

Lecture 3: Financial Statements

Understanding the Basics of Accounting



Presentation to Cox Business Students

FINA 3320: Financial Management

FINA 3320: Basics of Accounting

Or...

- **The 50-Minute Review of Financial Statements!**
- Or...
- Everything You Ever Wanted to Know About Balance Sheets, Income Statements, and Statements of Cash Flows but Were Afraid to Ask!

Purpose of This Lecture

- **(1) Understand the Three Basic Parts of Financial Statements**
 - **Balance Sheet:** “Snapshot” of firm’s position at a point in time
 - **Income Statement:** “Video Recording” of how firm performed between snapshots
 - **Statement of Cash Flows:** Using two balance sheets and one income statement to determine flow of cash through the firm
 - **(2) Learn Key Concepts Necessary to Examine and Analyze Financial Statements**
 - Develop tools to examine how well (or poorly) management’s decision-making has impacted value creation within the firm!
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The Example: Cox Oil Company, Inc.

- We will employ the Cox Oil Company, Inc. example throughout
- Cox example will illustrate basic accounting concepts
- Cox example will apply fundamental financial principles
 - True test of understanding is ability to apply concepts
 - Cox example provides application of each key concept
 - Makes is easier to ‘reverse engineer’

Two Important Differences

- **(1) Cash Flows versus Accounting Flows**
 - Financial managers are more interested in *cash flows*
 - Markets use cash flows for valuation, not accounting flows!
 - Why?
 - Because figures don't lie, but liars figure!
 - Cash flows are harder to manipulate than accounting flows
 - **(2) Market Value versus Accounting (Book) Value**
 - Financial managers are interested in *market value*
 - Market value: intrinsic worth placed on an item by the market
 - Book value: historical cost of an item “carried on the books”
 - Difference between market and book values could be enormous!
 - Consider an oil field that was purchased 50 years ago!!
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Why is Accounting Important?

- **Accounting provides a method to gather and summarize information**
 - Describes where the firm has been
 - Projects where the firm is going under a number of alternative scenarios
 - **Accounting statements are useful...**
 - ...To *financial managers* who must make decisions about the future of the firm
 - ...To *analysts* who must evaluate and value the firm
 - ...To *investors* who must decide whether or not to own a stake in the firm
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Overview: Three Parts of Financial Statements

- **Balance Sheet:** statement of financial position
 - “Snapshot” of the firm at any given point in time
 - (1) Indicates what the firm owns (i.e., assets) as of a specific date
 - (2) Indicates what the firm owes (i.e., liabilities) as of a specific date
 - (3) And difference between (1) and (2) above (i.e., equity)
 - **Income Statement:** statement of profit and loss
 - “Video recording” of firm between snapshots
 - (1) Provides record of firm’s operating results for a period
 - (2) Serves as guide in anticipating future results of firm
 - **Statement of Cash Flows:** undoes accrual accounting
 - “Ties” balance sheets and income statements together
 - (1) Shows flow of cash (firm’s life blood) over a period of time
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The Balance Sheet



The Balance Sheet Identity Equation

$$\text{Assets} = \text{Liabilities} + \text{Shareholders' Equity}$$

Consolidated Balance Sheet (000s)

<u>Assets</u>	<u>December 31</u>	<u>2007</u>	<u>2006</u>
Current Assets:			
Cash and cash equivalents		\$ 19,500	\$ 15,000
Marketable securities		46,300	32,000
Accounts receivable (net)		156,000	145,000
Inventories		180,000	185,000
Prepaid expenses and other current assets		<u>4,000</u>	<u>3,000</u>
Total current assets		405,800	380,000
Long-Term Assets:			
Gross property, plant and equipment		185,000	146,600
Less: accumulated depreciation		<u>35,000</u>	<u>27,000</u>
Net property, plant and equipment		150,000	119,600
Gross reserves		200,000	200,000
Less: accumulated depletion		<u>90,000</u>	<u>70,000</u>
Net reserves		110,000	130,000
Total long-term assets (net)		260,000	249,600
Other Assets:			
Gross intangibles (goodwill, patents)		2,250	2,250
Less: accumulated amortization		<u>300</u>	<u>250</u>
Net intangibles		1,950	2,000
Investment securities (at cost)		<u>300</u>	<u>-</u>
Total other assets (net)		2,250	2,000
Total Assets		<u>\$668,050</u>	<u>\$631,600</u>

Liabilities and Shareholders' Equity

2007

2006

Liabilities:

Current Liabilities:

Accounts payable	\$ 60,000	\$ 57,000
Notes payable	51,000	61,000
Accrued expenses	30,000	36,000
Income taxes payable	17,000	15,000
Other current liabilities	12,000	12,000
Current portion of long-term debt	<u>6,000</u>	<u>-</u>
Total current liabilities	176,000	181,000

