Illinois Small Business Development Centers
"Experts, networks, and tools to transform your business"

Illinois Small Business Development Centers (SBDC) provide information, confidential business guidance, training and other resources to early stage and existing small businesses.

Illinois International Trade Centers (ITC) provide information, counseling and training to existing, new to-export companies interested in pursuing international trade opportunities.

Illinois Procurement Technical Assistance Centers (PTAC) provide one-on-one counseling, technical information, marketing assistance and training to existing businesses that are interested in selling their products and/or services to local, state, or federal government agencies.

Technology, Innovation and Entrepreneurship Specialty (TIES) ten SBDC locations help Illinois businesses, entrepreneurs and citizens to succeed in a changing economy by: developing the skills of their workers; promoting safe and healthy workplaces; assisting in the commercialization of new technologies; and providing access to modernizing technologies and practices.

Business Center Locations

☐ SBDC
☐ SBDC/ITC
☐ SBDC/ITC/PTAC
☐ SBDC/PTAC
☐ PTAC
☐ Technology Services

*See the Northeast Region map on the last page for the Business Center Services in that area.

www.ilsbdc.biz
800-252-2923
If you own a business, you know how much hard work and dedication it requires. Sometimes your energy is so focused on day-to-day operations that you forget to step back, look at the big picture and gain valuable perspective.

How can you tell if your business is performing well? By using numbers from your company’s financial statements, you can calculate ratios and formulas that grade the performance of your business. This report card reveals the strengths and weaknesses of your company – and provides an opportunity for solid improvement.

By comparing your grades to industry averages, acceptable lending ranges and prior years’ performances, you will begin to develop “big picture vision.” Remember, these are averages of the health of your business, so expect your current grades to fall above or below them. Factors that can create differences include the company’s age, the number of locations, the expertise of managers and the efficiency of operations.

This book will walk you through the two financial statements that are used to calculate ratios and formulas – the Balance Sheet and the Income Statement. These two statements will help provide a clear understanding of your business health, but remember that they need to compare the same time periods (this year vs. last year, this quarter vs. last quarter).

The Balance Sheet is one day in the life of a business, frozen in time. This statement shows what is owned (assets), what is owed (liabilities) and the net worth or equity of the business (capital).

The Income Statement is a moving picture that spans whatever length of time you determine. It displays both income and expenses, revealing the net profit or loss over a period of time. It also shows the interest you have paid on loans.

There are a handful of other names for the Income Statement, including Income and Expense Statement, Operating Statement, Earnings Statement and Profit and Loss Statement (P&L). No matter what it’s called, this statement will help you focus more clearly on your business’ performance.

The information in this book is designed to help you “score” some insight into the performance of your business.
In a business, assets are like fuel. But how effectively are you managing them? Formulas 1 & 2 have the answer.

### Accounts Receivable Turnover

**Formula**

\[
\frac{\text{Accounts Receivable} \times 365 \text{ days}}{\text{Net Sales}}
\]

\[
\frac{27,375,000 \times 365}{900,000} = 30.4
\]

It takes 30.4 days to collect bills.

**What It Shows** ▶ How many days it takes to collect money owed to you. A lower answer is better.

**The Number Source** ▶ Balance Sheet and Income Statement

**The Goal** ▶ To reduce turnover time

**The Plan** ▶ Right now, the Accounts Receivables turnover is $75,000/30 days, or $2,250 per day.

If Accounts Receivable are collected just four days faster, (in 26 days instead of 30), the result is $9,000 in extra cash (4 days x $2,250).

### Inventory Turnover

**Formula**

\[
\frac{\text{Inventory} \times 365 \text{ days}}{\text{Cost of Goods Sold}}
\]

\[
\frac{31,025,000 \times 365}{540,000} = 57.4
\]

57 days to turnover or sell the inventory.

