Chapter 3

Income Statement Concepts: Income, Revenues, and Expenses

Revenue Recognition Principle

- Dictates that revenue be recognized in the accounting period in which it is earned.
- Revenue is earned when the service has been provided or when the goods are delivered (i.e., an exchange has taken place.
- You are reasonably certain to collect the revenue.

Income Concepts

Net Income (Loss) – The increase (decrease) in net assets; resulting from operations; over a period of time.

Net Assets – The excess of an entity's economic resources (assets) over its obligations (liabilities).

NET ASSETS (EQUITIES) = ASSETS – LIABILITIES

Equities – Another name for net assets.

Changes in Net Assets

Generally, the cause of an increase (decrease) in NET ASSETS from one period of time is INCOME (LOSS). However, since INCOME only results from operations, exchanging shares of the entity's common stock for cash increases net assets; it does not result from INCOME, but rather from an additional equity investment by owners.

Changes in Net Assets

Also, the payment of dividends reduces net assets as it does not result from LOSS, but rather from the withdrawal of assets from the entity for use by the stockholders (i.e., owners).

Effect of Net Income From Operations on Net Assets

Beginning Balance Sheet 1/01/04

Ending Balance Sheet 12/31/04

Income for the Period 1/1/04 –12/31/04

Revenue

Revenues – increase in net assets resulting from an entity's operation over a period of time.

Alternative Names for Revenue:

Sales – Used by merchandising entities (e.g., Wal-Mart) and manufacturing concerns (e.g., Ford).

Sales of Services or Total Billings –Used by service firms (e.g., Deloitte Touche).

Revenue (continued)

Interest Revenue – Used by financial institutions that earn revenues by lending money and charging interest (e.g., Bank of Boston).

Commissions, Asset Management and Portfolio Service Fees– Used by brokerage firms (e.g., Merrill Lynch) for fees charged for the different financial services performed for customers.

Premium Revenue – Used by insurance companies.

Gains and Losses

The difference between what is received by an entity and the book value of what is given up by the entity is reported as a gain or loss. An example is the sale of equipment. Since the selling of assets is not the primary purpose of the business, the gain (loss) is reported separately on the income statement and not as part of income from continuing operations.

Income Statement

- Reports success or failure of the company's operations during the period.
- Summarizes all revenue and expenses for period of time --month, quarter, or year. If revenues exceed expenses, the result is a net income. If expenses exceed revenue, the result is a (net loss).

Retained Earnings

Retained earnings is net income minus dividends paid since the formation of the business. It is net income that is retained in the business not paid to shareholders.

The balance in retained earnings is part of the stockholders' claim on the total assets of the corporation.

Retained Earnings

Example: A balance of $100,000 in retained earnings does not mean that there should be $100,000 in cash. The income resulting from the excess of revenues over expenses may have been used to purchase other assets--buildings, equipment, etc.

Articulation of The Financial Statements

Assets = Liabilities + Stockholders' Equity

A = L + Common Stock + Retained Earnings

Revenue (R) - Expenses (E) = NI

One should view the retained earnings statement as the "bridge" that connects the income statement with the balance sheet.

Matching Principle

Requires that expenses be recorded in the same period in which the revenues they helped produce are recorded.

Accounting Conventions - Expenses

- Accounting conventions relating to expenses are more involved than revenue's "substantial completion of the earnings process".
- Some expenses "follow" the earning of revenue (e.g., salaries of administrative staff).
- Others follow a "systematic" process (e.g., depreciation of plant and equipment is often straight-line or simply a fixed amount per year).

Expense Concepts

Expenses – The resources consumed in the process of earning revenues. This consumption results in a decrease in net assets over a period of time.

Examples of expenses:

Cost of sales – The expense associated with the cost of merchandise sold to customers by a merchandiser (e.g., J.C. Penney).

Rent expense – The cost of renting offices or warehouses.

Depreciation – The cost of using long-term assets such as "Property, Plant and Equipment."

Depreciation

Depreciation - is the rational and systematic process of allocating the cost of a plant asset over its useful (service) life. By expensing an asset's cost over its useful life results in a better match of the expense to the periods the asset is expected to generate revenue.

Effect of Debits/Credits on Accounts

DEBITS

Increase – Expenses and Dividends

Decrease – Revenues

CREDITS

Decrease – Expenses and Dividends

Increase – Revenues

Normal Balance

The term normal balance for an account is the side (i.e., debit or credit) that is increased.

Normal Debit Balance: Expenses, Dividends

Normal Credit Balance: Revenues

Let's Continue With Transaction Analysis

Transaction Analysis

Recall the basic steps in the recording process are:

- Analyze each transaction in terms of its effect on the accounts.
- Record the debit and credit effects on specific accounts for each transaction.