Long-Term Liabilities:

Deferred income taxes	16,000	9,000
9.12% debenture payable 2010	130,000	130,000
Other long-term debt	<u>-</u>	<u>6,000</u>
Total Liabilities	<u>322,000</u>	<u>326,000</u>

Shareholders' Equity:

Preferred stock, \$5.83 cumulative, \$100 par value	6,000	6,000
Common stock, \$5.00 par value	75,000	72,500
Additional paid-in capital	20,000	13,500
Retained earnings	249,000	219,600
Foreign currency translation adjustment (net of tax)	1,000	(1,000)
Unrealized gain on available-for-sale securities (net of tax)	50	-
Less: Treasury stock at cost	<u>(5,000)</u>	<u>(5,000)</u>
Total Shareholders' Equity	346,050	305,600

Total Liabilities and Shareholders' Equity

\$668,050 \$631,600

Assets: The Left-Hand Side (LHS)

- Assets classified as either *current* or *long-term (fixed)*
 - *Current Assets*: listed first on the LHS of balance sheet
 - Sometimes called *liquid assets*
 - Life of 1-year or less: converted to cash within 12 months
 - Listed in order of ‘liquidity’
 - ability to be converted to cash quickly and at, or near, market value
 - *Long-Term Assets*
 - sometimes referred to as *fixed assets* or *noncurrent assets*
 - Life greater than one year
 - Two categories: *tangible* and *intangible*
 - *Tangible Long-Term Assets*: (1) PP&E and (2) Reserves
 - *Intangible Long-Term Assets*: intellectual property and goodwill
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- **Cash and cash equivalents**
 - Bank deposits, petty cash, highly liquid securities (e.g., T-bills)
 - With exception of T-bills, these are non-earning assets
 - **Marketable securities**
 - Money market instruments (e.g., negotiable CDs)
 - Provide interest return on excess cash balances
 - **Accounts receivable**
 - Amounts due from customers
 - Arise due to trade credit provided by firm to its customers
 - **Inventories**
 - Raw materials, work-in-process, and finished goods
 - Cost of items purchase or manufactures for resale to customers
 - **Other current assets**
 - Current assets that don't fit into above categories (e.g., prepaid expenses)
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Cox Oil Company, Inc.
Consolidated Balance Sheet (000s)
December 31

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Long-Term Assets

- **Property, Plant and Equipment (PP&E)**
 - Assets used to manufacture, display, warehouse, and transport goods and services
 - These asset are not intended for sale
 - **Reserves**
 - Assets consisting of natural resources (e.g., oil)
 - Primarily related to mining and oil companies (extractive industries)
 - **Other Noncurrent Assets**
 - Intangible assets
 - Intellectual property rights and goodwill
 - Investment securities
 - Similar to marketable securities except expected to be held longer term (i.e., more than one year)
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Consolidated Balance Sheet (000s)
December 31

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Net reserves	110,000	130,000
Total long-term assets (net)	260,000	249,600
Other Noncurrent Assets:		
Gross intangibles (goodwill, patents)	2,250	2,250
Less: accumulated amortization	<u>300</u>	<u>250</u>
Net intangibles	1,950	2,000
Investment securities (at cost)	<u>300</u>	<u>-</u>
Total other assets (net)	2,250	2,000

Property, Plant and Equipment (PP&E)

- **Gross Property, Plant and Equipment**
 - Cost of fixed assets (Historical book value of PP&E)
 - **Land:** raw real estate
 - **Buildings:** improvements on land (office space, warehouses, etc.)
 - **Machinery and equipment:** manufacturing, etc.
 - **Leasehold improvements:** improvements to leased facility
 - **Furniture and fixtures:** office furniture, etc.
 - **Rolling stock:** automobiles and trucks
 - **Depreciation**
 - Accounting method of allocating cost of acquiring PP&E over its useful life – *neither* a cash expense *nor* a cash flow!
 - Cash is typically paid at the time a fixed asset is purchased
 - **Net Property, Plant and Equipment**
 - Gross PP&E less Accumulated depreciation
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Cox Oil Company, Inc.
Consolidated Balance Sheet (000s)
December 31

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Gross property, plant and equipment	185,000	146,600
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Gross Property, Plant and Equipment

Cox Oil Company, Inc.
Consolidated Balance Sheet (000s)
December 31

Question:
What did Cox Oil Company pay for its Property, plant & equipment?

