Fiscal Management: Part II

ACADEMY of DOCTORS of AUDIOLOGY®

The Power to Practice

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Business Series

Overview

- Financial Accounting
- Liquidity Ratios
- Activity or Turnover Ratios
- Debt/Leverage Ratios
- Profitability Ratios
- Tracking the Practice

Fiscal Management Part II

ACADEMY *of* DOCTORS *of* AUDIOLOGY®

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Financial Accounting

ADA
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Managerial Accounting

The process of identifying, measuring, analyzing, interpreting, and communicating information for the pursuit of an organization's goals.

Financial Accounting

The process of recording, summarizing and reporting the myriad of transactions from a business, so as to provide an accurate picture of its financial position and performance.

Financial Accounting

Data is not information until you do something with it.

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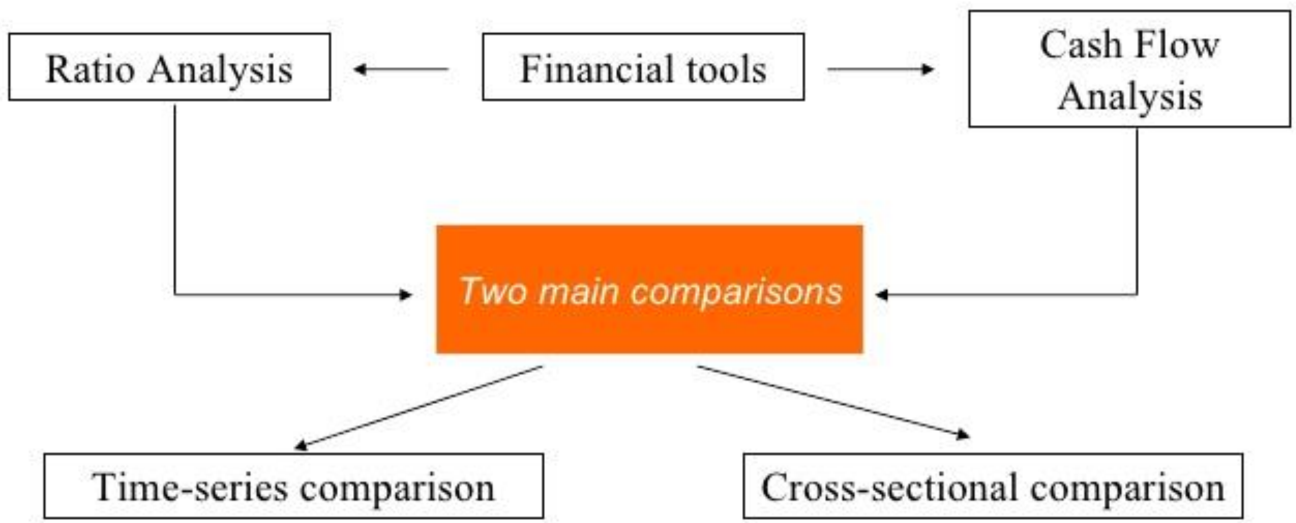
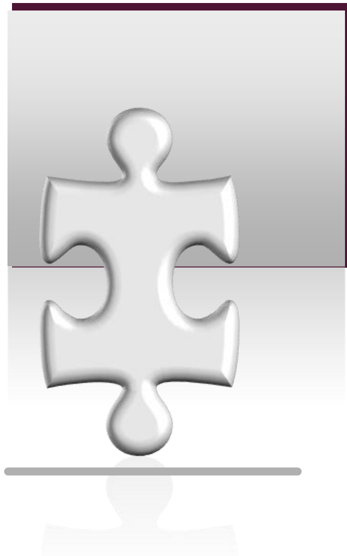
The Power to Practice

Financial Statement Calculations



- Two types
  - ***Cross Sectional*** – Comparison of the practice to an Industry Standard
  - ***Time Series*** – Comparison of same practice to different points in time.



Financial Statement Calculations

Ratio Analysis

Quantitative analysis of information contained in a company's financial statements

- Purpose of Ratio Calculation
  - Evaluates efficiency, liquidity, profitability & solvency
  - Ratio trends overtime are studied to check if they are improving or deteriorating
  - Primarily conducted on the Balance Sheet and Income Statement

Financial Statement Calculations

Liquidity Ratios

A company's ability to turn short-term assets into cash to cover debts.

