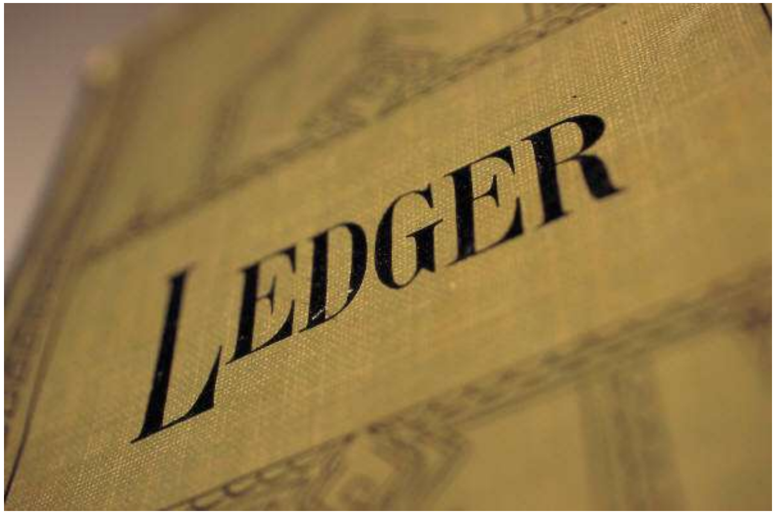
Pennsylvania Small Business Development Centers

Understanding Financial Statements



Helping Businesses Start, Grow, and Prosper

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Pennsylvania Small Business Development Centers

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Helping Businesses Start, Grow, and Prosper

Our Mission Statement

- The Saint Vincent College Small Business Development Center (SBDC) is part of a statewide system of university-based economic development organizations whose mission is to provide high quality education, information, and consulting to entrepreneurs to help them start and grow their businesses in the competitive global economy.

The Importance of Understanding Financial Statements

- Common mistake among business owners: Failing to collect and analyze basic financial data.
- Many entrepreneurs run their companies without any kind of financial planning.
- Only 10% of business owners routinely analyze their companies' financial statements as part of the managerial planning process.
- Financial planning is essential to running a successful business and is not that difficult!

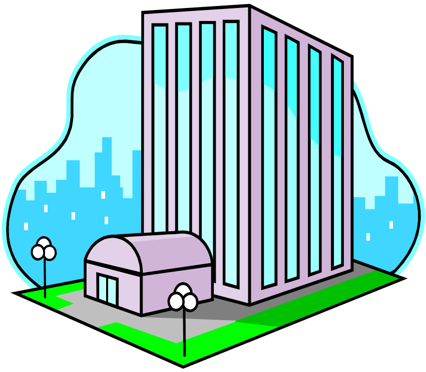
Full Disclosure……today is not about:

- Generally Accepted Accounting Principals
- Double Entry Accounting
- Tax Accounting

Business Transaction

- A business transaction is a financial event that changes the resources of your business.

Assets



- ASSETS = Property owned by a business.

Current Assets

- Cash is a current asset.

Current Assets

- In accounting, cash = currency, coins, checks, money orders, and funds on deposit in a bank.

Checking accounts

Savings accounts

Certificates of deposit

Current Assets

- Accounts receivable is a current asset.
- Accounts receivable – Claims for future collection from customers.
- The money your customer owes your business.

Current Assets

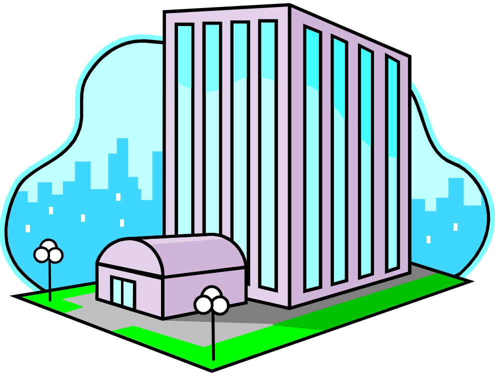
- Inventory is a current asset.
- Inventory – Supplies or goods used to produce your product or for resale.