Gross Property, Plant and Equipment

Land	\$ 30,000
Buildings	105,000
Equipment	35,000
Furniture, fixtures	<u>15,000</u>
Total Gross PP&E	\$185,000

Depreciation: An Example

- **Depreciation** is the accounting method for allocating cost of acquiring PP&E based on the assets' useful life to specific time periods
- Example:
 - Delivery truck costs \$10,000
 - Useful life is estimated to be 5 years
 - Assume straight-line depreciation (i.e., equal charges each year)

The balance sheet at the end of one year:

Truck (cost)	\$10,000
Less: Accumulated depreciation	<u>(2,000)</u>
Net depreciated cost	\$ 8,000

Accumulated Depreciation: An Example

- **Accumulated Depreciation** is the *total* amount of depreciation allocated to PP&E over a period of time
- Example continued...

The balance sheet at the end of one year:

Truck (cost)	\$10,000
Less: Accumulated depreciation	<u>(2,000)</u>
Net depreciated cost	\$ 8,000

At the end of the second year:

Truck (cost)	\$10,000
Less: Accumulated depreciation	<u>(4,000)</u>
Net depreciated cost	\$ 6,000

Net Property, Plant and Equipment

Cox Oil Company, Inc.
Consolidated Balance Sheet (000s)
December 31

- **Net Property, Plant and Equipment (Net PP&E)**
 - Gross PP&E less Accumulated depreciation

Questions:

What was Cox's PP&E depreciation expense for 2007?

What is the book value of Cox's PP&E at end of 2007?

<u>Year</u>	<u>2007</u>	<u>2006</u>
Gross property, plant and equipment	185,000	146,600
Less: accumulated depreciation	<u>35,000</u>	<u>27,000</u>
Net property, plant and equipment	150,000	119,600

Reserves and Depletion

- **Gross Reserves**
 - Cost of acquiring natural resources (e.g., oil)
 - **Depletion**
 - Accounting method of allocating cost of acquiring natural resources due to its withdrawal and use or sale
 - *Neither* a cash expense *nor* a cash flow!
 - Cash is typically paid at the time the natural resource is purchased
 - **Net Reserves**
 - Gross Reserves less Accumulated depletion
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Reserves

Cox Oil Company, Inc.
Consolidated Balance Sheet (000s)
December 31

Questions:

What did Cox Oil Company pay for its oil fields?

What was Cox Oil's depletion expense for 2007?

What is the market value of Cox Oil's reserves?

<u>Year</u>	<u>2007</u>	<u>2006</u>
Gross reserves	200,000	200,000
Less: accumulated depletion	<u>90,000</u>	<u>70,000</u>
Net reserves	110,000	130,000

Intangibles and Amortization

- **Gross Intangibles**
 - Assets having no physical existence, but substantial value
 - Cost of acquiring nonphysical assets
 - **Intellectual Property:** patents, copyrights, trademarks
 - **Goodwill:** excess amount paid for an acquired firm over market value of net assets of that firm
- **Amortization**
 - Accounting method for allocating cost of acquiring intangibles over their useful economic life – *Neither* a cash expense *nor* a cash flow!
- **Net Intangibles**
 - Gross intangibles less Accumulated Amortization

Intangibles

Cox Oil Company, Inc.
Consolidated Balance Sheet (000s)
December 31

Questions:

How much did Cox Oil pay to obtain its intangibles?

What is the total amount of amortization as of 2006? 2007?

What was Cox Oil's amortization expense during 2007?

<u>Year</u>	<u>2007</u>	<u>2006</u>
Gross intangibles (goodwill, patents)	2,250	2,250
Less: accumulated amortization	<u>300</u>	<u>250</u>
Net intangibles	1,950	2,000

Liabilities: The Right-Hand Side (RHS)

- Liabilities classified as *current* or *long-term*
 - *Current Liabilities*: listed first on the RHS of the balance sheet
 - Life of 1-year or less: must be paid within 12 months
 - *Long-Term Liabilities*
 - Obligations that are due after 1 year from balance sheet date

Cox Oil Company, Inc.
Consolidated Balance Sheet (000s)
December 31

<u>Total Liabilities</u>	<u>2007</u>	<u>2006</u>
Liabilities:		
Current Liabilities:		
Accounts payable	\$ 60,000	\$ 57,000
Notes payable	51,000	61,000
Accrued expenses	30,000	36,000
Income taxes payable	17,000	15,000
Other current liabilities	12,000	12,000
Current portion of long-term debt	<u>6,000</u>	<u>-</u>
Total current liabilities	176,000	181,000
Long-Term Liabilities:		
Deferred income taxes	16,000	9,000
9.12% debenture payable 2010	130,000	130,000
Other long-term debt	<u>-</u>	<u>6,000</u>
Total Liabilities	<u>322,000</u>	<u>326,000</u>

Current Liabilities

- **Accounts Payable**
 - Amounts owed to creditors (vendors) for goods and services purchased on credit (trade terms)
- **Notes Payable**
 - Short-term obligation to repay borrowed funds evidenced by promissory note
- **Accrued Expense**
 - Obligation to pay business expenses incurred, but not yet paid, during accounting period (e.g., employees' payroll)

Current Liabilities continued...