**What It Shows** ▶ How many days it takes to turn over (or sell) your inventory. A lower answer is better.

**The Number Source** ▶ Balance Sheet and Income Statement

**The Goal** ▶ To reduce excess inventory

**The Plan** ▶ Inventory now turns every 57 days, equaling $1,491 per day. (Ending inventory of $85K divided by 57 days)

If inventory is re-stocked every 30 days instead of 57, you cut 27 days from the formula. At $1,491 per day, the result is a $40,257 savings in inventory expenses.

### Balance Sheet Year End/As of Dec. 31

<table>
<thead>
<tr>
<th>Assets</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Assets:</td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td>10,000</td>
</tr>
<tr>
<td>Accounts Receivable</td>
<td>75,000</td>
</tr>
<tr>
<td>Inventory (ending)</td>
<td>85,000</td>
</tr>
<tr>
<td>Total Current Assets</td>
<td>170,000</td>
</tr>
<tr>
<td>Non-Current Assets</td>
<td></td>
</tr>
<tr>
<td>Fixed Assets</td>
<td>140,000</td>
</tr>
<tr>
<td>Less Accumulated Depreciation</td>
<td>(25,000)</td>
</tr>
<tr>
<td>Fixed Assets (net)</td>
<td>115,000</td>
</tr>
<tr>
<td>Advances to Owners</td>
<td>6,000</td>
</tr>
<tr>
<td>Total Non-Current Assets</td>
<td>121,000</td>
</tr>
<tr>
<td>Total Assets (170+121)</td>
<td>291,000</td>
</tr>
</tbody>
</table>

| Liabilities                |       |
| Current Liabilities        |       |
| Current Portion of Long-Term Debt | 6,000 |
| Note Payable               | 100,000|
| Accrued Taxes              | 3,000 |
| Accounts Payable (A/P)     | 41,000 |
| Total Current Liabilities  | 150,000|
| Long-Term Liabilities/Loan Payable | 54,000 |
| Total Liabilities (150+54) | 204,000|

| Capital or net worth       |       |
| Owners Investment          | 20,000 |
| Retained Earnings          | 67,000 |
| Total Capital              | 87,000 |

| Total Liabilities & Capital (204+87) | 291,000 |

### Income Statement January 1- December 31

<table>
<thead>
<tr>
<th>Sales</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Sales</td>
<td>900,000</td>
</tr>
</tbody>
</table>

| Cost of Goods Sold:        |       |
| Beginning Inventory        | 75,000 |
| Purchases                  | 350,000|
| Labor                      | 200,000|

| Total                      | 625,000|
| Less: Ending Inventory     | (85,000)|
| Cost of Goods Sold (625 less 85) | 540,000 |
| Gross Profit (900 less 540) | 360,000 |

| Expenses                   |       |
| Operating Expenses:        |       |
| - Selling Expenses         | 90,000 |
| - General & Administrative | 170,000|

| Total Expenses             | 260,000|
| Operating Income (360 less 260) | 100,000 |
| Interest Expense           | 20,000 |

| Profit                     |       |
| Net Profit before taxes    | 80,000 |
| Less: All Income Taxes     | 27,000 |
| Net Profit (80 less 27)    | 53,000 |
Liquidity indicators show a company’s ability to turn an asset into cash. How “cash rich” is your company? Formulas 3, 4 and 5 have the answer.

### What It Shows
Whether a company has enough current assets to operate the business on a daily basis, and to pay its current bills. **Higher numbers are better.**

### The Number Source
**Balance Sheet**

### The Goal
To keep enough money on hand for daily operations. The answer must be positive. If the answer is negative, more money is needed to meet expenses.

### The Plan
By following the tips below, working capital is preserved.

#### Working Capital

<table>
<thead>
<tr>
<th>FORMULA</th>
</tr>
</thead>
<tbody>
<tr>
<td>E</td>
</tr>
<tr>
<td>F</td>
</tr>
</tbody>
</table>

\[
$170,000 - $150,000 = $20,000
\]

What It Shows: If inventory should become obsolete, this ratio eliminates it from current assets and cash. The ratio is called “quick” because it includes items that can be turned into cash quickly.