- Prepaid expenses are current assets.
- Prepaid expenses – Expense items acquired and paid for in advance of their use, such as rent or insurance.

Long Term/Fixed Assets

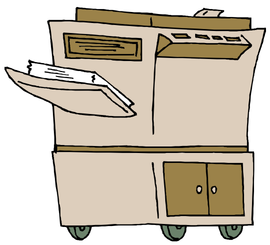
- Business property and land are fixed assets.

- Business Property and Land – If you own the building where your business is located, this is business property.



Long Term/Fixed Assets

- Equipment is a fixed asset.



- Equipment – The equipment your business owns.

Computers	Copiers
Machinery	Furniture

Liabilities

- Liabilities = Debts, loans, payments, or obligations owned by your business.

Current Liabilities

- Accounts payable is a current liability.

- Accounts payable – The short-term obligations that your business must pay in the future for goods and/or services.

  Examples: Utilities, Advertising
  Inventory purchases

Current Liabilities

- Employment taxes are current liabilities.
- Employment taxes are the payroll taxes withheld from your employees’ paychecks and the employer taxes accrued with each paycheck.

Current & Long-term Liabilities

- Loans or Notes Payable owed to banks or to investors are liability accounts.

- Current Liabilities:
  - The principal payments your business owes for the next 12 months.

- Long-term Liabilities:
  - The principal payments your business owes longer than one year.

Owner’s Equity

- Owners’ equity – The owner’s financial interest, sometimes stockholders’ equity, owners’ equity (proprietorship), or net worth.

- Owners’ equity is made up of the initial or later-stage investments in the business as well as any retained earnings that are reinvested in the business.

Examples: Capital Stock
Retained Earnings
(Net income)

Accounting Rule

- Assets equal liabilities plus owners equity.

- Assets = Liabilities + Owner's Equity

Accounting Rule Simplified

- Own – Owe = Net Worth
- Own = Owe + Net Worth
- Assets = Liabilities + Owner’s Equity
- Your Business = How it was financed (Capital Structure)

Balance Sheet

- **A balance sheet is a snapshot of a business' financial condition at a specific moment in time, usually at the close of an accounting period.**

- **A balance sheet helps you, a banker, or an investor quickly get a handle on the financial strength and capabilities of the business.**

    - Is the business in a position to expand?
    - Should the business bolster cash reserves?
    - Is the receivables cycle lengthening?
        - Can receivables be collected more aggressively?
        - Is some debt uncollectible?
    - Has the business been slowing down payables to forestall a cash shortage?

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Sample Balance Sheet

ABC COMPANY BALANCE SHEET December 31, 2001		
ASSETS		
Current Assets:		
Cash	$	13,188
Accounts Receivable	$	2,635
Inventories	$	21,500
Total Current Assets	**$**	**37,323**
Fixed Assets:		
Equipment	$	23,750
Furnishings & Fixtures	$	3,800
Total Fixed Assets	**$**	**27,550**
Total Assets	**$**	**64,873**
LIABILITIES & STOCKHOLDERS' EQUITY		
Current Liabilities:		
Loan Principal Payable (1/2001-12/2001)	$	-
Line of Credit Principal	$	-
Total Current Liabilities	$	-
Long-term Liabilities:		
Loan Principal Payable (1/2002 - 12/2010)	$	47,346
Total Long-term Liabilities	$	47,346
Total Liabilities	**$**	**47,346**
Owner's Equity		
ABC Equity	$	17,074
ABC Owner's Draw	$	(7,200)
Net Income	$	7,653
Total Owner's Equity	**$**	**17,527**
Total Liabilities & Stockholders' Equity	**$**	**64,873**

Sales

- Sales/Revenue= The sales figures represent the amount of revenue generated by the business.
- Net sales are total sales less any product returns or sales discounts.

Cost of Goods Sold

- Cost of goods sold = The costs directly associated with making or acquiring your products.