- **Income Taxes Payable**
 - Obligation to IRS for income taxes incurred, but not yet paid, during accounting period
 - **Other Current Liabilities**
 - Current liabilities that don't fit into any listed categories above
 - **Current Portion of Long-Term Debt (CPLTD)**
 - The portion of long-term debt that is due within one year of the balance sheet date
 - For example: At the end of 2007, the CPLTD would be the amount of principal of long-term debt that a firm will be paying during 2008
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December 31

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Long-Term Liabilities

- **Deferred Income Taxes**
 - Obligation to pay income taxes in future years
 - Typically arise from difference in depreciation method used to report taxes to IRS and method used to report to shareholders
 - Former uses accelerated depreciation, while latter uses straight-line
 - **Long-Term Debt**
 - Borrowed funds due after one year from the balance sheet date
 - Bank loan, mortgage bond, debenture, etc.
 - NOTE: Total long-term debt that firm must repay at any point in time is equal to long-term debt plus current portion of long-term debt!
 - **Other Long-Term Debt**
 - Any debt due after one year from balance sheet date not reported elsewhere (e.g., unfunded pension obligations)
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Cox Oil Company, Inc.
Consolidated Balance Sheet (000s)
December 31

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Other long-term debt	<u>-</u>	<u>6,000</u>
	146,000	145,000

Shareholders' Equity: Right-Hand Side

- Shareholders' equity classified as *preferred* or *common*
- **Preferred Stock**
 - An equity security that entitles its shareholders to certain preferences over common shareholders, e.g.,...
 - dividends, liquidation value, convertibility into other securities, etc.
- **Common Stock**
 - An equity security that entitled its shareholders to a residual claim on all cash flows and assets after all other claimants

Cox Oil Company, Inc.
Consolidated Balance Sheet (000s)
December 31

<u>Total Shareholders' Equity</u>	<u>2007</u>	<u>2006</u>
Shareholders' Equity:		
Preferred stock, \$5.83 cumulative, \$100 par value	6,000	6,000
Common stock, \$5.00 par value	75,000	72,500
Additional paid-in capital	20,000	13,500
Retained earnings	249,000	219,600
Foreign currency translation adjustment (net of tax)	1,000	(1,000)
Unrealized gain on available-for-sale securities (net of tax)	50	-
Less: Treasury stock at cost		
(2007 and 2006 – 1,000 shares)	<u>(5,000)</u>	<u>(5,000)</u>
Total Shareholders' Equity	346,050	305,600

Preferred Stock

Cox Oil Company, Inc.
Consolidated Balance Sheet (000s)
December 31

- **Attributes of Cox Oil's Preferred Shares**
 - Stated dividend: \$5.83 — payable annually per share before any dividend is paid on common shares
 - Dividend type: Cumulative — dividend accumulates if not paid in any year
 - Par value: \$100 — or face value of shares
 - Shares Outstanding: 60,000 shares — book value of \$6 million

Common Equity: Line Items

- **Common Stock**
 - Par or stated value
 - **Additional Paid-In Capital**
 - Total excess of shareholders' investment in the company over the par or stated value
 - **Retained Earnings**
 - Accumulated profit or loss of the company, less total of all dividends paid, since the startup of the company
 - **Other**
 - Foreign currency transaction adjustments
 - Unrealized gain on securities
 - Treasury Stock
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Retained Earnings

Cox Oil Company, Inc. Consolidated Balance Sheet (000s) December 31

What happened to Cox's retained earnings from year-end 2006 to year-end 2007?

Cox's 2006 Retained Earnings	\$219,600
Plus: Cox's 2007 Net Income	47,750
Less: 2007 Dividends Paid to Cox's Preferred Shareholders	350
Less: 2007 Dividends Paid to Cox's Common Shareholders	<u>18,000</u>
Cox's 2007 Retained Earnings	\$249,000

- Retained earnings for end-of-year 2006 were \$219,600
 - This is also the beginning retained earnings balance for 2007
 - Net income for 2007 was \$47,750
 - Total dividends (preferred and common) were \$18,350
 - Retained earnings for end-of-year 2007 is \$249,000
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Balance Sheet: Review

Questions:

What is the balance sheet identity equation?

What is on the left-hand side of the balance sheet?

What are the asset categories on the LHS of the balance sheet?

What is PP&E? Reserves? Intangibles?

What is depreciation? Depletion? Amortization?

What is accumulated depreciation?

