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Understanding Financial Statements

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IN CONJUNCTION WITH**



Introduction: During this presentation you will

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- Increase understanding of Financial Statements
- Obtain appreciation of financial impact of business decisions
- Learn to use financial statements to analyze company's overall performance to make business decisions
- Learn the relationship of Financial Statements to Budgets

Introduction: Beginning Basics

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- In order to have a financial statement that is valuable you need to:
 - Determine your accounting method Cash vs. Accrual
 - Have accurate bookkeeping

Introduction: Beginning Basics

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- Cash Basis-recognizes revenues when money comes in and recognizes expenses when money is paid out
- Accrual Basis-recognized revenues when money is earned

Cash vs Accrual Accounting Example

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Transactions	Amount	Cash Basis General Ledger Input	Accrual Basis General Ledger Input
Received invoice from consultant	\$4,000	Ignored	\$4,000 Debit to Expense
Paid water bill	\$100	\$100 Debit to Expense	Ignored
Sent invoice for services performed	\$10,000	Ignored	\$10,000 Credited to Income/Revenue
Received fees income	\$100	\$100 Credit to Income/Revenue	Ignored
Cash Basis Outcome		Profit \$0	
Accrual Basis Outcome			Profit \$6,000

Cash vs Accrual Pros and Cons

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- **Cash**

- Pros-simple, flexible, considers cash flow, income not taxed unless received.
- Cons-no control of accounts receivable & accounts payable

- **Accrual**

- Pros-better idea of real income and expenses, gives good picture of long-term vision of business
- Cons-cash flow & analysis take a back seat, more complex

Introduction: Bookkeeping

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- Tools for accurate bookkeeping
 - Intuit (QuickBooks)
 - Sage (Peachtree)
 - Microsoft (FreshBooks) – suited for Independent Contractors

Introduction: Three Types of Accounting

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- **Tax Accounting**

- Focus on taxes, governed by the Internal Revenue Code to prepare tax returns
- Balance sheet items can be accounted for differently when preparing financial statements and tax payables.
- For example, companies can prepare their financial statements implementing the first-in-first-out (FIFO) method to record their inventory for financial purposes, yet they can implement the last-in-first-out (LIFO) approach for tax purposes. LIFO will reduce the current year's taxes payable.

Introduction: Three Types of Accounting

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- **Financial Accounting**

- Recording, summarizing and reporting of transactions from a business to provide an accurate picture of its financial position & performance.
- Objective of financial accounting is the preparation of financial statements (the balance sheet, income statement and cash flow statement) company's operating performance over a particular period
- Generally prepared quarterly and annually, and in accordance with Generally Accepted Accounting Principles (GAAP)
- Generally prepared for external parties including investors, creditors, regulators and tax authorities.

Introduction: Three Types of Accounting

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- **Managerial Accounting**

- Accounting type we are applying today
- Known as Cost Accounting
- Process of identifying, measuring, analyzing, interpreting, and communicating information for the pursuit of an organization's goals.
- Information is aimed at helping managers within the organization make decisions
- Ratios used to provide information

Financial Statements and How we will be using them in this workshop

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- First – Income Statement – reviewing today
- Second – Balance Sheet – reviewing today
- Third – Cash Flow Statement – not used today
- Use ratios and look business decision examples

Income Statement: Purpose

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- Summarizes a company's revenues (sales) and expenses quarterly and annually for its fiscal year
- Also known as:
 - statement of income
 - statement of earnings
 - statement of operations
 - statement of operating results
 - P&L – Profit & Loss

Income Statement

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- **Net Sales (Sales or Revenue)**
 - The amount of sales generated by a company after the deduction of returns, allowances for damaged or missing goods and any discounts allowed.

Income Statement

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- Cost of Sales (Cost of Goods or Products Sold or Cost of Services)
 - Manufacturing
 - Raw Materials
 - Labor and Manufacturing Overhead
 - Depreciation Expense
 - Service/Consulting
 - Cost of Services Rendered
 - Cost of Revenues

Income Statement

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- **Gross Profit (Gross Income or Gross Margin)**
 - More than difference between Net Sales and Cost of Sales
 - Provides the resources to cover all company expenses
 - Higher the margin greater the income

Income Statement

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- **Expenses**
 - Selling
 - General
 - Administrative
 - Trend of expenses as a percentage of sales depicts efficient management

Income Statement

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- Operating Income
 - Gross Profit – Expenses
 - Interest Expense
 - Taxes
 - Special Expenses-nonrecurring one time expenses

Income Statement

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- Net income (net profit, net earnings)
 - “The Bottom Line”

Income Statement

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Gross Profit Margin

An indication of the total margin available to cover operating expenses and yield a profit.