Examples: Leather used to make shoes.
Merchandise purchased for resale

Gross Profit

- **Gross Profit** is derived by subtracting the Cost of Goods Sold from the Net Sales.
  - It does not include any operating expenses or income taxes.

Net Sales
\- Cost of Goods Sold
Gross Profit

Expenses

- Expenses = The daily expenses incurred in the operation of your business.

Examples:	Advertising	Payroll (wages & salaries)
	Interest	Payroll taxes
	Supplies	Meetings & Receptions
	Real Estate Taxes	Travel & Entertainment
	Rent	Utilities

Net Income Before Taxes

- **Net Income Before Taxes** is arrived at by subtracting Total Expenses from the Gross Profit.

Gross Profit
- Total Expenses

Net Income Before Taxes

Net Income

- Net Income is the amount of money the business has earned **after** paying income taxes to the federal government and, if applicable, state and local government taxes as well.

Income Statement

- An income statement, otherwise known as a profit and loss statement, records all revenues for a business during a given period, as well as the operating expenses for the business.

- The income statement enables you to determine the operating performance of your business.
  - Examine which areas are over budget or under budget.
  - Pinpoint unexpected expenditures.
  - Track increases in product returns or cost of goods sold.
  - Determine tax liability.

Sample Income Statement

	ABC COMPANY									
	PRO FORMA INCOME STATEMENT									
	JANUARY 1, 2001 THROUGH DECEMBER 31, 2001									
	Jan-01	**Feb-01**	**Mar-01**	**Apr-01**	**May-01**	**Jun-01**	**Jul-01**	**Aug-01**	**Sep-01**	**Oct-01**
Income										
Costume Rentals	$ 670	$ 2,010	$ 670	$ 2,010	$ 1,675	$ 1,675	$ 1,675	$ 2,010	$ 1,340	$ 8,375
Retail Sales	$ 330	$ 990	$ 330	$ 990	$ 825	$ 825	$ 825	$ 990	$ 660	$ 4,125
Income	$ 1,000	$ 3,000	$ 1,000	$ 3,000	$ 2,500	$ 2,500	$ 2,500	$ 3,000	$ 2,000	$ 12,500
Cost of Goods Sold	$ 145	$ 435	$ 145	$ 435	$ 363	$ 363	$ 363	$ 435	$ 290	$ 1,813
Gross Profit	$ 855	$ 2,565	$ 855	$ 2,565	$ 2,138	$ 2,138	$ 2,138	$ 2,565	$ 1,710	$ 10,688
Operating Expenses:										
Advertising	$ 750	$ 750	$ 750	$ 750	$ 750	$ 750	$ 750	$ 750	$ 750	$ 750
Auto Expense	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100
Depreciation	$ 250	$ 250	$ 250	$ 250	$ 250	$ 250	$ 250	$ 250	$ 250	$ 250
Insurance	$ 35	$ 35	$ 35	$ 35	$ 35	$ 35	$ 35	$ 35	$ 35	$ 35
Interest-Loan	$ 478	$ 476	$ 474	$ 472	$ 471	$ 469	$ 468	$ 466	$ 465	$ 463
Legal & Professional	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50
Licenses & Permits	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50
Office Supplies	$ 30	$ 30	$ 30	$ 30	$ 30	$ 30	$ 30	$ 30	$ 30	$ 30
Rent	$ 400	$ 400	$ 400	$ 400	$ 400	$ 400	$ 400	$ 400	$ 400	$ 400
Utilities	$ 150	$ 150	$ 150	$ 150	$ 150	$ 150	$ 150	$ 150	$ 150	$ 150
Total Operating Expenses	$ 2,293	$ 2,291	$ 2,289	$ 2,287	$ 2,286	$ 2,284	$ 2,283	$ 2,281	$ 2,280	$ 2,278
Net Income Before Taxes	$ (1,438)	$ 274	$ (1,434)	$ 278	$ (149)	$ (147)	$ (146)	$ 284	$ (570)	$ 8,410

Cash Flow Analysis

- **Statement of Cash Flows – Shows the change in the firm's working capital over a period of time by listing the *sources* and *uses* of funds.**

- Actual cash flow analysis shows how your business is doing
  - **Are you profitable?**
  - **Is your business seasonal?**
  - **Are there any accounts receivable problems?**
  - **Have you accumulated too much inventory?**

Accounts Receivable

- About 90% of industrial and wholesale sales are on credit, and 40% of retail sales are on account.
- Survey of small companies across a variety of industries found that 77% extend credit to their customers.
- Remember: “A sale is not a sale until you collect the money.”
- Accounts receivable goal: Collect your company’s cash as fast as you can.