- Health of the practice
- Can it pay its bills

Financial Statement Calculations

Liquidity Ratios

Current Ratio

The ratio is mainly used to give an idea of the company's ability to pay back its short-term liabilities (debt and payables) with its short-term assets (cash, inventory, receivables).

Financial Statement Calculations

Liquidity Ratios

Current Ratio

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

Current Ratio Calculation

Liquidity Ratios

Current Ratio = $\dfrac{\textbf{Current Assets}}{\textbf{Current Liabilities}}$

$$\frac{\$284{,}000}{\$67{,}000} = 4.2,\ \text{CR}$$

AUDIOLOGY ASSOCIATES, INC.
Balance Sheet
December 31, 2009

Assets		**Liabilities & Owners' Equity**	
Current assets:		Current liabilities:	
Cash	34,000.	Short Term Debt	20,000.
Accounts Receivable	80,000.	Accounts Payable	35,000.
Merchandise Inventory	170,000.	Other Accrued Liabilities	12,000.
Total Current Assets	284,000.	Total Current Liabilities	67,000.
Plant and equipment:		Long term debt	50,000.
Equipment	40,000.	Total Liabilities	117,000.
Less Accumulated depreciation	(4,000.)	Owners' Equity	203,000.
		Total liabilities and	0.

This practice has over 4 times the necessary cash to pay its bills

Current Ratio Calculation

Liquidity Ratios

- **If the ratio is less than 1**
  - **Business cannot pay its bills**
  - **May have difficulty staying in business**
- **If the ratio is 2 or more**
  - **Business can pay bills with money left over**
  - **Healthy Business**

Current Ratio Concerns

1. The Current Ratio Includes Prepaid expenses
   - Insurance
   - Inventory
   - Prepaid Taxes

2. Many Audiology Practices do not have inventory

3. May need to calculate without these expenses
   - Quick Ratio/Acid Test Ratio

Quick or Acid Test Ratio

Liquidity Ratios

Stricter

More Conservative

An indicator of a company’s short-term liquidity. The quick ratio measures a company’s ability to meet its short-term obligations with its most liquid assets. For this reason, the ratio excludes inventories from current assets.

$$\text{Quick / Acid Test Ratio} = \frac{\text{Cash + Marketable Securities+ Accounts Receivable}}{\text{Current Liabilities}}$$

Quick or Acid Test Ratio

Liquidity
Ratios

Stricter

More Conservative

- **Figures Liquidity without prepaid expenses Insurance & Inventory**
- **As with CR must be greater than 1 to pay bills**

Financial Statement Calculations

Liquidity Ratios

Defense Interval Measure

An efficiency ratio that measures how many days a company can operate without having to access non-current (long-term) assets.

Defense Interval Measure

- Measures how long the practice can operate without any business.
- Natural Disasters
- Some feel a better analysis than Liquidity measures as it compares to expenses rather than debt.
- Allows for a projection of emergency cash (Defensive Assets) necessary if there is no business.

Defense Interval Measure

Liquidity Ratios

To figure the *Defense Interval Measure* you must first know the

<u>Projected Daily Operating Expenses (PDOE)</u>

How much does it cost to keep the practice open daily

Defense Interval Measure

Liquidity Ratios

Projected Daily Operating Expenses (PDOE)

$$\textbf{PDOE} = \frac{\textbf{Total Yearly Expenses}}{\textbf{365}}$$

Simply add up the Cost of goods, selling and administrative expenses from the Balance Sheet and divide by 365.

Defense Interval Measure Calculation

Projected Daily Operating Expenses (PDOE)

Liquidity Ratios

$$\text{PDOE} = \frac{\text{Total Yearly Expenses}}{365}$$

$$\frac{311{,}000}{365} = \$852.00$$

Daily Operating Expenses

AUDIOLOGY ASSOCIATES, INC.
Income Statement
Year the Ended December 31, 2009

Net sales	1,200,000.
Costs of goods sold	850,000.
Net profit	350,000.
Selling, general and administrative expenses	311,000.
Income from operations (EBIT)	39,000.
Interest expense	9,000.
Income before taxes (EBT)	30,000.
Income taxes	12,000.
Net Income	18,000.