What is on the right-hand side of the balance sheet?

What are the liability categories on the RHS of the balance sheet?

What is current portion of long-term debt (CPLTD)?

How is CPLTD related to long-term debt?

What are the two types of equity securities issued by C-Corps?

How is preferred stock different from common stock?

Consolidated Balance Sheet (000s)

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Total Liabilities and Shareholders' Equity

\$668,050 \$631,600

Income Statement

- Measures performance of a firm over some period of time
 - Most often reviewed income statement is the one representing the entire year (i.e., the annual income statement)
 - Annual income statement is important for two reasons
 - (1) It shows the record of a company's operating results for entire year
 - (2) It also serves as a valuable guide in anticipating how the company may perform in the future
 - More than a single year's income statement required
 - **Trend Analysis:** requires multiple annual income statements for the same firm
 - **Industry Comparison Analysis:** enables analyst to *benchmark* firm's performance against the industry average (median) performance
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Income Statement Equation

$$\text{Sales} - \text{Expenses} = \text{Income}$$

Cox Oil Company, Inc.

Consolidated Income Statement

January 1 through December 31

(Dollars in Thousands, Except Per-Share Amounts)

	2007	2006
Net sales	\$765,050	\$725,000
Cost of goods sold	<u>535,000</u>	<u>517,000</u>
Gross Profit	230,050	208,000
Selling, general and administrative expenses	96,804	109,500
Depreciation, depletion and amortization	<u>28,050</u>	<u>25,000</u>
Earnings before interest and taxes (EBIT)	105,196	73,500
Interest Expense	16,250	16,750
Dividend and interest income	<u>5,250</u>	<u>10,000</u>
Earnings before taxes and extraordinary items	94,196	66,750
Income tax	<u>41,446</u>	<u>26,250</u>
Earnings before extraordinary items	52,750	40,500
Extraordinary item: Loss on earthquake	<u>(5,000)</u>	<u>-</u>
Net income	<u>\$ 47,750</u>	<u>\$ 40,500</u>
EPS of common stock before extraordinary item	\$ 3.55	\$ 2.77
Earnings per share – extraordinary item	<u>(0.34)</u>	<u>-</u>
Net income per common share	<u>\$ 3.21</u>	<u>\$ 2.77</u>

Income Statement: Line Items

- **Net Sales:** Gross Sales less Returns and Allowances
 - **Returns and Allowance:** \$ amount of returned goods and allowances for price reductions or discounts
 - **Cost of Goods Sold (or Cost of Sales):** Direct Costs
 - **Direct Labor:** cost of labor to produce goods and/or services
 - **Direct Material:** cost of material used to produce goods and services
 - **Factory Overhead:** cost allocation for electricity, etc. for production
 - **Gross Profit:** Net Sales less Cost of Goods Sold
 - Profit (or loss) from sales after direct expenses
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Cox Oil Company, Inc.
Consolidated Income Statement
January 1 through December 31
(Dollars in Thousands, Except Per-Share Amounts)

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Gross Profit	230,050	208,000

- Cox Oil Company's net sales increased from 2006 to 2007
 - Cox's cost of good sold also increased from 2006 to 2007
 - Cox's gross profit increased from 2006 to 2007, indicating that the growth in sales was beneficial!
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Income Statement: Line Items continued...

- **Operating (or SG&A) Expenses:** Indirect Costs
 - **Selling, General and Administrative Expenses:** sales commissions, executive and office personnel salaries, office utilities, etc.
 - **Depreciation, Depletion and Amortization:** non-cash costs associated with fixed assets, natural resources, and intangible assets
 - Could be included in Cost of Goods Sold, but generally appears here
- **Earnings Before Interest and Taxes (or EBIT):**
Gross Profit less Operating Expenses
 - Profit (or loss) generated by a company's normal operating activities before considering non-operating items, interest expense, income taxes, and extraordinary items

Cox Oil Company, Inc.
Consolidated Income Statement
January 1 through December 31
(Dollars in Thousands, Except Per-Share Amounts)

	2007	2006
Net sales	\$765,050	\$725,000
Cost of goods sold	<u>535,000</u>	<u>517,000</u>
Gross Profit	230,050	208,000
Selling, general and administrative expenses	96,804	109,500
Depreciation, depletion and amortization	<u>28,050</u>	<u>25,000</u>
Earnings before interest and taxes (EBIT)	105,196	73,500

- Cox' s indirect expenses (SG&A) decreased from 2006 to 2007!
 - This indicates management controlled these expenses better in 2007 than in 2006
 - Cox' s non-cash expenses increased from 2006 to 2007
 - This is due in part because Cox purchased more PP&E (see balance sheet), as well as increased extraction from its oil fields
 - Cox' s EBIT increased significantly from 2006 to 2007!
-

Income Statement: Line Items continued...