Cash and Profits

- Cash ≠ profits.
- Profit is the difference between a company's total revenue and total expenses.
- Cash is the money that is free and readily available to use.
- Cash flow measure a company's liquidity and its ability to pay it bills.

Cash Management

- A business can be earning a profit and be forced to close because it runs out of cash!!!
- Young and growing companies are “cash sponges.”
- Know your company’s cash flow cycle.

Cash Flow

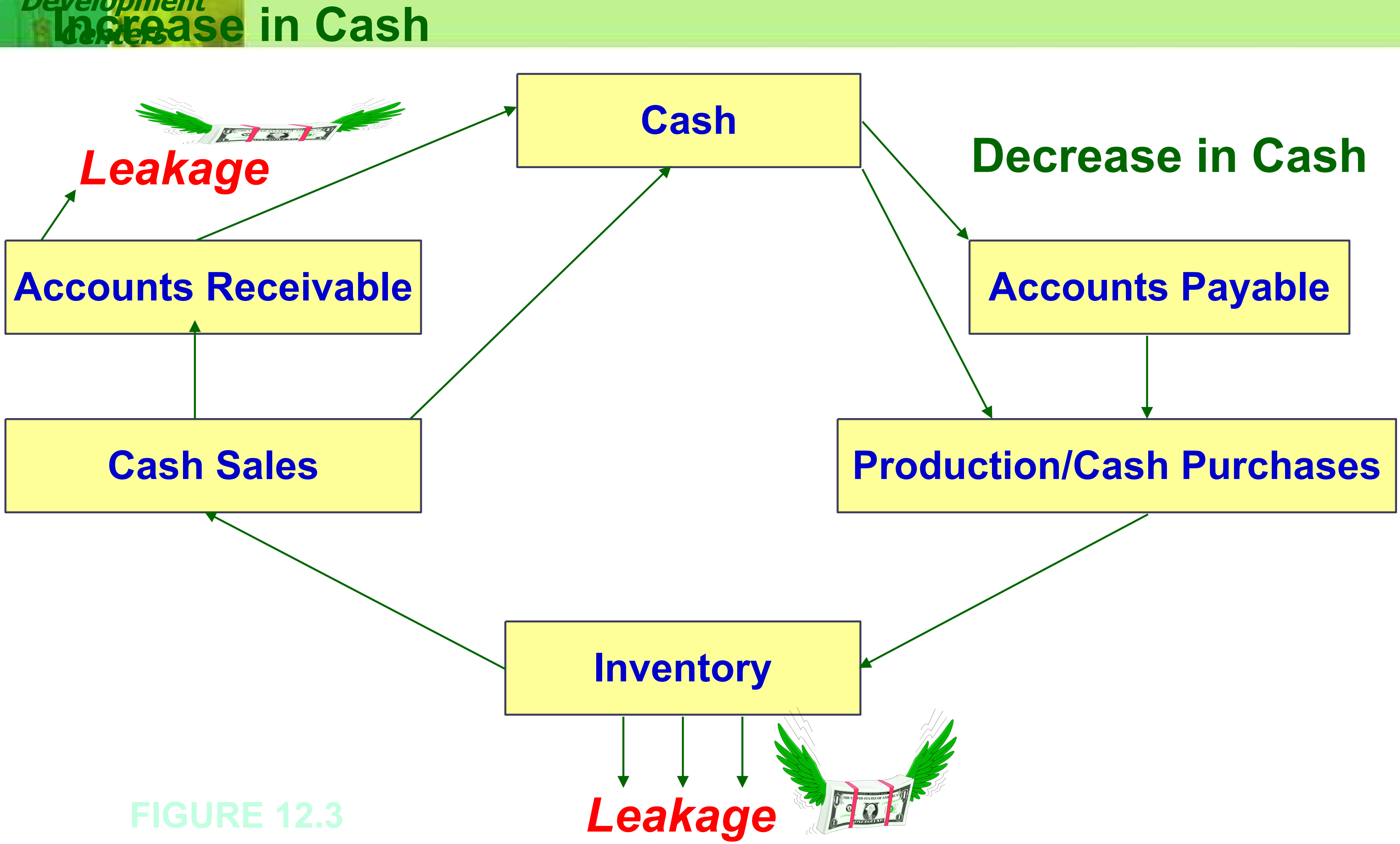

FIGURE 12.3

Valuing Accounts Receivable

Age of Accounts (days)	Amount	Collection Probability	Value
0-30	$40,000	.95%	$38,000
31-60	$25,000	88%	$22,000
61-90	$14,000	70%	$9,800
91-120	$10,000	40%	$4,000
121-150	$7,000	25%	$1,750
151+	$5,000	10%	$500
Total	$101,000		$76,050

Table 7.1

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Cash Flow vs. Profit & Loss

- Cash vs. Accrual
- Cash flow cycle of your business
- Changes in inventory, A/R, and A/P
- Capital Expenditures
- Principle payments
- Depreciation

Pennsylvania Small Business Development Centers

Sample Cash Flow Statement

ABC COMPANY
PRO FORMA CASH FLOW STATEMENT
JANUARY 1, 2001 THROUGH DECEMBER 31, 2001

	Jan-01	Feb-01	Mar-01	Apr-01	May-01	Jun-01	Jul-01	Aug-01
CASH FLOWS FROM OPERATING ACTIVITIES:								
Net Income (Loss)	$ (1,438)	$ 274	$ (1,434)	$ 278	$ (149)	$ (147)	$ (146)	$ 284
(Increase)/Decrease in Inventory	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Cash Flows From Operating Activities	$ (1,438)	$ 274	$ (1,434)	$ 278	$ (149)	$ (147)	$ (146)	$ 284