It costs $852.00 to keep the doors open each day

Defense Interval Measure

Liquidity Ratios

Once the PDOE is known the DIM can be computed as:

$$\text{Defense Interval Measure} = \frac{\text{Defensive Assets}}{\text{Projected Daily Operating Expenses}}$$

Defense Interval Measure Calculation

Liquidity Ratios

$$\frac{\text{Defensive Assets} \quad \$50{,}000}{\text{PDOE} \quad \$852} = 58 \text{ days}$$

Defense Interval Measure

Activity/Turnover Ratios

Activity or Turnover Ratios

Activity / Turnover Ratios are a set of financial ratios used to measure the efficiency of various operations of a business.

- Activity ratios measure the efficiency of the firm in using its resources / assets.
- Also known as Asset Management Ratios because these ratios indicate the efficiency with which the assets of the firm are managed / utilized.

Activity/Turnover Ratios

Activity or Turnover Ratios

Activity / Turnover Ratios are a set of financial ratios used to measure the efficiency of various operations of a business.

Three Important Ratios:

- **Accounts Receivable Turnover Ratio**
- **Inventory Turnover Ratio**
- **Total Assets Turnover Ratio**

Activity/Turnover Ratios

Activity or Turnover Ratios

Accounts Receivable Turnover Ratios

Receivable turnover ratio indicates the frequency of conversion from debtors to cash normally in a year. It also suggests the extent of liquidity of debtors. Average collection period gives a time period in which debtors are converted into cash.

Activity/Turnover Ratios

Activity or Turnover Ratios

Accounts Receivable Turnover Ratios

To figure the ***Accounts Receivable Turnover Ratio*** you must first know the ***Average Accounts Receiveable Balance.***

Take balance at end of last year + balance at end of current year / 2

Average Accounts Receivable Balance Calculation

Activity or Turnover Ratios

$$\text{Ave A/R} = \frac{\text{AR Balance Year 1 + AR Balance Year 2}}{2}$$

$$\text{Ave A/R} = \frac{\$31{,}000 + \$80{,}000}{2}$$

Ave A/R= $55,500

AUDIOLOGY ASSOCIATES, Inc.
Balance Sheet
December 31, 2009

Assets		Liabilities & Owners' Equity	
Current assets:		Current liabilities:	
Cash	34,000.	Short Term Debt	20,000.
Accounts Receivable	80,000.	Accounts Payable	35,000.
Merchandise Inventory	170,000.	Other Accrued Liabilities	12,000.
Total Current Assets	284,000.	Total Current Liabilities	67,000.
Plant and equipment:		Long term debt	50,000.
Equipment	40,000.	Total Liabilities	117,000.
Less Accumulated depreciation	(4,000.)	Owners' Equity	203,000.
Total assets	320,000.	Total liabilities and owners' equity	320,000.

Year 1 Balance 31,000

Accounts Receivable Turnover Ratio

Activity or Turnover Ratios

$$\text{Accounts Receivable Turnover Ratio} = \frac{\text{Net Sales}}{\text{Ave. Accounts Receivable}}$$

Accounts Receivable Turnover Ratio (Calculation)

Activity or Turnover Ratios

$$ART = \frac{\text{Net Sales}}{\text{Ave. Accounts Receivable}}$$

$$\text{Ave A/R} = \frac{\$1{,}200{,}000}{\$55{,}500}$$

ART= 21

AUDIOLOGY ASSOCIATES, Inc.
Income Statement
Year the Ended December 31, 2009

Net sales	1,200,000.
Costs of goods sold	850,000.
Net profit	350,000.
Selling, general and administrative expenses	311,000.
Income from operations (EBIT)	39,000.
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Income taxes	12,000.
Net Income	18,000.

Accounts Receivable turns 21 times per year, AR turns about every 17 days

Accounts Receivable Turnover Ratio

Activity or Turnover Ratios

Ave. Audiology Clinic….ART is about 6

Accounts Receivable turns 6 times per year or every 60 days

Activity/Turnover Ratios

Activity or Turnover Ratios

Inventory Turnover Ratios

Inventory turnover ratio indicates how many times inventory is sold and replaced in a financial year. In other words, the ratio gives the frequency of conversion of inventory into cash in a given financial year. Normally, higher ratio is considered good as it suggests better inventory management. Assists in planning for stock orders.