- **Interest Expense:** Debt Multiplied by Cost of Debt
 - Payment by borrower of funds to compensate lender for use of funds
- **Other Income and Expense:** Add Other Income and Subtract Other Expenses
 - **Other Income:** Non-operating income (e.g., dividends received and/or interest earned)
 - **Other Expense:** Non-operating expenses
- **Earnings Before Taxes (or EBT):** EBIT less Interest Expense plus Other Income less Other Expense
 - Taxable profit

Cox Oil Company, Inc.
Consolidated Income Statement
January 1 through December 31
(Dollars in Thousands, Except Per-Share Amounts)

	2007	2006
Net sales	\$765,050	\$725,000
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Gross Profit	230,050	208,000
Selling, general and administrative expenses	96,804	109,500
Depreciation, depletion and amortization	<u>28,050</u>	<u>25,000</u>
Earnings before interest and taxes (EBIT)	105,196	73,500
Interest Expense	16,250	16,750
Dividend and interest income	<u>5,250</u>	<u>10,000</u>
Earnings before taxes and extraordinary items	94,196	66,750

- Cox's interest expense decreased from 2006 to 2007
 - This is due to a decrease in notes payable on the balance sheet
 - Other income also decreased from 2006 to 2007
 - It is unclear why this decrease occurred since both marketable securities and investments increased from 2006 to 2007 on the balance sheet
-

Income Statement: Line Items continued...

- **Income Tax:** EBT Multiplied by Effective Tax Rate
 - Effective tax rate depends on the level or nature of firm's income
 - Large firms like Cox are subject to top statutory corporate tax rate
 - However, tax credits, tax-free income, and nondeductible expenses tend to change the overall tax rate
 - **Earnings Before Extraordinary Items:** EBT less Income Tax
 - **Extraordinary Items**
 - Non-operating items that are both unusual and occur infrequently
 - **Net Income:** Earnings after Taxes and Extraordinary
-

Consolidated Income Statement
 January 1 through December 31
 (Dollars in Thousands, Except Per-Share Amounts)

	2007	2006
Net sales	\$765,050	\$725,000
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Interest Expense	16,250	16,750
Dividend and interest income	<u>5,250</u>	<u>10,000</u>
Earnings before taxes and extraordinary items	94,196	66,750
Income tax	<u>41,446</u>	<u>26,250</u>
Earnings before extraordinary items	52,750	40,500
Extraordinary item: Loss on earthquake	<u>(5,000)</u>	<u>-</u>
Net income	<u>\$ 47,750</u>	<u>\$ 40,500</u>

- Cox' s effective income tax rate in 2007 (2006) was 44% (39%)
 - $41,446/94,196 = 44\%$; and $26,250/66,750 = 39\%$
- An earthquake caused \$5,000,000 of damage to one of Cox' s oil rigs in 2007

Income Statement: Per Share Calculations

- **Earnings Per Share (EPS) Before Extraordinary Items**
 - Earnings Before Extraordinary Items Divided by # of Common Shares Outstanding
 - 2007 Earnings Before Extraordinary Items = \$52.75 million
 - Number of common shares outstanding in 2007 = 15 million
 - NOTE: Difference in calculation (\$3.52) and reported (\$3.55) is due to rounding since financial statements in thousands (000)
 - **EPS – Extraordinary Items**
 - Extraordinary Item Divided by # of Common Shares Outstanding
 - 2007 Extraordinary Item = \$5 million
 - NOTE: Difference in calculation (\$0.33) and reported (\$0.34) due to rounding
 - **EPS**
 - Net Income Divided by # of Common Shares Outstanding
-

Cox Oil Company, Inc.
Consolidated Income Statement
January 1 through December 31
(Dollars in Thousands, Except Per-Share Amounts)

	2007	2006
EPS of common stock before extraordinary item	\$ 3.55	\$ 2.77
Earnings per share – extraordinary item	<u>(0.34)</u>	<u>-</u>
Net income per common share	<u>\$ 3.21</u>	<u>\$ 2.77</u>

- 2007 EPS Before Extraordinary Item: \$52.75 million/15 million shares = \$3.52
 - 2007 EPS – Extraordinary Item: \$5 million/15 million shares = (\$0.33)
 - 2007 EPS (or Net Income Per Share) = \$47.75 million/15 million shares = \$3.18
 - NOTE: Differences due to rounding (000s) on the financial statements
-

Income Statement: Review

Questions

What is the income statement equation?

How is net sales determined?

What three direct items makeup cost of goods sold?

What are operating (or SG&A) expenses?

What are the three non-cash expenses?

How are interest expenses determined?

How are income taxes calculated?