Sales-Cost of Goods Sold / Sales

$(\$1,026,380 - \$66,713) / \$1,026,380 = 93.5\%$

- Relationship to Sales
- Relationship to Cost of Goods
- Trend- year over year comparison

Income Statement

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Net Profit Margin (or Net Return on Sales)

Shows after tax profits per dollar of sales. Subpar profit margins indicate that the firm's sales prices are relatively low or that costs are relatively high or both.

Profits after Taxes and Expenses / Sales

$$\$210,577 / \$1,026,380 = 20.5\%$$

- Relationship to Sales
- Relationship to Cost of Goods
- Trend- year over year comparison

Income Statement

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Break-Even Ratio

An analysis to determine the point at which revenue received equals the costs associated with receiving the revenue.

Operating Expenses / Targeted Profit Margin =
Annual gross sales needed to break even

$$\$327,900 / .39 = \$840,769$$

- Relationship to Sales
- Relationship to Cost of Goods
- Trend- year over year comparison

Breakeven Analysis Restaurant

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Summary of Annual Projected Expenses:

	For the Year Ending,				
	Year #1	Year #2	Year #3	Year #4	Year #5
Total Wage Expense	\$38,400	\$124,800	\$230,400	\$244,800	\$249,984
Annual Interest Expense/Debt Payments	\$105,000	\$105,000	\$105,000	\$208,995	\$208,995
Start-Up Costs - Unamortizable	\$53,000	\$43,000	\$43,000	-	-
Rent	\$54,000	\$127,620	\$201,829	\$222,055	\$222,662
Insurance	\$12,000	\$28,360	\$44,851	\$49,346	\$49,481
Consulting	\$25,000	\$25,750	\$26,523	\$27,319	\$28,139
Cleaning/Repairs/Maintenance	\$9,000	\$21,270	\$33,638	\$37,009	\$37,110
Utilities	\$7,200	\$17,016	\$26,910	\$29,607	\$29,688
Supplies	\$5,400	\$12,762	\$20,183	\$22,205	\$22,266
Professional Fees	\$5,400	\$12,762	\$20,183	\$22,205	\$22,266
Travel	\$4,500	\$10,635	\$16,819	\$18,505	\$18,555
Telephone	\$3,600	\$8,508	\$13,455	\$14,804	\$14,844
Printing	\$2,700	\$6,381	\$10,091	\$11,103	\$11,133
Web Hosting	\$900	\$2,127	\$3,364	\$3,701	\$3,711
Miscellaneous	\$1,800	\$4,254	\$6,728	\$7,402	\$7,422
	\$327,900	\$550,245	\$802,974	\$919,056	\$926,256

Breakeven Analysis Restaurant

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For the Year Ending,

	Year #1	Year #2	Year #3	Year #4	Year #5
<u>Cost of Sales and Variable Sales Related Expenses:</u>					
Food & Beverages	33.0%	33.0%	33.0%	33.0%	33.0%
Labor	12.0%	12.0%	12.0%	12.0%	12.0%
Paper Supplies	5.0%	5.0%	5.0%	5.0%	5.0%
Royalty Fees	5.0%	5.0%	5.0%	5.0%	5.0%
Advertising	3.5%	3.5%	3.5%	3.5%	3.5%
Ad Fees	1.5%	1.5%	1.5%	1.5%	1.5%
Marketing & Development Fees	1.0%	1.0%	1.0%	1.0%	1.0%
 Total Cost of Sales and Variable Sales Related Expenses	 61.0%	 61.0%	 61.0%	 61.0%	 61.0%
 Profit Margin (Including Variable Sales Related Expenses)	 39.0%	 39.0%	 39.0%	 39.0%	 39.0%

Breakeven Analysis Restaurant

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	For the Year Ending,				
	Year #1	Year #2	Year #3	Year #4	Year #5
Annual Gross Sales Needed to Break Even	\$840,769	\$1,410,885	\$2,058,908	\$2,356,554	\$2,375,015
Projected Stores Open for Business	1.5	3.5	5.5	6.0	6.0
Average Annual Gross Sales Needed to Break Even Per Restaurant	\$560,513	\$403,110	\$374,347	\$392,759	\$395,836
Average Weekly Gross Sales Needed to Break Even Per Restaurant	\$10,779	\$7,752	\$7,199	\$7,553	\$7,612
Average Daily Gross Sales Needed to Break Even Per Restaurant	\$1,540	\$1,107	\$1,028	\$1,079	\$1,087
Average number of customers spending \$14 daily needed to break even	110	79	73	77	78

Balance Sheet

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- Normally lists all assets liabilities and capital
- The total of all numbers of assets must equal or balance the total of all numbers liabilities and capital.
- A balance sheet balances according to this equation:

$$\text{Assets} = \text{Liabilities} + \text{Capital}.$$

Balance Sheet: Assets

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- These are things of value owned by a business.
 - Physical Property
 - Building
 - Object
 - Stock Certificate
 - Right
 - Patented process

Balance Sheet: Current Assets

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- Can be expected to turn into cash within a year or less.
 - Cash
 - Marketable Securities
 - Accounts Receivable
 - Inventory.