Activity/Turnover Ratios

Activity or Turnover Ratios

Inventory Turnover Ratios

To figure the ***Inventory Turnover Ratio*** you must first know the ***Average Inventory Balance.***

Take balance at end of last year + balance at end of current year / 2

Average Inventory

Activity or Turnover Ratios

$$\text{Ave Inventory} = \frac{\text{Inv end of year 1} + \text{Inv end of year 2}}{2}$$

$$\text{Ave Inventory} = \frac{\$111{,}000 + \$170{,}000}{2}$$

$$\text{Ave Inventory} = \$140{,}500$$

AUDIOLOGY ASSOCIATES, Inc.
Balance Sheet
December 31, 2009

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Year 1 Inventory 111,000

Activity/Turnover Ratios

Activity or Turnover Ratios

Inventory Turnover Ratios

$$\textbf{Inventory Turnover} = \frac{\textbf{Cost of Goods Sold}}{\textbf{Ave. Inventory}}$$

Inventory Turnover Ratio

Activity or Turnover Ratios

$$\text{Inventory Turnover} = \frac{\text{Cost of Goods Sold}}{\text{Average Inventory}}$$

$$\text{Inventory Turnover} = \frac{\$850{,}000}{\$140{,}500}$$

$$\text{Inventory Turnover} = 6$$

AUDIOLOGY ASSOCIATES, Inc.
Income Statement
Year the Ended December 31, 2004

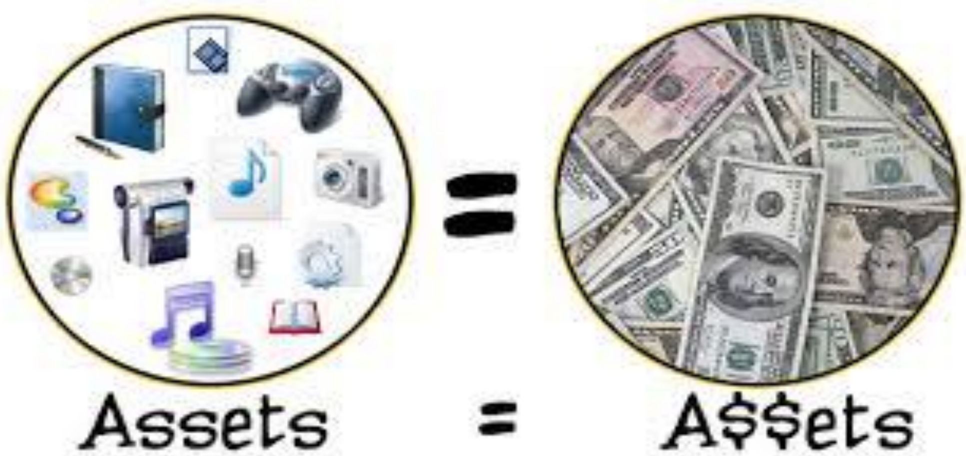
Net sales	1,200,000.
Costs of goods sold	$\boxed{850{,}000.}$
Net profit	350,000.
Selling, general and administrative expenses	311,000.
Income from operations (EBIT)	39,000.
Interest expense	9,000.
Income before taxes (EBT)	30,000.
Income taxes	12,000.
Net Income	18,000.