Recording A Transaction

- On October 17 Rhody receives $40,000 in cash for services performed.
- How does this affect the accounting equation?

Recording A Transaction

A	=	L	+	SE
+				+

- Assets increase
- Stockholders' equity increases via retained earnings (i.e., revenue)

What asset account and "indirectly" what Stockholders' equity account is affected?

Recording A Transaction

Cash	(debit)	$40,000	
Service Revenue	(credit)		$40,000

Note: The income statement account revenue is directly affected. However, this indirectly affects stockholders' equity

Recall: Debits are always written first and you always indent the credit.

Recording A Transaction

- On November 5 Rhody pays its employees $5,000 for work performed.
- How does this affect the accounting equation?

Recording A Transaction

A = L + SE

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- Assets decrease
- Stockholders' equity decreases via retained earnings (i.e., wage expense)

What asset account and "indirectly" what Stockholders' equity account is affected?

Recording A Transaction

Salary Expense (debit) $5,000
Cash (credit) $5,000

Note: The income statement account expense is directly affected. However, this indirectly affects stockholders' equity

Recall: Debits are always written first and you always indent the credit.

Recording A Transaction

- On November 22 Rhody performs services and bills the client $15,000 for the services
- How does this affect the accounting equation?

Recording A Transaction

A = L + SE

\+   +

- Assets increases
- Stockholders' equity increases via retained earnings (i.e.,revenue)

What asset account and "indirectly" what Stockholders' equity account is affected?

Recording A Transaction

Accounts Receivable (debit) $15,000
Revenue (credit) $15,000

Note: The income statement account revenue is directly affected. However, this indirectly affects stockholders' equity

Recall: Debits are always written first and you always indent the credit.

Recording A Transaction

- On December 12 Rhody pays a dividend to its stockholders.
- How does this effect the accounting equation?

Recording A Transaction

A = L + SE

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- Assets decrease
- Stockholders' equity decreases via retained earnings (i.e., dividends)

What asset account and "indirectly" what Stockholders' equity account is affected?

Recording A Transaction

Dividends (debit)	$500	
Cash	(credit)	$500

Note: The retained earnings statement is directly affected. However, this indirectly affects stockholders' equity

Recall: Debits are always written first and you always indent the credit.

T-Account

Remember every journal entry will be posted to the appropriate account. For example, based on the entries made, the T-Account for revenue would have an ending credit balance of $55,000 (see next slide).

T - Account

REVENUE

	Debit	Credit
10/17		40,000
11/22		15,000
		55,000
Balance		55,000 (Credit)

"START" Corporation
Trial Balance (From Chapter 2)
December 31, 2004

	Debit	Credit
Cash	$12,000	
Note Receivable	10,000	
Supplies	4,000	
Inventory	14,000	
Prepaid Insurance	12,000	
Office Equipment	20,000	
Accounts Payable		14,000
Unearned Service Revenue		18,000
Common Stock		40,000
	$ 72,000	$72,000

“START" Corporation
Updated Trial Balance
December 31, 2004

	Debit	Credit
Cash	$46,500	
Supplies	4,000	
Accounts Receivable	15,000	
Note Receivable	10,000	
Inventory	14,000	
Prepaid Insurance	12,000	
Office Equipment	20,000	
Accounts Payable		14,000
Unearned Service Revenue		18,000
Common Stock		40,000
Dividends	500	
Service Revenue		55,000
Salaries Expense	5,000	
	$127,000	$127,000

Accrual Basis Accounting

Thus, revenue is recorded only when earned not when cash is received

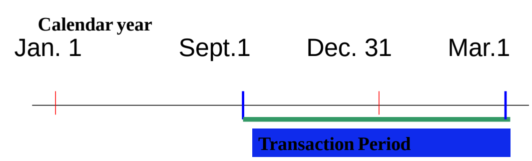
and

Expense is recorded only when incurred not when cash paid

The Need for Adjusting Entries

- Companies are on a calendar or fiscal year and business transactions can cut across two years.
- Therefore, adjusting entries are needed to ensure that the revenue recognition and matching principles are followed.

The Need for Adjusting Entries



Rule For Adjusting Entries

Every adjusting entry will affect an income statement account and a balance sheet account. The balance sheet account **NEVER** will be **CASH.**

Major Types Of Adjusting Entries

Adjusting entries can be classified as either

- ☞Prepayments or
- ☞Accruals

Each of these classes has two subcategories.

Adjusting Entries For Prepayments

Prepayments fall into two categories--

- Prepaid expenses

  and

- Unearned revenues.

Prepayments

Cash has been spent but the item acquired has not been used or consumed

or

Cash has been collected before revenue is earned

Prepaid Expenses

Prepaid expenses - expenses have been paid in cash and are recorded as assets until they are used or consumed.

Prepaid expenses expire with the passage of time (i. e., rent or insurance) or they are consumed (i. e., supplies or depreciation).