Balance Sheet: Fixed Assets

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- Cannot be quickly turned into cash without interfering with business operations.
 - Land
 - Buildings
 - Machinery
 - Equipment
 - Furniture
 - Long-term investments

Balance Sheet: Intangible Assets

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- Rights or things of value to a company, which are not physical objects. These assets may be the most important ones a company owns. Often they do not appear on financial reports.
 - Patents
 - Copyrights
 - Trademarks
 - Licenses
 - Franchises

Balance Sheets: Liabilities

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- Amounts owed by a company to others.

Balance Sheet: Current Liabilities

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- Amounts due within one year or less
 - Accounts payable
 - Accruals
 - Loans due to be paid within a year
 - Taxes due within a year

Balance Sheet: Long-term Liabilities

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- Due more than a year in the future
 - Mortgages
 - Bonds
 - Long-term loans

Balance Sheet: Capital - Partnership

33

- Capital money & investment are fixed assets with a long-term use invested in a business by its owners.
 - Buildings
 - Machinery
 - Fixed assets in a business.

Balance Sheet: Ratios

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Current Ratio

Indicates the extent to which the claims of short-term creditors are covered by assets that are expected to be converted to cash in a period roughly corresponding to the maturity of the liabilities.

Current Assets/ Current Liabilities

$$\$383,879 / \$230,551 = 1.66$$

- What does this tell us?
- What changes can/need to be made?

Balance Sheet: Ratios

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Debt-to-Equity Ratio

Provides another measure of the fund provided by creditors versus the funds provided by owners.

Total Debt / Total Stockholders' Equity

$$\$144,835 / \$165,594 = 87.4\%$$

- What does this tell us?
- What changes can/need to be made?

Balance Sheet: Ratios

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Inventory Turnover

When compared to industry averages, it provides an indication of whether a company has excessive or perhaps inadequate finished goods inventory.

Cost of Goods Sold/Average Inventory

\$66,713 / \$111,755

Entire inventory is sold in .6 days - Less than 1 day.

- What does this tell us?
- What changes can/need to be made?

Balance Sheet: Ratios

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Accounts Receivable Turnover

A measure of the average length of time it takes the firm to collect the sales made on credit.

Average Annual Sales / Average Account Receivable

\$975,061/\$193,041=

AR turnover 5.05 times per year

- What does this tell us?
- What changes can/need to be made?

Key Financial Ratios

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- Financial ratios illustrate the strengths and weaknesses of a business.
- Chart unusual fluctuations and gauge performance.
- Ratios are helpful analyze, forecast, set goals and track progress.

Acknowledgement

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- Definitions furnished by
 - www.dummies.com
 - Glossary of Important Financial Accounting Terms, From *How to Keep Score in Business*, Copyright by Robert Follett
- Ratios furnished by
 - *Modern Industry* and *Dun's Reviews* published by Dun & Bradstreet (14 ratios for 125 lines of business activities)
 - Robert Morris Associates, Annual Statement Studies (11 ratios for 156 lines of business)
 - FTC-SEC's *Quarterly Financial Report* for manufacturing corporations
 - Thompson, AA, Jr., and Strickland, A.J.,III. 1996. Strategic Management: Concepts and cases, 9th ed. Irwin: Chicago, p. 326-7. Copyright, Irwin (Times Mirror Higher Education Group)

Thank You!

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Key Financial & Accounting Terms

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- **General ledger**

- The record of all financial transactions taking place within a business during a particular accounting cycle, ordered by chart of account number

- **Depreciation**

- The method used to systematically move the cost of an asset from the balance sheet to the income statement over the course of the asset's useful life. Financial accounting uses three methods of depreciation based on time: the straight-line, declining balance, and sum-of-the-years'-digits methods. A fourth method, units-of-production, is based on actual physical usage of the fixed asset.

- **Contingency**

- A liability that exists because of a circumstance (such as a lawsuit) that may cause a business loss in the future depending on other events that have yet to happen (such as the outcome of a trial) and indeed may never happen

Key Financial & Accounting Terms

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- **Stockholders' equity**

- The claim that shareholders of the corporation have to the company's net assets. Stockholders' equity has three common components:
- **Paid-in capital:** Money the shareholders in the corporation invest in the business
- **Treasury stock:** A company's own stock, which it buys back from other investors
- **Retained earnings:** The company's total net income or loss from the first day it's in business to the date on the balance sheet

- **Business combination**

- The The process of combining two or more businesses — also known as mergers and acquisitions (M&A). Business combinations come in two different forms:
- Asset acquisition: One company acquires the net assets of another company.
- Stock acquisition: The acquiring company purchases an investment in another company (which is now a subsidiary).