CASH FLOWS FROM INVESTING ACTIVITIES:								
Depreciation Expense	$ 250	$ 250	$ 250	$ 250	$ 250	$ 250	$ 250	$ 250
Loan Consolidation	$ (30,000)	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Inventory	$ (20,000)	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Purchase of Equipment	$ -	$ -	$ -	$ -	$ (10,000)	$ -	$ -	$ -
Loan Closing Costs	$ (2,500)	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Cash Flows From Investing Activities	$ (52,250)	$ 250	$ 250	$ 250	$ (9,750)	$ 250	$ 250	$ 250
CASH FLOWS FROM FINANCING ACTIVITIES:								
Owner's Capital Contributed	$ 20,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Loan Proceeds Received	$ 50,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Less: Owner's Draw	$ (600)	$ (600)	$ (600)	$ (600)	$ (600)	$ (600)	$ (600)	$ (600)
Less: Principal Payment-Loan	$ (230)	$ (233)	$ (235)	$ (237)	$ (239)	$ (241)	$ (243)	$ (246)
Cash Flows From Financing Activities	$ 69,170	$ (833)	$ (835)	$ (837)	$ (839)	$ (841)	$ (843)	$ (846)
Net Cash Flows	$ 15,482	$ (309)	$ (2,019)	$ (309)	$ (10,737)	$ (738)	$ (739)	$ (312)
Plus: Beginning Cash Balance	$ -	$ 15,482	$ 15,173	$ 13,154	$ 12,846	$ 2,108	$ 1,370	$ 632
Ending Cash Balance	$ 15,482	$ 15,173	$ 13,154	$ 12,846	$ 2,108	$ 1,370	$ 632	$ 320

Ratio Analysis

- "How is my company doing?"
- A method of expressing the relationships between any two elements on financial statements.
- Important barometers of a company's health.
- Studies indicate few small business owners compute financial ratios and use them to manage their businesses.