Prepaid Expenses

Recall on April 1, Rhody paid $12,000 for a one-year insurance policy.

Original Entry:

Prepaid Insurance (debit) $12,000

Cash (credit) $12,000

Prepaid Expenses

Adjusting Entry:

Insurance Expense (debit) $9,000

Prepaid Insurance (credit) $9,000

Calculation:

$\$12,000 \times \frac{9}{12} = \$9,000$

Prepaid Expenses

Recall on January 1, Rhody paid $20,000 for equipment. The equipment has a useful life of 5 years.

Original Entry:

Equipment (debit) $20,000

Cash (credit) $20,000

Prepaid Expenses

Adjusting Entry:
Depreciation Expense (debit) $4,000
Accumulated Depreciation (credit) 4,000

Calculation:
$20,000 / 5 = $4,000

Unearned Revenues

- Money received and recognized as liability until the moment of the earning process complete.

Unearned Revenues

Recall on September, 1 Rhody received $18,000 from one of its leesees
Leasing term is 1 year.

Initial:
Cash $18,000
Unearned rent revenue $18,000

Unearned Revenue

Adjusting Entry:
Unearned rent revenue (debit) $6,000
Rent revenue (credit) $6,000

Calculation:
$\$18{,}000 \times \frac{4}{12} = \$6{,}000$

Adjusting Entries For Accruals

Accruals fall into two categories
- Accrued revenue
  and
- Accrued expenses

Accrued Revenue

Accrued revenues are revenues that have been earned but not yet received in cash.

Accrued Revenues

Recall on October 1, 2004, Rhody lent the Minutemen Corporation $10,000 in the form of a note receivable. The note is due on September 30, 2005, and carries an interest rate of 9%.

Original Entry:

Note Receivable (debit) $10,000

Cash (credit) $10,000

Accrued Revenues

Interest receivable is the amount of income a company receives for the use of its money. Information needed to compute interest income:

- Face value of note
- Interest rate (expressed as annual rate)
- The length of time note is outstanding

Accrued Revenues

Adjusting Entry:

Interest Receivable (debit) $225

Interest income (credit) $225

Calculation:

$\$10{,}000 \times 9\% = \$900 \times \frac{3}{12} = \$225$

Accrued Expenses

Accrued expenses are expenses that have been incurred but not yet paid in cash and there is no original entry.

Accrued Expenses

Rhody pays its workers every 2 weeks on Friday. The total payroll is $80,000 every two weeks. The employees work only Monday - Friday. Assume that the last payday in December is the 26th and that the next payday is January 9. What adjusting entry must be made at the end of December?

Original Entry:

NO ENTRY

Accrued Expenses

December/January

S	M	T	W	TH	F	S
21	22	23	24	25	26	27
28	29	30	31	1	2	3
4	5	6	7	8	9	10

Green days in 2004 - (3)

Red days in 2005 – (7)

The 26th and 9th are paydays

Accrued Expenses

Adjusting Entry:

Salary expense (debit) $24,000

Salary payable (credit) $24,000

Calculation:

$$\$80{,}000 \times \frac{3 \text{ days}}{10 \text{ days}} = \$24{,}000$$

The Accounting Cycle

- Analyze business transactions.
- Journalize the transactions.
- Put in proper T – accounts (done by computer).
- Prepare a trial balance.
- Journalize and post adjusting entries--prepayments and accruals.
- Prepare an adjusting trial balance.

The Accounting Cycle

- Prepare financial statements. Note the financial statements must be prepared in this order since the income flows into the retained earnings statement which flows into the balance sheet:
  - Income statement
  - Retained earnings statement
  - Balance sheet
- Close out all temporary accounts

The Nature And Purpose of an Adjusted Trial Balance

- The adjusted trial balance is prepared after all adjusting entries have been journalized and posted.
- The adjusted trial balance shows the balances of all accounts.
- Financial statements are prepared from the adjusted trial balance.

Rhody Corporation
Adjusted Trial Balance
December 31, 2004

	Debit	Credit	Debit	Credit	Debit	Credit
Cash	$46,500				46,500	
Supplies	4,000				4,000	
Note Receivable	10,000				10,000	
Interest Receivable			225		225	
Accounts Receivable	15,000				15,000	
Inventory	14,000				14,000	
Prepaid Insurance	12,000			9,000	3,000	
Office Equipment	20,000				20,000	
Accum. Depreciation				4,000		4,000
Accounts Payable		14,000				14,000
Salary Payable				24,000		24,000
Unearned Service Revenue		18,000	6,000			12,000
Common Stock		40,000				40,000
Dividends	500				500	
Service Revenue		55,000				55,000
Salaries Expense	5,000		24,000		29,000	
Insurance Expense			9,000		9,000	
Depreciation Expense			4,000		4,000	
Interest Income				225		225
Rent Revenue				6,000		6,000
Totals	$127,000	$127,000	$43,225	$43,225	$155,225	$155,225