ITR = 6 …..then inventory will turn 6 times per year, every 2 months

Activity/Turnover Ratios

Activity or Turnover Ratios

Assets Turnover Ratio

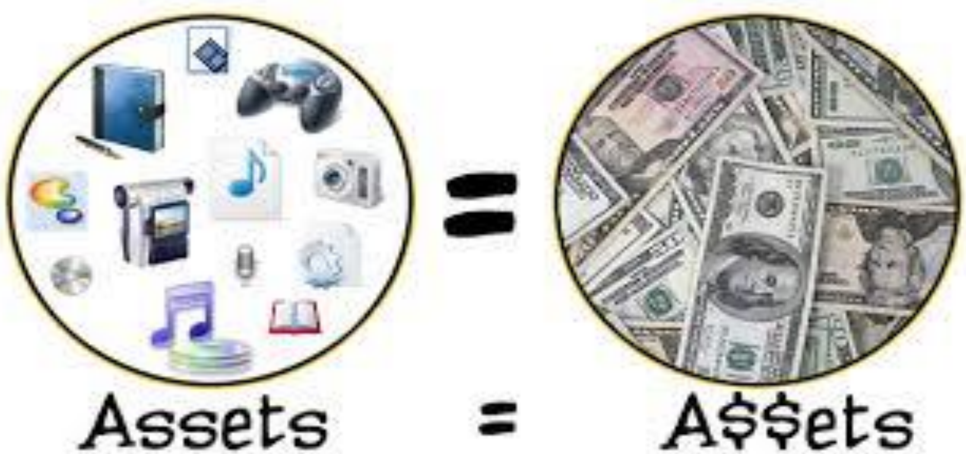


The amount of sales or revenues generated per dollar of assets. The Asset Turnover ratio is an indicator of the efficiency with which a company is deploying its assets.

Activity/Turnover Ratios

Activity or Turnover Ratios

Assets Turnover Ratio



- The higher the better, suggests greater revenue per dollar of assets
- Calculation varies among industries
- Usually conducted once per year
- Conducted with both Balance Sheet and Income Statement

Assets Turnover Ratios

Activity or Turnover

$$\text{Asset Turnover Ratio} = \frac{\text{Net Sales}}{\text{Total Assets}}$$

$$\text{Asset Turnover Ratio} = \frac{\$1.200,000}{\$320,000}$$

$$\text{Asset Turnover Ratio} = 3.75$$

ATR = 3.75 …..the assets will turn 3.75 times per year, every 3.2 months about 94 days

AUDIOLOGY ASSOCIATES, Inc.
Income Statement
Year the Ended December 31, 2009

AUDIOLOGY ASSOCIATES, Inc.
Balance Sheet
December 31, 2009

Assets		Liabilities & Owners' Equity	
Current assets:		Current liabilities:	
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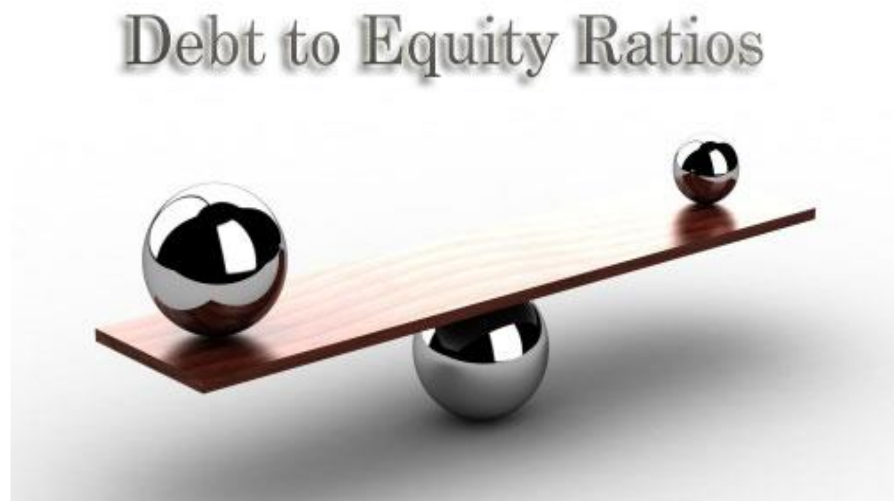
Debt/Leverage Ratios

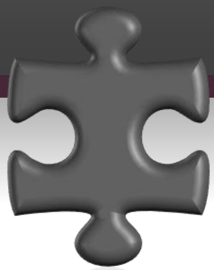
Debt/Leverage Ratios



Measurements of the overall solvency of the practice

- Debt to Assets Ratio
- Times Interest Earned
- Suggest the amount of debt relative to the assets of the practice
- If the practice can support more debt for equipment, expansion, etc.

Debt/Leverage Ratios



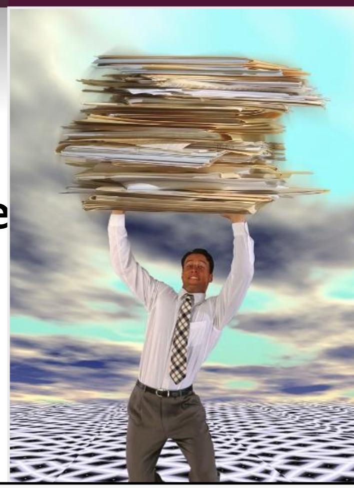
Debt/Leverage Ratios

Debt to Assets Ratio

Presents the liability of the practice for each dollar of assets. Provides the creditors with information about the ability of the practice to withstand losses without impairing the interest of the creditors.