Interpreting Ratios

- Ratios – useful yardsticks of comparison.
- Standards vary from one industry to another; the key is to watch for "red flags."
- *Critical numbers* – measure key financial and operational aspects of a company's performance. Examples:
  - Sales per labor hour at a supermarket
  - Food costs as a percentage of sales at a restaurant.
  - Load factor (percentage of seats filled with passengers) at an airline.

Liquidity Ratios

"Liquidity" – the Business' short term ability to pay its current and unexpected debts.

Why are Liquidity Ratios important?

Liquidity Ratios

Working Capital

=Current Assets – Current Liabilities

Current Ratio

= Currents Assets ÷ Current Liabilities

(2:1 Preferred)

Quick Ratio

=(Current Assets – Inventory) ÷ Current Liabilities

(1:1 Preferred)

Financial Leverage Ratios

Debt to Equity Ratio

= Total Debt ÷ Total Equity

Debt Ratio

= Total Debt ÷ Total Assets

Operating Ratios

Operating Ratios - Ratios that reflect activities crucial to making a profit in your business.

Why do we need Operating Ratios?

Operating Ratios

Inventory Turnover

= Cost of Goods Sold ÷ Average Inventory

Receivables Turnover

= Annual Credit Sales ÷ Accounts Receivable

Average Collection Period

= 365 ÷ Receivables Turnover

Specific Efficiency Ratios

- Inventory Turnover
  - COGS : Inventory
  - Measures rate inventory is used per year
- Days Inventory Turns
  - 365 : Inventory Turn
  - Days inventory on hand

Average Inventory Turnover Ratio

Average Inventory Turnover Ratio - Tells the average number of times a firm's inventory is "turned over" or sold out during the accounting period.

$$\text{Average Inventory Turnover Ratio} = \frac{\text{Cost of Goods Sold}}{\text{Average Inventory*}} = \frac{\$1,290,117}{\$630,600} = 2.05 \text{ times a year}$$

$$\text{*Average Inventory} = \frac{\text{Beginning Inventory + Ending Inventory}}{2}$$

Average Collection Period Ratio

Average Collection Period Ratio (days sales outstanding, DSO) - Tells the average number of days required to collect accounts receivable.

Two Steps:

$$\text{Receivables Turnover} = \frac{\text{Credit Sales}}{\text{Accounts Receivable}} = \frac{\$1{,}309{,}589}{\$179{,}225} = 7.31 \text{ times Ratio a year}$$

$$\text{Average Collection} = \frac{\text{Days in Accounting Period}}{\text{Receivables Turnover Ratio}} = \frac{365}{7.31} = 50.0 \text{ days Period Ratio}$$

Profitability Ratios

Profitability Ratios - Ratios that compare earnings to the resources available in the business.

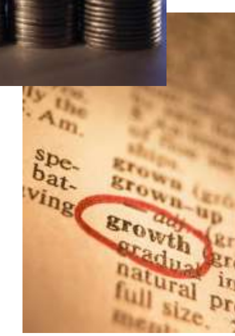
Think of these ratios as answering the question:

"How well did I do, given what I had to work with?"

Profitability Ratios

Gross Profit Margin

= (Sales – Cost of Goods Sold) ÷ Sales



Return on Assets

= Net Income ÷ Total Assets

Return on Equity

= Net Income ÷ Shareholder Equity

Putting Your Ratios to the Test

- *When comparing your company's ratios to your industry's standards, ask the following questions:*

1. **Is there a significant difference in my company's ratio and the industry average?**
2. **If so, is this a *meaningful* difference?**
3. **Is the difference good or bad?**
4. **What are the possible causes of this difference? What is the most likely cause?**
5. **Does this cause require that I take action?**
6. **If so, what action should I take to correct the problem?**

Interpreting Ratios

Sam's Appliance Shop	Industry Median
Current ratio = 1.87:1	Current ratio = 1.50:1

Although Sam's falls short of the rule of thumb of 2:1, its current ratio is above the industry median by a significant amount. Sam's should have no problem meeting short-term debts as they come due.

