholder's equity, or net worth, is negative, the lender cannot form a debt-equity ratio. When the net worth is only a little more than zero, the ratio becomes incredibly large. One small business we know of turned the corner with sales of about \$1 million per year, excellent profits, and net worth of about \$5,000; it needed \$300,000 to support the growth in hand. The banker calculated the debt-equity ratio at 60, not counting the short-term debt the company already had. Debt financing was out of the question.

This phenomenon occurs at some point in the lives of almost all small businesses. It is quite often a predictable phase on the road to success. Blind application of the debt-equity ratio criteria to a business in that phase can, and often does, threaten its survival.

The small business that survives start-up losses may have excellent capacity to service an additional debt burden. But the business must generate sales and earnings for a considerable period of time before its net equity on the balance sheet approaches a reasonable sum acceptable to most bankers and investors. It has to earn back the start-up losses.

Acquiring additional equity when the company is in this phase of growth is extremely difficult. The original investors have watched their holding dwindle from the losses of the start-up period. Now they want their capital returned before allowing other investors to reap the benefits. Also, original investors have often paid steep prices for their ownership. The offering price to new investors will likely be lower since it must be based on the current financial statements.

It is during this phase that the original stockholders often develop investor fatigue. They have heard the glowing promises for too long. They want their money back with a reasonable return. The original investors may even act in ways that are detrimental to their stock; they have no patience left just at the time when patience is the only thing they need to see their investment objectives fulfilled.

## Improving the Debt-Equity Ratio

Owner-managers can better their debt-equity ratio. Earnings help most, but achieving earnings growth takes time. Since improved earnings from

## Further Small Business Reading

Several other articles in this issue of HBR have potential relevance to owners and managers of small businesses. Most of these articles deal with problems or opportunities generated by external sources and situations.

In the Ideas for Action feature, Arthur J. Lumsden's article, "New Interest of U.S. Industry in the Caribbean," advises readers on the new attractiveness of the Caribbean as an area for business expansion. Also, Lawrence Mittman and Rees W. Morrison in their article, "Bankruptcies: Assets Often Can be Picked up at Bargain Prices," point out the many acquisition opportunities presented by companies that have filed for bankruptcy.

How to best handle a union-organizing drive is the subject of William Fulmer's article, "Step by Step Through a Union Campaign." Former EPA administra-

tor William Drayton discusses new approaches being developed for companies to ease the burden of seemingly inflexible environmental regulations in his article, "Getting Smarter about Regulation." And in "New Ways to Reach Your Customers," Benson Shapiro and John Wyman consider the implications of newly evolving communication methods on companies' sales approaches.

Two articles advise readers to look within their companies for answers on how to compete more effectively with the Japanese. The articles by Robert Hayes, "Why Japanese Factories Work," and by Steven Wheelwright, "Japan—Where Operations Really Are Strategic," contend that Japanese managers have achieved their remarkable success in making high-quality products by paying extremely close attention to production basics.

sales growth consumes cash, the wisest course may be to increase the earnings by increasing the profit margin. This can be accomplished by constraining expenses, improving productivity, or increasing prices.

A company can constrain its growth rate by increasing prices or tightening sales terms. Increasing prices is fine, if the market will stand for it. Improving the terms of sale—such as by moving from net 30 to net 10 days—improves cash flow.

The denominator of the ratio can sometimes be improved by creatively rearranging liabilities. From a relative of the owner-manager, one company borrowed \$25,000 on a one-year note with an annual rollover provision. The company's executive changed the loan to a personal obligation and wrote a new note with the company. Then, with the consent of the directors, he accepted common stock in payment of the company's obligation. This move reduced the company's debt by \$25,000 and increased the equity by an equal amount, and had a dramatic effect on the debt-equity ratio.

## In Conclusion

Owner-management of a small business is a distinct discipline characterized by severe constraints on financial resources, a lack of trained personnel, and a short-range management perspective imposed by a volatile competitive environment. Liquidity must be a prime objective. The analytical models applicable to big business are of limited use in this arena. Typically, they assume steady-state conditions subject to minor changes.

Most small companies seem to do best with conservative growth rates. The small business cannot afford much professional service. The owner-manager needs to have the broad thinking of a generalist and be able to tolerate disorder, endure switching from role to role, and stick to fundamentals. In big business management, the direction appears to be toward ever-increasing sophistication. For owner-managers, the direction must be just the opposite, back to basics.