Key Financial & Accounting Terms

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- **Income Statement** - A summary of a management's performance as reflected in the profitability (or lack of it) of an organization over a certain period. It itemizes the revenues and expenses of past that led to the current profit or loss, and indicates what may be done to improve the results. In contrast to a balance sheet, an income statement depicts what happened over a month, quarter, or year. It is based on a fundamental accounting equation ($\text{Income} = \text{Revenue} - \text{Expenses}$) and shows the rate at which the owners equity is changing for better or worse. Along with balance sheet and cash flow statement it forms the basic set of financial information required to manage an organization. Also called earnings report, operating statement, or profit and loss account.
- **Balance Sheet** - A balance sheet is a statement of a company's financial position at a particular moment in time. This financial report shows the two sides of a company's financial situation -- what it owns and what it owes. What the company owns, called its assets, is always equal to the combined value of what the company owes, called its liabilities, and the value of its shareholders' equity. Expressed as an equation, a company's balance sheets shows $\text{assets} = \text{liabilities} + \text{shareholder value}$. If the company were to dissolve, then its debts would be paid, and any assets that remained would be distributed to the shareholders as their equity. Bankruptcy occurs in situations where there is nothing left to distribute to the shareholders, and the company balance sheet is in fact unbalanced because the company owes more than it owns.
- **Statement of Cash Flows** - summarizes business' cash inflows and outflows during an accounting period

Additional Reference Terms

- **Account** -- a record of financial transactions; usually refers to a specific category or type, such as travel expense account or purchase account.
- **Accountant** -- a person who trained to prepare and maintain financial records.
- **Accounting** -- a system for keeping score in business, using dollars.
- **Accounting period** -- the period of time over which profits are calculated. Normal accounting periods are months, quarters, and years (fiscal or calendar).
- **Accounts payable** -- amounts owed by the company for the goods or services it has purchased from outside suppliers.
- **Accounts receivable** -- amounts owed to the company by its customers.
- **Accrual basis, system, or method** -- an accounting system that records revenues and expenses at the time the transaction occurs, not at the time cash changes hands. If you buy a coat and charge it, the store records or accrues the sale when you walk out with the coat, not when you pay your bill. Cash basis accounting is used by individuals. Accrual basis accounting is used by most businesses.
- **Accrued expenses, accruals** -- an expense which has been incurred but not yet paid for. Salaries are a good example. Employees earn or accrue salaries each hour they work. The salaries continue to accrue until payday when the accrued expense of the salaries is eliminated.
- **Aging** -- a process where accounts receivable are sorted out by age (typically current, 30 to 60 days old, 60 to 120 days old, and so on.) Aging permits collection efforts to focus on accounts that are long overdue.

Additional Reference Terms

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- **Amortize** -- to charge a regular portion of an expenditure over a fixed period of time. For example if something cost \$100 and is to be amortized over ten years, the financial reports will show an expense of \$10 per year for ten years. If the cost were not amortized, the entire \$100 would show up on the financial report as an expense in the year the expenditure was made. (See entries on Expenditure and Expense.)
- **Appreciation** -- an increase in value. If a machine cost \$1,000 last year and is now worth \$1,200, it has appreciated in value by \$200. (The opposite of depreciation.)
- **Assets** -- things of value owned by a business. An asset may be a physical property such as a building, or an object such as a stock certificate, or it may be a right, such as the right to use a patented process.
 - **Current Assets** are those assets that can be expected to turn into cash within a year or less. Current assets include cash, marketable securities, accounts receivable, and inventory.
 - **Fixed Assets** cannot be quickly turned into cash without interfering with business operations. Fixed assets include land, buildings, machinery, equipment, furniture, and long-term investments.
 - **Intangible Assets** are items such as patents, copyrights, trademarks, licenses, franchises, and other kinds of rights or things of value to a company, which are not physical objects. These assets may be the most important ones a company owns. Often they do not appear on financial reports.
- **Audit** -- a careful review of financial records to verify their accuracy.

Additional Reference Terms

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- **Bad debts** -- amounts owed to a company that are not going to be paid. An account receivable becomes a bad debt when it is recognized that it won't be paid. Sometimes, bad debts are written off when recognized. This is an expense. Sometimes, a reserve is set up to provide for possible bad debts. Creating or adding to a reserve is also an expense.
- **Balance sheet** -- a statement of the financial position of a company at a single specific time (often at the close of business on the last day of the month, quarter, or year.) The balance sheet normally lists all assets on the left side or top while liabilities and capital are listed on the right side or bottom. The total of all numbers on the left side or top must equal or balance the total of all numbers on the right side or bottom. A balance sheet balances according to this equation: $\text{Assets} = \text{Liabilities} + \text{Capital}$.
- **Bond** -- a written record of a debt payable more than a year in the future. The bond shows amount of the debt, due date, and interest rate.
- **Book value** -- total assets minus total liabilities. (See also net worth.) Book value also means the value of an asset as recorded on the company's books or financial reports. Book value is often different than true value. It may be more or less.
- **Breakeven point** -- the amount of revenue from sales which exactly equals the amount of expense. Breakeven point is often expressed as the number of units that must be sold to produce revenues exactly equal to expenses. Sales above the breakeven point produce a profit; below produces a loss.