Interpreting Ratios

Sam's Appliance Shop	Industry Median
Quick ratio = 0.63:1	Quick ratio = 0.50:1

Again, Sam is below the rule of thumb of 1:1, but the company passes this test of liquidity when measured against industry standards. Sam relies on selling inventory to satisfy short-term debt (as do most appliance shops). If sales slump, the result could be liquidity problems for Sam's. What steps should Sam take to deal with this threat?

Interpreting Ratios

Sam's Appliance Shop	Industry Median
Debt ratio = 0.68:1	Debt ratio = 0.64:1

Creditors provide 68% of Sam's total assets, very close to the industry median of 64%. Although the company does not appear to be overburdened with debt, Sam's might have difficulty borrowing , especially from conservative lenders.

Interpreting Ratios

Sam's Appliance Shop

Debt to net worth ratio = 2.20:1

Industry Median

Debt to net worth ratio = 1.90:1

Sam's owes $2.20 to creditors for every $1.00 the owner has invested in the business (compared to $1.90 to every $1.00 in equity for the typical business). Many lenders will see Sam's as "borrowed up," having reached its borrowing capacity. Creditor's claims are more than twice those of the owners.

Interpreting Ratios

Sam's Appliance Shop

Times interest earned ratio = 2.52:1

Industry Median

Times interest earned ratio = 2.0:1

Sam's earnings are high enough to cover the interest payments on its debt by a factor of 2.52:1, slightly better than the typical firm in the industry. Sam's has a cushion (although a small one) in meeting its interest payments.

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Interpreting Ratios

Sam's Appliance Shop

Average inventory turnover ratio =

2.05 times per year

Industry Median

Average inventory turnover ratio =

4.0 times per year

Inventory is moving through Sam's at a very slow pace. What could be causing this low inventory turnover in Sam's business?

Interpreting Ratios

Sam's Appliance Shop	Industry Median
Average collection period ratio = 50.0 days	Average collection period ratio = 19.3 days

Sam's collects the average account receivable after 50 days compared to the industry median of 19 days - more than 2.5 times longer. What is a more meaningful comparison for this ratio? What steps can Sam take to improve this ratio?

Interpreting Ratios

Sam's Appliance Shop	Industry Median
Average payable period ratio = 59.3 days	Average payable period ratio = 43 days

Sam's payables are nearly 40 percent slower than those of the typical firm in the industry. Stretching payables too far could seriously damage the company's credit rating. What are the possible causes of this discrepancy?

Interpreting Ratios

Sam's Appliance Shop	Industry Median
Net Sales to total assets ratio = 2.21:1	Net Sales to total assets ratio = 2.7:1

Sam's Appliance Shop is not generating enough sales, given the size of its asset base. What factors could cause this?

Interpreting Ratios

Sam's Appliance Shop	Industry Median
Net profit on sales ratio = 3.24%	Net profit on sales ratio = 7.6%

After deducting all expenses, Sam's has just 3.24 cents of every sales dollar left as profit - less than half the industry average. Sam may discover that some of his operating expenses are out of balance.

Interpreting Ratios

<u>Sam's Appliance Shop</u>

Net profit to assets ratio = 7.15%

<u>Industry Median</u>

Net profit to assets ratio = 5.5%

Sam's generates a return of 7.15% for every $1 in assets, which is 30% above the industry average. Given his asset base, Sam is squeezing an above-average return out of his company. Is this likely to be the result of exceptional profitability, or is there another explanation?