What are extraordinary expenses?

How is net income determined?

What is EPS?

How is EPS calculated?

Cox Oil Company, Inc.

Consolidated Income Statement

January 1 through December 31

(Dollars in Thousands, Except Per-Share Amounts)

	2007	2006
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Net income per common share	<u>\$ 3.21</u>	<u>\$ 2.77</u>

Statement of Cash Flows

- Third of the Three Parts of the Financial Statement!
 - Perhaps the most important to financial managers and analysts
 - ‘Rips’ apart the accrual method of accounting to view flow or cash through the firm
 - Under accrual accounting, transaction recognized on the income statement when the goods or services are delivered or performed, which does not necessarily coincide with the receipt of cash
 - Cash is the life’s blood of a company – like an arm or a leg that losses the flow of blood and eventually withers, a firm that doesn’t receive sufficient cash flow will eventually attrite.
 - Three Sections of Statement of Cash Flows
 - **Cash Flows from Operating Activities**
 - **Cash Flows from Investing Activities**
 - **Cash Flows from Financing Activities**
-

Consolidated Statement of Cash Flows

2007

Cash flows from operating activities:

Net income before dividends	\$ 47,750
Additions (Sources of Cash):	
Depreciation, depletion, and amortization	28,050
Decrease in inventory	5,000
Increase in accounts payable	3,000
Increase in income taxes payable	2,000
Increase in deferred taxes	7,000
Subtractions (Uses of Cash):	
Increase in accounts receivable	(11,000)
Increase in prepaid expenses and other current assets	(1,000)
Decrease in accrued expenses	(6,000)
Net cash provided by operating activities	\$ 74,800

Cash flows from investing activities:

Securities purchases	(14,600)
Principal payment received on securities	50
Long-term asset purchases	(38,400)
Net cash used in investing activities	\$(52,950)

Cash flows from financing activities:

Decrease in notes payable	\$(10,000)
Increase in common stock	9,000
Payment of dividends	(18,350)
Net cash used in financing activities	\$(19,350)
Effect of exchange rate changes on cash	\$ 2,000
Net increase in cash and cash equivalents	\$ 4,500
Cash and cash equivalents at beginning of the year	15,000
Cash and cash equivalents at end of the year	\$ 19,500

Three Sections of Statement of Cash Flows

- **Cash Flows from Operating Activities**
 - Cash flows from company's primary business activities
 - e.g., Production and delivery of goods and services for sale
 - Reflects cash effects of transaction, which are included in the determination of net income
- **Cash Flows from Investing Activities**
 - Cash flows from a company's activities relating to asset acquisition and disposal
- **Cash Flows from Financing Activities**
 - Cash flows from a company's activities relating to the receipt and repayment of funds provided by creditors and investors

Cash Flows from Operating Activities: Line Items

- **Net Income Before Dividends:** From the income statement
 - **Additions (Sources of Cash)**
 - Non-cash expenses from the income statement
 - *Decreases in Assets* from the prior year's balance sheet (e.g., 2006) to the current year's balance sheet (e.g., 2007) – “Change In” denoted as Δ
 - *Increases in Liabilities or Equity* from the prior year's (e.g., 2006) balance sheet to the current year's (e.g., 2007) balance sheet – Change In (or Δ)
 - **Subtractions (Uses of Cash)**
 - *Increases in Assets* from the prior year's balance sheet (e.g., 2006) to the current year's balance sheet (e.g., 2007) – Change In (or Δ)
 - *Decreases in Liabilities or Equity* from the prior year's (e.g., 2006) balance sheet to the current year's (e.g., 2007) balance sheet – Change In (or Δ)
-

Cox Oil Company, Inc.
Consolidated Statement of Cash Flows

2007

Cash flows from operating activities:

Net income before dividends	\$ 47,750
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Increase in accounts receivable	(11,000)
Increase in prepaid expenses and other current assets	(1,000)
Decrease in accrued expenses	(6,000)
Net cash provided by operating activities	\$ 74,800

- **Additions:** Decrease in asset – Inventory; Increase in liabilities – A/P, Taxes Payable, and Deferred Taxes
- **Subtractions:** Increase in assets – A/R and Other Current Assets; Decrease in liability – Accrued Expenses

Cash Flows from Investing Activities: Line Items

- **Δ Securities:** Purchase or Sale of Marketable Securities and Investments
 - Determined as Δ Marketable Securities and Investments on balance sheet
 - **Securities Issued or Repurchased:** Δ in debt or equity securities on the balance sheet
 - **Source of Cash:** Issuance of debt or equity securities
 - **Use of Cash:** Repurchase of debt or equity securities
 - **Δ Principal on Securities:** Unrealized securities' gain (source of cash) or loss (use of cash) on balance sheet
 - **Δ Long-Term Asset:** Purchase or Sale of Fixed Assets
 - Determined as Δ Tangible and Intangible Long-Term Assets on balance sheet
-

Cox Oil Company, Inc.