Additional Reference Terms

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- **Capital** -- money invested in a business by its owners. (See equity.) On the bottom or right side of a balance sheet. Capital also refers to buildings, machinery, and other fixed assets in a business. A capital investment is an investment in a fixed asset with a long-term use.
- **Capitalize** -- to capitalize means to record an expenditure on the balance sheet as an asset, to be amortized over the future. The opposite is to expense. For example, research expenditures can be capitalized or expensed. If expensed, they are charged against income when the expenditure occurs. If capitalized, the expenditure is charged against income over a period of time usually related to the life of the products or services created by the research.
- **Cash** -- money available to spend now. Usually in a checking account.
- **Cash flow** -- the amount of actual cash generated by business operations, which usually differs from profits shown.
- **Chart of accounts** -- a listing of all the accounts or categories into which business transactions will be classified and recorded. Each account usually has a number. Transactions are coded by this number for manipulation on computers.
- **Contingent liabilities** -- liabilities not recorded on a company's financial reports, but which might become due. If a company is being sued, it has a contingent liability that will become a real liability if the company loses the suit.
- **Cost of sales, cost of goods sold** -- the expense or cost of all items sold during an accounting period. Each unit sold has a cost of sales or cost of the goods sold. In businesses with a great many items flowing through, the cost of sales or cost of goods sold is often computed by this formula: $\text{Cost of Sales} = \text{Beginning Inventory} + \text{Purchases During the Period} - \text{Ending Inventory}$.

Additional Reference Terms

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- **Credit** -- an accounting entry on the right or bottom of a balance sheet. Usually an increase in liabilities or capital, or a reduction in assets. The opposite of credit is debit. Each credit in a balance sheet has a balancing debit. Credit has other usages, as in "You have to pay cash, your credit is no good." Or "we will credit your account with the refund."
- **Debit** -- an accounting entry on the left or top of a balance sheet. Usually an increase in assets or a reduction in liabilities. Every debit has a balancing credit.
- **Deferred charges** -- see prepaid expenses.
- **Deferred income** -- a liability that arises when a company is paid in advance for goods or services that will be provided later. For example, when a magazine subscription is paid in advance, the magazine publisher is liable to provide magazines for the life of the subscription. The amount in deferred income is reduced as the magazines are delivered.
- **Depreciation** -- an expense that is supposed to reflect the loss in value of a fixed asset. For example, if a machine will completely wear out after ten year's use, the cost of the machine is charged as an expense over the ten-year life rather than all at once, when the machine is purchased. Straight line depreciation charges the same amount to expense each year. Accelerated depreciation charges more to expense in early years, less in later years. Depreciation is an accounting expense. In real life, the fixed asset may grow in value or it may become worthless long before the depreciation period ends.
- **Discounted cash flow** -- a system for evaluating investment opportunities that discounts or reduces the value of future cash flow. (See present value.)
- **Dividend** -- a portion of the after-tax profits paid out to the owners of a business as a return on their investment.
- **Double entry** -- a system of accounting in which every transaction is recorded twice -- as a debit and as a credit.

Additional Reference Terms

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- **Earnings per share** -- a company's net profit after taxes for an accounting period, divided by the average number of shares of stock outstanding during the period.
- **80 - 20 rule** -- a general rule of thumb in business that says that 20% of the items produce 80% of the action -- 20% of the product line produces 80% of the sales, 20 percent of the customers generate 80% of the complaints, and so on. In evaluating any business situation, look for the small group which produces the major portion of the transactions you are concerned with. This rule is not exactly accurate, but it reflects a general truth, nothing is evenly distributed.
- **Equity** -- the owners' share of a business.
- **Expenditure** -- an expenditure occurs when something is acquired for a business -- an asset is purchased, salaries are paid, and so on. An expenditure affects the balance sheet when it occurs. However, an expenditure will not necessarily show up on the income statement or affect profits at the time the expenditure is made. All expenditures eventually show up as expenses, which do affect the income statement and profits. While most expenditures involve the exchange of cash for something, expenses need not involve cash. (See expense below.)
- **Expense** -- an expenditure which is chargeable against revenue during an accounting period. An expense results in the reduction of an asset. All expenditures are not expenses. For example, a company buys a truck. It trades one asset - cash - to acquire another asset. An expenditure has occurred but no expense is recorded. Only as the truck is depreciated will an expense be recorded. The concept of expense as different from an expenditure is one reason financial reports do not show numbers that represent spendable cash. The distinction between an expenditure and an expense is important in understanding how accounting works and what financial reports mean. (To expense is a verb. It means to charge an expenditure against income when the expenditure occurs. The opposite is to capitalize.)