Rhody Corporation
Income Statement
January 1, 2004 - December 31, 2004

Revenue:		
Service Revenue	$55,000	
Rent Revenue	6,000	
Interest Income	225	
Total Revenue		$61,225
Expenses:		
Salaries Expense	$29,000	
Insurance Expense	9,000	
Depreciation Expense	4,000	
Total Expenses		42,000
Net Income		$19,225

Rhody Corporation
Retained Earnings Statement
December 31, 2004

	Retained Earnings on 1/1/04	$ 0
+	Net Income (From Income Statement)	19,225
-	Dividends	500
	Retained Earnings on 12/31/04	$18,725

Rhody Corporation
Balance Sheet
January 1, 2004 - December 31, 2004

ASSETS		
Cash	$ 46,500	
Accounts Receivable	15,000	
Note Receivable	10,000	
Interest Receivable	225	
Supplies	4,000	
Inventory	14,000	
Prepaid Insurance	3,000	
Total Current Assets		$92,725
Office Equipment	$20,000	
Accum. Depreciation	(4,000)	16,000
TOTAL ASSETS		**$108,725**
LIABILITIES		
Accounts Payable	$14,000	
Salary Payable	24,000	
Unearned Service Revenue	12,000	
Total Current Liabilities		$50,000
STOCKHOLDERS' EQUITY		
Common Stock		40,000
Retained Earnings (FROM Retained Earnings Statement)		18,725
TOTAL LIABILITIES & STOCKHOLDERS' EQUITY		**$108,725**

Temporary/Permanent Accounts

- The computer will zero out all temporary accounts (i.e., income statement accounts revenue and expenses) and the dividend account. The income statement accounts are zeroed out because an income statement is limited to a period of time (i.e., one year).
- The permanent balance sheet accounts are never zeroed out since they continue forever (i.e., going concern concept).

Common-Sized Financials

A common-sized statement recast, either the balance sheet or the income statement as a percentage of a selected number. For the balance sheet, that number is assets, and for the income statement, that number is sales. Thus, all assets should be stated as a percentage of total assets and all expenses should be stated as a percentage of sales.

Rhody Corporation
Common-Sized Income Statement
January 1, 2004 - December 31, 2004

Revenue:		
Service Revenue	$55,000	
Rent Revenue	6,000	
Interest Income	225	
Total Revenue	$61,225	100.00%
Expenses:		
Salaries Expense	$29,000	47.36%
Insurance Expense	9,000	14.70%
Depreciation Expense	4,000	6.53%
Total Expenses	$42,000	68.59%
Net Income	$19,225	31.41%

Rhody Corporation
Common-Sized -Balance Sheet
January 1, 2004 - December 31, 2004

ASSETS		
Cash	$ 46,500	42.77%
Accounts Receivable	15,000	13.80%
Note Receivable	10,000	9.20%
Interest Receivable	225	.02%
Supplies	4,000	3.68%
Inventory	14,000	12.88%
Prepaid Insurance	3,000	2.76%
Total Current Assets	$92,725	85.28%
Office Equipment	20,000	18.39%
Accum. Depreciation	(4,000)	(3.68)%
TOTAL ASSETS	**$108,725**	**100.00%**
LIABILITIES		
Accounts Payable	$ 14,000	12.88%
Salary Payable	24,000	22.07%
Unearned Service Revenue	12,000	11.04%
Total Current Liabilities	$50,000	45.99%
STOCKHOLDERS EQUITY		
Common Stock	40,000	36.79%
Retained Earnings	18,725	17.22%
TOTAL LIABILITIES & STOCKHOLDERS EQUITY	**$108,725**	**100.00%**

Ratio Analysis

Expresses the relationship among selected items of financial statement data

Relationship can be expressed in term of…
- percentage
- rate
- proportion

Financial Ratio Classifications

Income Statement-Based Ratios
- Profitability Ratios

Financial Ratio Classifications

Profitability Ratios - measures of the income or operating success of a company for a given period of time

Profitability/Efficiency Ratios...

Measure operating success of a company over a period of time.
- Return on Assets
- Return on Sales

Return on Sales Ratio

Measures the percentage of each dollar of sales that results in net income. Higher value suggests favorable efficiency.

$$\text{Return on Sales Ratio} = \frac{\text{Net Income}}{\text{Net Sales}}$$

Return On Assets Ratio

Reveals the amount of net income generated by each dollar invested. Higher value suggests favorable efficiency.

$$\text{Return on Assets Ratio} = \frac{\text{Net Income}}{\text{Average Total Assets}}$$

Average Assets equals total assets at the beginning of the year plus total assets at the end of the year divided by 2.