Interpreting Ratios

Sam's Appliance Shop

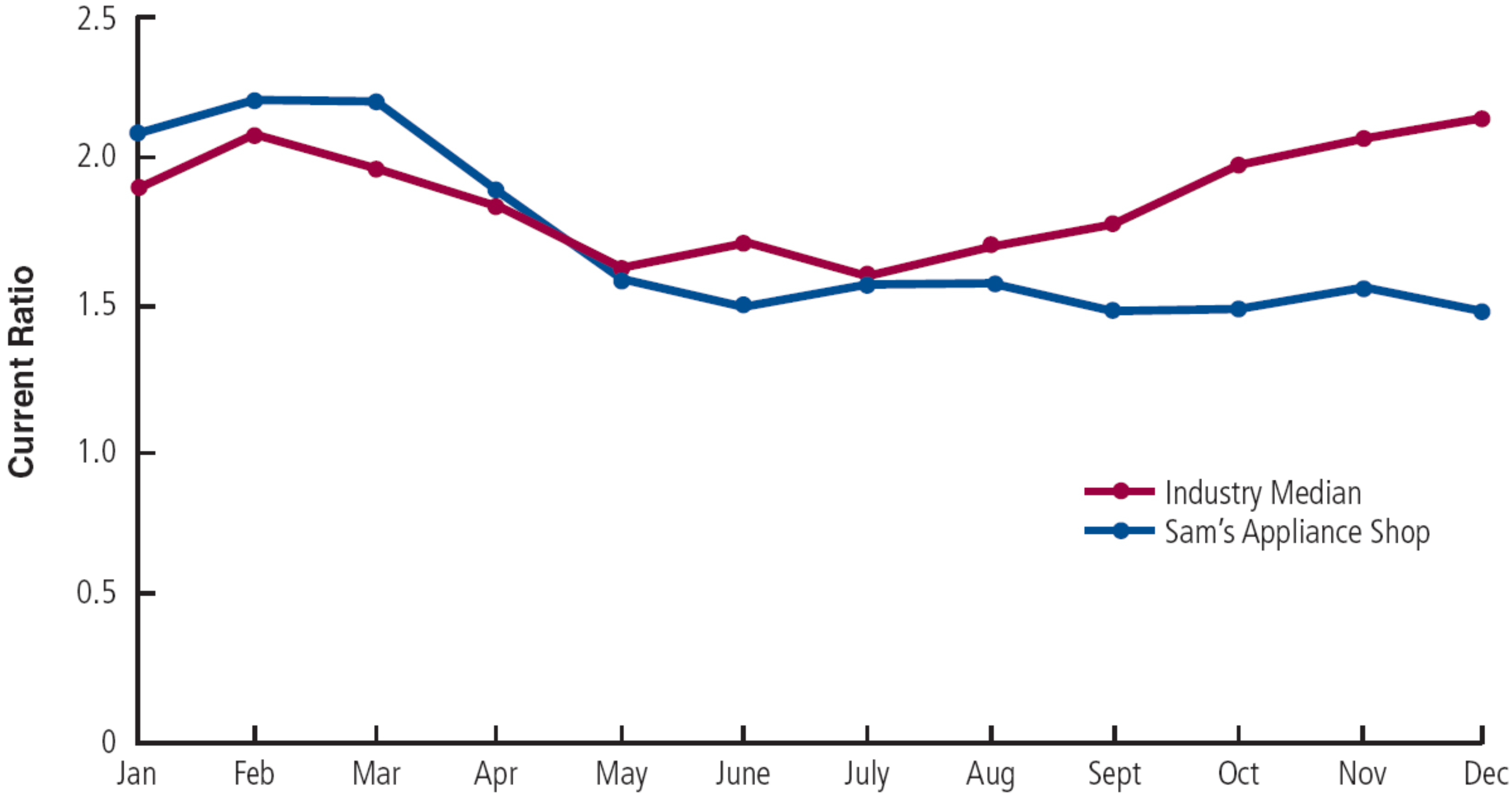
Net profit on equity ratio = 22.65 %

Industry Median

Net profit on equity ratio = 12.6%

Sam's return on his investment in the business is an impressive 22.65%, compared to an industry median of just 12.6% Is this the result of high profitability, or is there another explanation?

Trend Analysis of Ratios



Your Questions?

Questions ?

Thank you for coming.

Please fill out the evaluation form!