Additional Reference Terms

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- **Fiscal year** -- an accounting year than begins on a date other than January 1.
- **Fixed asset** -- see asset.
- **Fixed cost** -- a cost that does not change as sales volume changes (in the short run.) Fixed costs normally include such items as rent, depreciation, interest, and any salaries unaffected by ups and downs in sales.
- **Goodwill** -- in accounting, the difference between what a company pays when it buys the assets of another company and the book value of those assets. Sometimes, real goodwill is involved - a company's good reputation, the loyalty of its customers, and so on. Sometimes, goodwill is an overpayment.
- **Income** -- see profit.
- **Interest** -- a charge made for the use of money.
- **Inventory** -- the supply or stock of goods and products that a company has for sale. A manufacturer may have three kinds of inventory: raw materials waiting to be converted into goods, work in process, and finished goods ready for sale.
- **Inventory obsolescence** -- inventory no longer salable. Perhaps there is too much on hand, perhaps it is out of fashion. The true value of the inventory is seldom exactly what is shown on the balance sheet. Often, there is unrecognized obsolescence.
- **Inventory shrinkage** -- a reduction in the amount of inventory that is not easily explainable. The most common cause of shrinkage is probably theft.
- **Inventory turnover** -- a ratio that indicates the amount of inventory a company uses to support a given level of sales. The formula is: $\text{Inventory Turnover} = \frac{\text{Cost of Sales}}{\text{Average Inventory}}$. Different businesses have different general turnover levels. The ratio is significant in comparison with the ratio for previous periods or the ratio for similar businesses.
- **Invested capital** -- the total of a company's long-term debt and equity.
- **Journal** -- a chronological record of business transactions

Additional Reference Terms

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- **Ledger** -- a record of business transactions kept by type or account. Journal entries are usually transferred to ledgers.
- **Liabilities** -- amounts owed by a company to others. *Current liabilities* are those amounts due within one year or less and usually include accounts payable, accruals, loans due to be paid within a year, taxes due within a year, and so on. *Long-term liabilities* normally include the amounts of mortgages, bonds, and long-term loans that are due more than a year in the future.
- **Liquid** -- having lots of cash or assets easily converted to cash.
- **Marginal cost, marginal revenue** -- marginal cost is the additional cost incurred by adding one more item. Marginal revenue is the revenue from selling one more item. Economic theory says that maximum profit comes at a point where marginal revenue exactly equals marginal cost.
- **Net worth** -- total assets minus total liabilities. Net worth is seldom the true value of a company.
- **Opportunity cost** -- a useful concept in evaluating alternate opportunities. If you choose alternative A, you cannot choose B, C, or D. What is the cost or loss of profit of not choosing B, C, or D? This cost or loss of profit is the opportunity cost of alternative A. In personal life you may buy a car instead of taking a European vacation. The opportunity cost of buying the car is the loss of the enjoyment of the vacation.
- **Overhead** -- a cost that does not vary with the level of production or sales, and usually a cost not directly involved with production or sales. The chief executive's salary and rent are typically overhead.
- **Post** -- to enter a business transaction into a journal or ledger or other financial record.
- **Prepaid expenses, deferred charges** -- assets already paid for, that are being used up or will expire. Insurance paid for in advance is a common example. The insurance protection is an asset. It is paid for in advance, it lasts for a period of time, and expires on a fixed date.

Additional Reference Terms

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- **Present value** -- a concept that compares the value of money available in the future with the value of money in hand today. For example, \$78.35 invested today in a 5% savings account will grow to \$100 in five years. Thus the present value of \$100 received in five years is \$78.35. The concept of present value is used to analyze investment opportunities that have a future payoff.
- **Price-earnings (p/e) ratio** -- the market price of a share of stock divided by the earnings (profit) per share. P/e ratios can vary from sky high to dismally low, but often do not reflect the true value of a company.
- **Profit** -- the amount left over when expenses are subtracted revenues. *Gross profit* is the profit left when cost of sales is subtracted from sales, before any operating expenses are subtracted. *Operating profit* is the profit from the primary operations of a business and is sales minus cost of sales minus operating expenses. *Net profit before taxes* is operating profit minus non-operating expenses and plus non-operating income. *Net profit after taxes* is the bottom line, after everything has been subtracted. Also called income, net income, earnings. Not the same as cash flow and does not represent spendable dollars.
- **Retained earnings** -- profits not distributed to shareholders as dividends, the accumulation of a company's profits less any dividends paid out. Retained earnings are not spendable cash.
- **Return on investment (ROI)** -- a measure of the effectiveness and efficiency with which managers use the resources available to them, expressed as a percentage. *Return on equity* is usually net profit after taxes divided by the shareholders' equity. *Return on invested capital* is usually net profit after taxes plus interest paid on long-term debt divided by the equity plus the long-term debt. *Return on assets used* is usually the operating profit divided by the assets used to produce the profit. Typically used to evaluate divisions or subsidiaries. ROI is very useful but can only be used to compare consistent entities -- similar companies in the same industry or the same company over a period of time. Different companies and different industries have different ROIs.