Consolidated Statement of Cash Flows

2007

Cash flows from investing activities:

Securities purchases	(14,600)
Principal payment received on securities	50
Long-term asset purchases	<u>(38,400)</u>
Net cash used in investing activities	<u>\$(52,950)</u>

- **Securities Purchases:** Δ Marketable Securities + Δ Investments
 - Marketable securities were \$32,000 in 2006 and \$46,300 in 2007, an increase of \$14,300 (use of cash)
 - Investments were \$0 in 2006 and \$300 in 2007, an increase in \$300 (use of cash)
- **Unrealized Gain on Securities:** Δ Unrealized Gain
 - \$0 in 2006 and \$50 in 2007 on the balance sheet (source of cash)
- **Long-Term Purchase:** Δ in Long-Term Assets (Fixed, Natural, Intangible)
 - PP&E was \$146,600 in 2006 and \$185,000 in 2007, an increase of \$38,400 (use of cash)
- **Equation for Net:** $\Delta LTA_{2007} = NetLTA_{2007} + Noncash_{2007} - NetLTA_{2006}$

Cash Flow from Financing Activities: Line Items

- **Δ Notes Payable:** on the balance sheet
 - **Source of Cash:** Increase in Notes Payable from prior year's balance sheet (e.g., 2006) to current year's balance sheet (e.g., 2007)
 - **Use of Cash:** Decrease in Notes Payable from prior year's balance sheet (e.g., 2006) to current year's balance sheet (e.g., 2007)
 - **Δ Long-Term Debt (LTD):** on the balance sheet
 - Equation: $\Delta LTD_{2007} = LTD_{2007} + CPLTD_{2007} - LTD_{2006}$
 - **Source of Cash:** Increase in Δ LTD
 - **Use of Cash:** Decrease in Δ LTD
 - **Δ Preferred and/or Common Stock:** on balance sheet
 - **Source of Cash:** Increase in Δ Preferred and/or Common Stock
 - **Use of Cash:** Decrease in Δ Preferred and/or Common Stock
 - **Payment of Dividends:** determined by reconciling retained earnings
-

Cox Oil Company, Inc.
Consolidated Statement of Cash Flows

2007

Cash flows from financing activities:

Decrease in notes payable	\$(10,000)
Increase in common stock	9,000
Payment of dividends	<u>(18,350)</u>
Net cash used in financing activities	<u>\$(19,350)</u>

- Notes Payable decrease from \$61,000 in 2006 to \$51,000 in 2007 (use)
 - Common Stock (i.e., Par Value + Additional Paid-In Capital) increase from \$86,000 in 2006 to \$95,000 in 2007 (source)
 - Common Stock (Par Value) increased from \$72,500 in 2006 to \$75,000 in 2007
 - Additional Paid-In Capital increase from \$13,500 in 2006 to \$20,000 in 2007
 - In 2007, \$350 in Preferred, and \$18,000 in Common, dividends were paid (use)
 - Based on reconciling retained earnings
-

Miscellaneous

- **Effect of Exchange Rate Changes on Cash:** on balance sheet
 - Foreign Currency Translation Adjustment (FCTA)
 - Δ FCTA for Cox from (\$1,000) in 2006 to \$1,000 in 2007, an increase of \$2,000 (source of cash)

Cox Oil Company, Inc.
Consolidated Statement of Cash Flows

	<u>2007</u>
Net cash provided by operating activities	\$ 74,800
Net cash used in investing activities	\$(52,950)
Net cash used in financing activities	\$(19,350)
Effect of exchange rate changes on cash	<u>\$ 2,000</u>
Change in Cash from 2006 to 2007	\$ 4,500
Cash and cash equivalents at end of the year	\$ 19,500
Cash and cash equivalents at beginning of the year	<u>15,000</u>
Net increase in cash and cash equivalents	\$ 4,500

- Change in cash for 2007 based on three activities from Statement of Cash Flows is \$4,500
 - Change in Cash and Cash Equivalents on balance sheet from 2006 to 2007 is also \$4,500
-

Statement of Cash Flows: Review

Questions

What are the three sections of activities on the Statement of Cash Flows?

Is an increase in an asset a source of cash or a use of cash?

Is a decrease in an asset a source of cash or a use of cash?

Is an increase in a liability or equity a source of cash or a use of cash?

Is a decrease in a liability or equity a source of cash or a use of cash?

Done!

Now we can start to analyze...

Thank You!



Charles B. (Chip) Ruscher, PhD

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