Debt/Leverage Ratios

Debt/Leverage Ratios



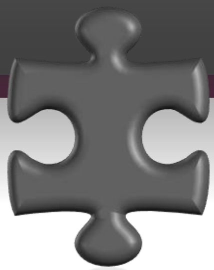
Debt to Assets Ratio

$$\text{Debt to Assets Ratio} = \frac{\text{Total Liabilities}}{\text{Total Assets}}$$

- The lower the better, suggesting the practice is less dependent on borrowing.
- A higher DA Ratio indicates that if business is bad for a time that it could cause financial problems

Debt/Leverage Ratios

Debt to Assets Ratio



Debt/Leverage

$$\text{Debt to Assets Ratio} = \frac{\text{Total Liabilities}}{\text{Total Assets}}$$

$$\text{Debt to Assets Ratio} = \frac{\$117{,}000}{\$320{,}000}$$

$$\text{Debt to Assets Ratio} = 36.5\%$$

The lower the better, suggesting that the practice is less dependent upon borrowing.

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Balance Sheet
December 31, 2009

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Debt/Leverage Ratios

Times Interest Earned

Debt/Leverage Ratios

$$\text{Times Interest Earned} = \frac{\text{EBIT}}{\text{Interest Expense}}$$

$$\text{Times Interest Earned} = \frac{\$39,000}{\$9,000}$$

$$\text{Times interest Earned} = 4.3$$

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Income Statement
Year the Ended December 31, 2009

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Costs of goods sold	850,000.
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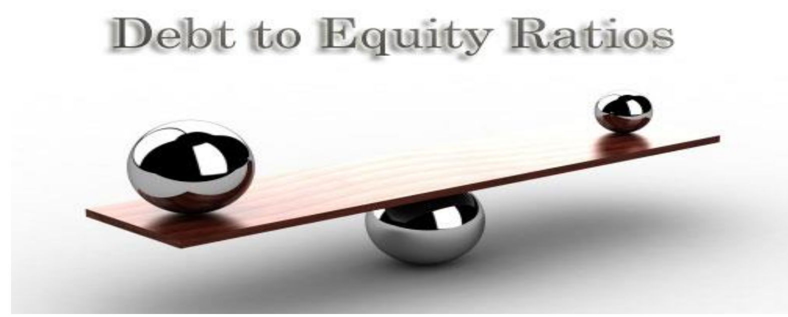
Debt/Leverage Ratios

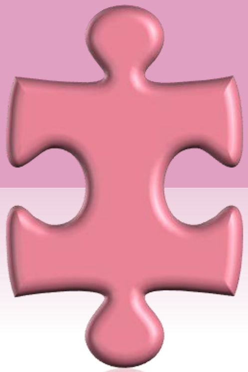
Times Interest Earned Ratio

Debt/Leverage Ratios



- This ratio should be between 3 and 5 for Audiology Practices
- Indicates that earnings are 3 to 5 times greater than the interest charges, if less than 1 cannot pay interest

Profitability Ratios



Profitability Ratios

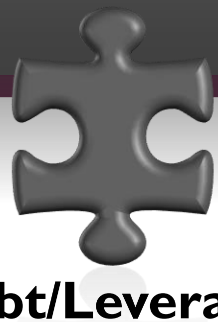
Ratios that may tell the most about a practice are the profitability ratios that are conducted on the income statement. Profitability ratios are clues as to how well the practice has performed in the past.

Routine Profitability Ratios are

- Profit Margin On Sales (PMOS)
- Asset Turnover Ratio (already discussed)

Profitability Ratios

Profit Margin On Sales



Debt/Leverage Ratios

- How much of every dollar of sales is profit.
- Calculation is expressed in # cents per dollar is profit.

$$\text{Profit Margin On Sales} = \frac{\text{Net Profit}}{\text{Net Sales}}$$

Profitability Ratios

Profit Margin On Sales

Debt/Leverage Ratios

$$\text{Profit Margin on Sales} = \frac{\text{Net Profit}}{\text{Net Sales}}$$

$$\text{Profit Margin on Sales} = \frac{\$350{,}000}{\$1{,}200{,}000}$$

$$\text{Profit Margin on Sales} = \$\,.29$$

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Interest expense	9,000.
Income before taxes (EBT)	30,000.
Income taxes	12,000.
Net Income	18,000.