- **Revenue** -- the amounts received by or due a company for goods or services it provides to customers. Receipts are cash revenues. Revenues can also be represented by accounts receivable.
- **Risk** -- the possibility of loss; inherent in all business activities. High risk requires high return. All business decisions must consider the amount of risk involved.
- **Sales** -- amounts received or due for goods or services sold to customers. *Gross sales* are total sales before any returns or adjustments. *Net sales* are after accounting for returns and adjustments.
- **Stock** -- a certificate (or electronic or other record) that indicates ownership of a portion of a corporation; a share of stock. *Preferred stock* promises its owner a dividend that is usually fixed in amount or percent. Preferred shareholders get paid first out of any profits. They have preference. *Common stock* has no preference and no fixed rate of return. *Treasury stock* was originally issued to shareholders but has been subsequently acquired by the corporation. *Authorized but unissued stock* is stock which official corporate action has authorized but has not sold or issued. (Stock also means the stock of goods, the stock on hand, the inventory of a company.)
- **Sunk costs** -- money already spent and gone, which will not be recovered no matter what course of action is taken. Bad decisions are made when managers attempt to recoup sunk costs.
- **Trial balance** -- at the close of an accounting period, the transactions posted in the ledger are added up. A test or trial balance sheet is prepared with assets on one side and liabilities and capital on the other. The two sides should balance. If they don't, the accountants must search through the transactions to find out why. They keep making trial balances until the balance sheet balances.
- **Variable cost** -- a cost that changes as sales or production change. If a business is producing nothing and selling nothing, the variable cost should be zero. However, there will probably be fixed costs.

Additional Reference Terms

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- **Working capital** -- current assets minus current liabilities. In most businesses the major components of working capital are cash, accounts receivable, and inventory minus accounts payable. As a business grows it will have larger accounts receivable and more inventory. Thus the need for working capital will increase.
- **Write-down** -- the partial reduction in the value of an asset, recognizing obsolescence or other losses in value.
- **Write-off** -- the total reduction in the value of an asset, recognizing that it no longer has any value. Write-downs and write-offs are non-cash expenses that affect profits.

Budget Example

CATEGORY	BUDGET AMOUNT	ACTUAL AMOUNT	DIFFERENCE
INCOME			
Sales Revenue			
Interest Income			
Investment Income			
Other Income			
TOTAL INCOME			
EXPENSES			
Accounting/Legal Services			
Advertising			
Bank Service Charges			
Fees			
Delivery Charges			
Estimated Taxes			
Health Insurance			
Hiring Costs			
Maintenance			
Interest on Debt			
Inventory Purchases			
Licenses/Permits			
Loan Payments			
Office Supplies			
Payroll			
Professional Fees			
Rent/Lease Payments			
Retirement Contributions			
Subscriptions and Dues			
Utilities			
Vehicle Expenses			
TOTAL EXPENSES			
TOTAL INCOME MINUS TOTAL EXPENSES			

* Do on at least a monthly basis and compare quarterly and year to date0

Budget vs. actual comparison: Why it's necessary

July 5, 2012

Many small business owners think of budgeting as a non-essential task, something they'll get to when they have time. These leaders, who operate their businesses without a formal strategic financial plan, are doing themselves a major disservice, as it can be impossible to consider how far their company has come, when they have no starting point or means of tracking progress. Rather than fly by the seat of their pants, these business leaders need to conduct a budget vs. actual comparison. This process involves using financial data to assess how closely a company's spending and generated revenue meets the financial forecasting projections included in its budget. By taking the time to conduct this comparison, business leaders can determine the following: whether there are areas that need more funding; whether the budget is realistic; and whether they are on pace to meet their long-term objectives.

Below are a few tips for understanding budget vs. actual comparison.

What are reasons for the variances?

There are several reasons why there will be discrepancies between the budget and the actual amount for expenditures and revenues. These differences can occur because of the strength of the economy, consumer needs or preferences and the actions of competitors. Because these factors can be unpredictable, it's important for small businesses to reflect on the exact cause or causes that resulted in the variance.

How can small business owners interpret the variances?

Creating a budget vs. actual comparison is extremely important for small businesses because it allows them to alter their future financial forecasts based upon the numbers collected in the monthly reports. Small business owners can see where the budget can be improved, as well as parts of the budget that were very accurate. Through better planning, monitoring, evaluating and controlling, small business owners can improve their processes after analyzing the budget vs. actual comparison.

What can be done about the variances?

Depending upon how the actual results compared to the budget, small business owners can make the necessary adjustments to their budget. Whether it be modifying ongoing expenditures or strategies, or cutting back spending on marketing and advertising, small business owners need to use this informative data to improve their budgeting strategies and enhance their operations. However, small business owners should be sure not to overreact and change their budget drastically based on temporary factors that will affect a business for only a short period of time.