#### Quick or Acid Test Ratio

<table>
<thead>
<tr>
<th>FORMULA</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
</tr>
<tr>
<td>F</td>
</tr>
</tbody>
</table>

\[
\frac{$85,000}{150,000} = 0.56
\]

What It Shows: This ratio reveals a company’s ability to pay short-term debt. **A higher number is better.**

### Tips for Improving Your Score for Formulas 3, 4 and 5
- Collect Accounts Receivable quicker with a better credit policy (see Formula 1 on page 4)
- Decrease inventory turnover (see Formula 2 on page 4)
- Pay Accounts Payable faster and take advantage of trade discounts (see Formula 3 on page 6)
- Increase profit margins by raising prices and selling more products/services (see Formula 4 on page 7)
Inco Me Statement
January 1 - December 31

Sales
Net Sales ....................................... 900,000

Cost of Goods Sold:
Beginning Inventory .............................. 75,000
Purchases ........................................... 350,000
Labor ................................................. 200,000
Total .................................................. 625,000
Less: Ending Inventory ............................ (85,000)
Cost of Goods Sold (625 less 85) ................. 540,000
Gross Profit (900 less 540) ....................... 360,000

Expenses
Operating Expenses:
- Selling Expenses .............................. 90,000
- General & Administrative ..................... 170,000
Total Expenses ..................................... 260,000
Operating Income (360 less 260) ............... 100,000
Interest Expense .................................. 20,000

Profit
Net Profit before taxes (100 less 20) ............. 80,000
Less: All Income Taxes ............................ 27,000
Net Profit (80 less 27) .............................. 53,000

Balance Sheet
Year End/As of Dec. 31

Assets
Current Assets:
Cash .............................................. 10,000
Accounts Receivable ......................... 75,000
Inventory (ending) .............................. 85,000
Total Current Assets ............................. 170,000
Non-Current Assets
Fixed Assets ....................................... 140,000
Less Accumulated Depreciation ............. (25,000)
Fixed Assets (net) ............................... 115,000
Advances to Owners ............................. 6,000
Total Non-Current Assets ....................... 121,000
Total Assets (170+121) ........................... 291,000

Liabilities
Current Liabilities
Current Portion of Long-Term Debt ............ 6,000
Note Payable ...................................... 100,000
Accounts Payable (A/P) ....................... 41,000
Total Current Liabilities ......................... 150,000
Long-Term Liabilities/Loan Payable ........... 54,000
Total Liabilities (150+54) ....................... 204,000

Capital or net worth
Owners Investment .............................. 20,000
Retained Earnings ............................... 67,000
Total Capital ...................................... 87,000

Total Liabilities & Capital (204+87) ............ 291,000

Accounts Payable Turnover

What It Shows ▶ How quickly a business pays its suppliers.
The Number Source ▶ Balance Sheet and Income Statement

The Goal ▶ To pay bills faster. Lower numbers (30 days or less) are better. This business now takes 43 days to pay its suppliers.
The Plan ▶ Take advantage of discounts that often apply if a bill is paid early. “2%, 10 days, net 30 days” means 2% may be deducted from an invoice if it’s paid in 10 days. For example, if the $350,000 in annual purchases was paid in 10 days, the savings would be $7,000 yearly.

What It Shows ▶ Whether a company has enough equity.
The Number Source ▶ Balance Sheet

The Goal ▶ An answer of 3 or lower is preferred. This company is leveraged 2.34 times, meaning for every $1 owners have invested, lenders and creditors have invested $2.34.
The Plan ▶ Decrease leverage by increasing the amount of money earned and kept in retained earnings.