Calculation yields $0.29: 29 cents of every dollar collected by the practice is profit.

Tracking the Business

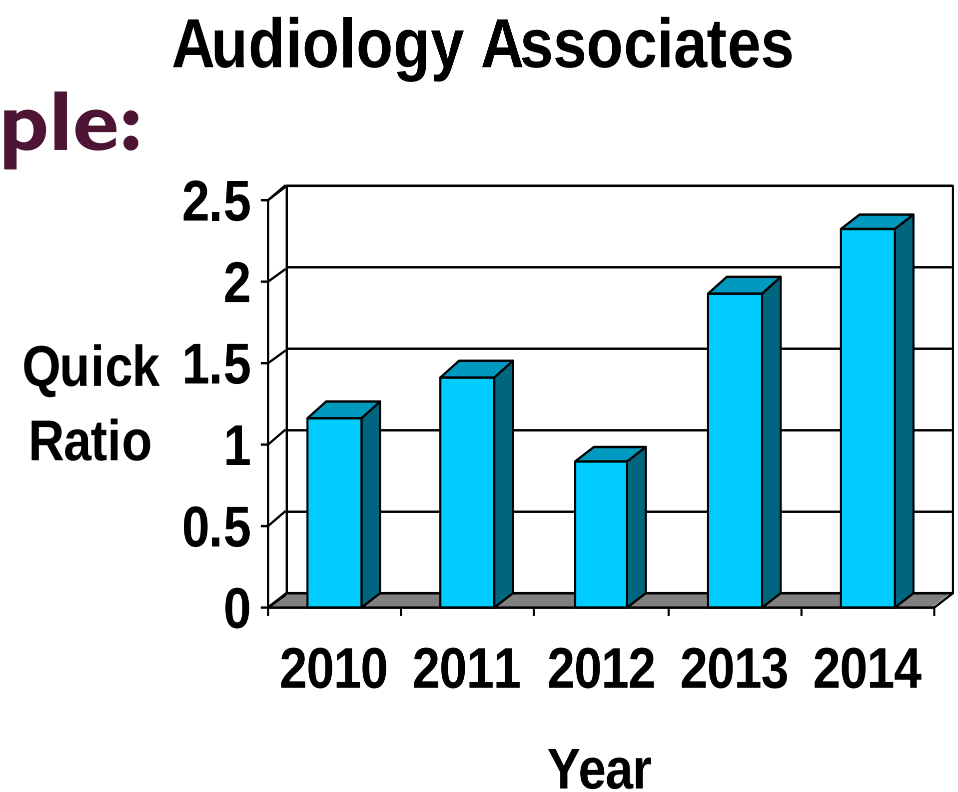
Tracking the Practice

- Easily conducted with spreadsheets
- Can demonstrate areas of the practice that need improvement
- Tell why there are problems in the practice
- What went well with the practice and what went wrong.

Tracking the Business

Tracking the Practice

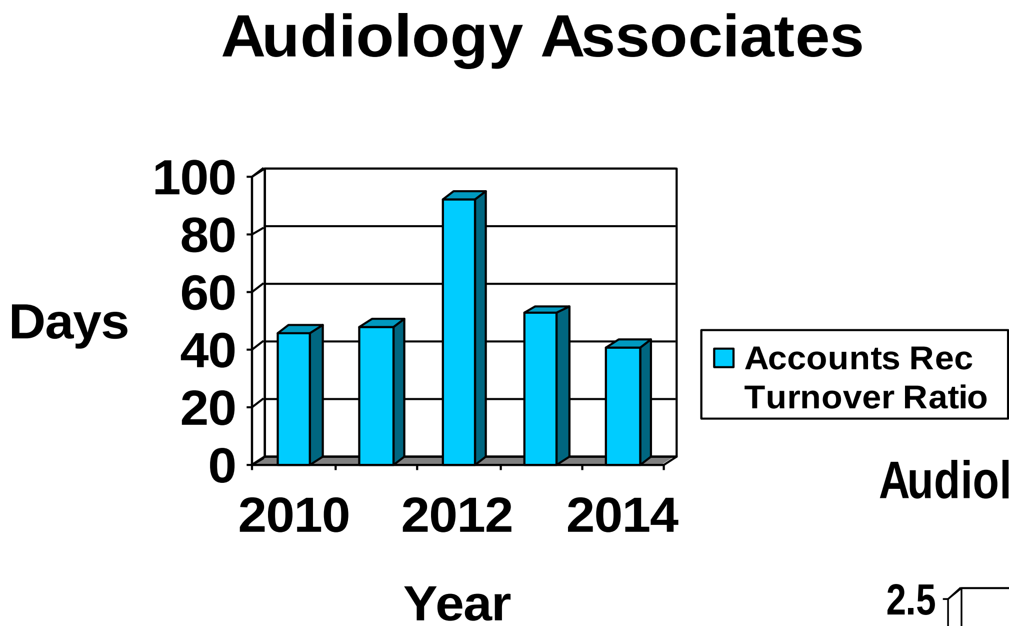
For Example:

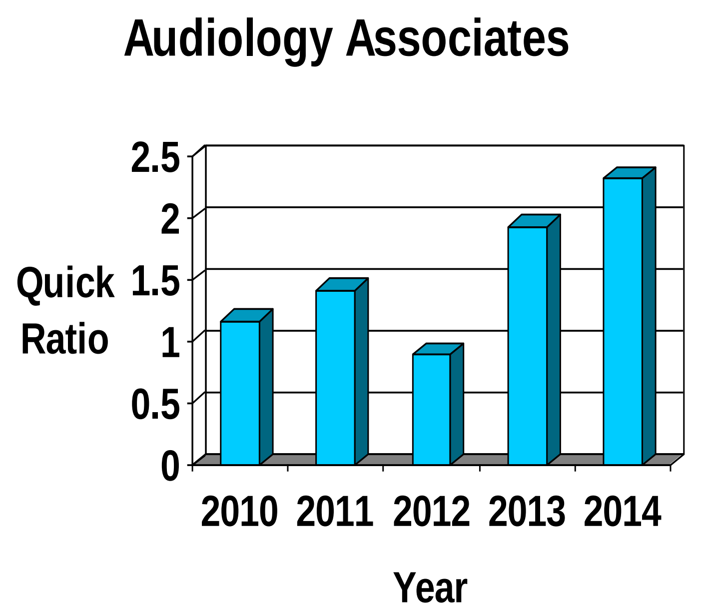


- Reviewing QR for 2000-2004
- 2002 is Low? Why?
- Difficult to tell until you look at other ratios at the same time

Tracking the Business

Tracking the Practice

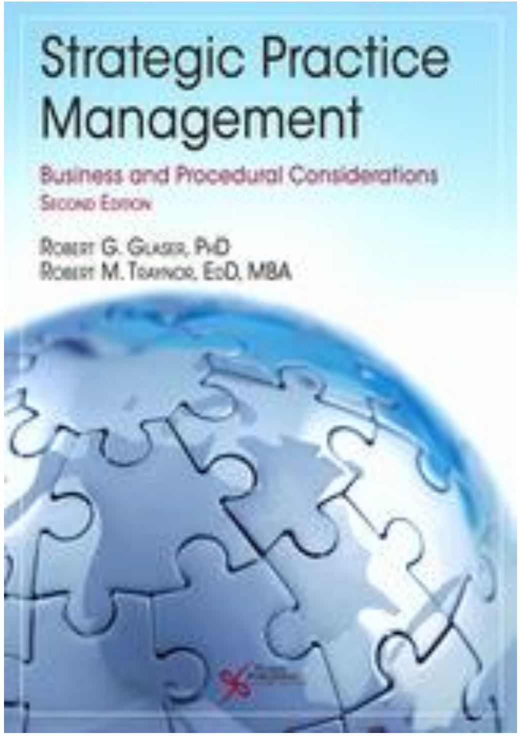




- Review Quick Ratio and the Accounts Receivable Turnover Ratio together.
- Quick Ratio was low when the Accounts Receivable Turnover Ratio was high
- A possible explanation of why it was difficult to pay the bills.

Tracking the Business

Tracking the Practice



- There are many other Ratios that may be beneficial to you in your practice.
- Your accountant can help you set up the ones that are important for you.
- Further information go to Strategic Practice Management.