Courtesy of PlanGuru Blog July 2012

Profitability Ratios

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Gross Profit Margin

An indication of the total margin available to cover operating expenses and yield a profit.

$$\text{Sales} - \text{Cost of Goods Sold} / \text{Sales}$$

Operating Profit Margin (or Return on Sales)

An indication of the firm's profitability from current operations without regard to the interest charges accruing from the capital structure.

$$\text{Profits before Taxes and Interest} / \text{Sales}$$

Profitability Ratios

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Net Profit Margin (or Net Return on Sales)

Shows after tax profits per dollar of sales. Subpar profit margins indicate that the firm's sales prices are relatively low or that costs are relatively high or both.

Profits after Taxes / Sales

Return on Total Assets

A measure of the return on total investment of the enterprise. It is sometimes desirable to add interest to after tax profits to form the numerator of the ratio since total assets are financed by creditors as well as by stockholders; hence, it is accurate to measure the productivity of assets by the returns provided to both classes of investors.

Profits after Taxes / Total Assets

Or

Profits after Taxes + Interest / Total Assets

Profitability Ratios

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Return on Stockholder's Equity (or Return on Net Worth)

A measure of the rate of return on stockholders' investment in the enterprise.

Profits after Taxes/ Total Stockholder's Equity

Return on Common Equity

A measure of the rate of return on the investment the owners of the common stock have made in the enterprise. More commonly referred to as “return on equity” or ROE.

Profits after Taxes-Preferred Stock Dividends/
Total Stockholders' Equity – Par Value of Preferred Stock

Profitability Ratios

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Earnings per share

Shows the earnings available to the owners of each share of Common Stock.

Profits after Taxes- Preferred Stock Dividends/
Number of Shares of Common Stock Outstanding

Liquidity Ratios

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Current Ratio

Indicates the extent to which the claims of short-term creditors are covered by assets that are expected to be converted to cash in a period roughly corresponding to the maturity of the liabilities.

Current Assets/ Current Liabilities

Quick Ratio (or acid-test ratio)

A measure of the firm's ability to pay off short-term obligations without relying on the sale of its inventories.

Current Assets-Inventory/ Current Liabilities

Liquidity Ratios

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Inventory to Net Working Capital

A measure of the extent to which the firm's working capital is tied up in inventory.

$\text{Inventory} / (\text{Current Assets} - \text{Current Liabilities})$

Leverage Ratios

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Debt-to-Assets Ratio

Measures the extent to which borrowed funds have been used to finance the firm's operations.

Total Debt / Total Assets

Debt-to-Equity Ratio

Provides another measure of the fund provided by creditors versus the funds provided by owners.

Total Debt / Total Stockholders' Equity

Long-Term-Debt-to-Equity Ratio

A widely used measure of the balance between debt and equity in the firm's long-term capital structure.

Long-Term Debt / Total Stockholders' Equity

Leverage Ratios

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Times-Interest-Earned (or Coverage) Ratio

Measures the extent to which earnings can decline without the firm becoming unable to meet its annual interest costs.

Profits before Interest and Taxes/ Total Interest Charges

Fixed-Charge Coverage

A more inclusive indication of the firm's ability to meet all of its fixed-charge obligations.

$$\frac{(\text{Profits before Taxes and Interest} + \text{Lease Obligations})}{(\text{Total Interest Charges} + \text{Lease Obligations})}$$

Activity Ratios

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Inventory Turnover

When compared to industry averages, it provides an indication of whether a company has excessive or perhaps inadequate finished goods inventory.

Sales/ Inventory of Finished Goods

Fixed Assets Turnover

A measure of the sales productivity and utilization of plant and equipment.

Sales/ Fixed Assets

Total Assets Turnover

A measure of the utilization of all the firm's assets; a ratio below the industry average indicates the company is not generating a sufficient volume of business, given the size of its asset investment.

Sales/ Total Assets

Activity Ratios

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Accounts Receivable Turnover

A measure of the average length of time it takes the firm to collect the sales made on credit.

Annual Sales / Accounts Receivable

Average Collection Period

Indicates the average length of time must wait after making a sale before it receives payment. This has implications for financial management and quality of customers (marketing).

Accounts Receivable / (Total Sales / 365)

Or

Accounts Receivable / Average Daily Sales

Other Ratios

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Dividend Yield on Common Stock

A measure of the return to owners received in the form of dividends.

Annual Dividends per Share/ Current Market Price per Share

Price-Earnings Ratio

Faster-growing or less-risky tend to have higher price-earnings ratios than slower growing or more-risky firms.

Current Market Price per Share/ After Tax Earnings per Share

Other Ratios

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Dividend Payout

Indicates the percentage of profits paid out as dividends.

Annual Dividends per Share/ After-Tax Earnings per Share

Cash Flow per Share

A measure of the discretionary funds over and above expenses that are available for use by the firm.

(After Tax Profits + Depreciation)/ Number of Common Shares Outstanding