Leverage or Debt-to-Worth Ratio

Formula

\[
\text{Leverage or Debt-to-Worth Ratio} = \frac{\text{Total Liabilities}}{\text{Total Capital}}
\]

\[
\begin{align*}
\text{Total Liabilities} & \quad 204,000 \\
\text{Total Capital} & \quad 87,000 \\
\hline
\end{align*}
\]

\[\frac{204,000}{87,000} = 2.34\]

Investing in a business is serious business. To find out how much money owners have invested versus lenders, plug your numbers into Formulas 6 and 7.

Debt Management

Formula

\[
\text{Accounts Payable Turnover} = \frac{\text{Accounts Payable at $41,000 x 365 days}}{\text{Purchases}}
\]

\[
\begin{align*}
\text{Accounts Payable} & \quad 41,000 \\
\text{365 days} & \quad 14,965,000 \\
\text{Purchases} & \quad 350,000 \\
\hline
\end{align*}
\]

\[\frac{14,965,000}{350,000} = 42.75\]

Investing in a business is serious business. To find out how much money owners have invested versus lenders, plug your numbers into Formulas 6 and 7.

DEBT MANAGEMENT

6 Leverage or Debt-to-Worth Ratio

What It Shows ▶ Whether a company has enough equity.
The Number Source ▶ Balance Sheet

The Goal ▶ An answer of 3 or lower is preferred. This company is leveraged 2.34 times, meaning for every $1 owners have invested, lenders and creditors have invested $2.34.
The Plan ▶ Decrease leverage by increasing the amount of money earned and kept in retained earnings.

7 Accounts Payable Turnover

What It Shows ▶ How quickly a business pays its suppliers.
The Number Source ▶ Balance Sheet and Income Statement

The Goal ▶ To pay bills faster. Lower numbers (30 days or less) are better. This business now takes 43 days to pay its suppliers.
The Plan ▶ Take advantage of discounts that often apply if a bill is paid early. “2%, 10 days, net 30 days” means 2% may be deducted from an invoice if it’s paid in 10 days. For example, if the $350,000 in annual purchases was paid in 10 days, the savings would be $7,000 yearly.

BALANCE SHEET

Year End/As of Dec. 31

Assets
Current Assets:
Cash .............................................. 10,000
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Retained Earnings ............................... 67,000
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Total Liabilities & Capital (204+87) ............ 291,000

INCOME STATEMENT

January 1- December 31

Sales
Net Sales ........................................... 900,000

Net Sales
Cost of Goods Sold:
Beginning Inventory .............................. 75,000
Purchases ........................................... 350,000
Labor ................................................. 200,000
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Cost of Goods Sold (625 less 85) ................. 540,000
Gross Profit (900 less 540) ....................... 360,000

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Total Expenses ..................................... 260,000
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Interest Expense .................................. 20,000

Profit
Net Profit before taxes (100 less 20) ............. 80,000
Less: All Income Taxes ............................ 27,000
Net Profit (80 less 27) .............................. 53,000
No matter what kind of product or service you provide, turning a profit is the goal. So how are you doing? Formulas 8 and 9 give you the bottom line.

8 Cash Flow to Current Maturities or Debt Service Ratio

\[
\text{Net profit of $53,000 plus $13,000 in depreciation} = \frac{\$66,000}{\$6,000} = 11
\]

What It Shows ► Your ability to pay term debts after owner withdrawals.

The Number Source ► Balance Sheet and Income Statement

The Goal ► An answer of 2 or more is preferred. New businesses use one year’s worth of loan payments instead of the Accounts Receivable figure.

The Plan ► To increase debt service, do three things:
1) refinance at a lower rate, 2) ask if you can pay interest only on loans for a period of time, and 3) consolidate debt in order to pay it back over a longer period of time.

Due over the next year or $150 per month

9 Profit Margin on Sales

\[
\frac{\text{Net Profit}}{\text{Sales}} = \frac{\$53,000}{\$900,000} = 0.0588
\]

What It Shows ► The percentage of net profit for every dollar of sales.

The Number Source ► Income Statement

The Goal ► The higher the number, the better.

The Plan ► To increase your profit margin, follow three courses of action: raise prices, lower the cost of goods and reduce expenses.

INCOME STATEMENT January 1 - December 31

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Net Sales .......................... 900,000
Cost of Goods Sold:
Beginning Inventory ................. 75,000
Purchases .......................... 350,000
Labor .............................. 200,000
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Net Profit before taxes (100 less 20) .. 80,000
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Net Profit (80 less 27) ............... 53,000

Loan to be paid back over time. $60K loan with $54K due over time and $6K due in one year - Current Portion of Long-Term debt

BALANCE SHEET Year End / As of Dec. 31

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Total Liabilities & Capital (204+87) ..... 291,000
Compared To What?

How Industry Standards Can Lend Valuable Perspective

Knowing what the average grades are for your industry really gives you a barometer for assessing the performance of your own company. Use your business’ North American Industry Classification System (NAICS) code number to compare your grades to industry standards. Find your number at www.sba.gov/businessop/standards/naics.html

Industry Resources

Check your library or the Internet for these resources:

• Small Business Administration/SBA
• Risk Management Association Annual Statement Studies
• Dun & Bradstreet’s Key Business Ratios
• Prentice Hall’s Almanac of Business and Industry Ratios
• Your local, regional and national trade associations

WHAT MAKES A BUSINESS GO ROUND?

EVERY SUCCESSFUL BUSINESS PUTS A SPIN ON MAKING THE OPERATING CYCLE TURN FASTER. THE FASTER THE CYCLE, THE BETTER YOUR BUSINESS’ GRADES AND THE MORE MONEY YOU SAVE.

For example, the savings shown in these three ratios total $56,257:

F O R M U L A 1 shows how collecting Accounts Receivable faster can produce $9,000 in extra cash. See page 4.

F O R M U L A 2 shows how restocking inventory every 30 days saves $40,257 in expenses. See page 4.

F O R M U L A 7 shows how paying bills faster results in a $7,000 savings. See page 6.

REPORT CARD

<table>
<thead>
<tr>
<th>Assets</th>
<th>1 Accounts Receivable Turnover</th>
<th>4</th>
<th>30.4 days</th>
<th>Good</th>
<th>30 days</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2 Inventory Turnover</td>
<td>4</td>
<td>57.4 turns</td>
<td>Good</td>
<td>Match Industry</td>
</tr>
<tr>
<td>Liquidity</td>
<td>3 Working Capital</td>
<td>5</td>
<td>$20,000</td>
<td>Good</td>
<td>Positive Number</td>
</tr>
<tr>
<td></td>
<td>4 Quick or Acid Test</td>
<td>5</td>
<td>.56</td>
<td>Increase</td>
<td>1 or more</td>
</tr>
<tr>
<td></td>
<td>5 Current</td>
<td>5</td>
<td>1.13</td>
<td>Increase</td>
<td>2 or more</td>
</tr>
<tr>
<td>Debt</td>
<td>6 Leverage (or Debt-to-Worth)</td>
<td>6</td>
<td>2.34 times</td>
<td>Good</td>
<td>3 or less</td>
</tr>
<tr>
<td></td>
<td>7 Accounts Payable Turnover</td>
<td>6</td>
<td>42.75 days</td>
<td>Decrease</td>
<td>30 days</td>
</tr>
<tr>
<td>Profit</td>
<td>8 Cash Flow to Current Maturities (Debt Service)</td>
<td>7</td>
<td>$11</td>
<td>Good</td>
<td>2 or more</td>
</tr>
<tr>
<td></td>
<td>9 Profit Margin on Sales</td>
<td>7</td>
<td>5.9%</td>
<td>Good</td>
<td>Match Industry</td>
</tr>
</tbody>
</table>
The Illinois SBDC is funded in part through a cooperative agreement with the U.S. Small Business Administration and the Illinois Department of Commerce and Economic Opportunity.

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