ACCT 430
Course Summary

Compiled by KSA Academics Committee

Consolidated Balance Sheets

Walgreen Co. and Subsidiaries at August 31, 2008 and 2007 *(In millions, except shares and per share amounts)*

Assets		2008	2007
Current Assets	Cash and cash equivalents	$ 443	$ 255
	Accounts receivable, net	2,527	2,237
	Inventories	7,249	6,790
	Other current assets	214	229
	Total Current Assets	10,433	9,511
Non-Current Assets	Property and equipment, at cost, less accumulated depreciation and amortization	9,775	8,204
	Goodwill	1,438	1,060
	Other non-current assets	764	539
	Total Non-Current Assets	11,977	9,803
	Total Assets	$22,410	$19,314
Liabilities and Shareholders' Equity			
Current Liabilities	Short-term borrowings	$ 83	$ 884
	Trade accounts payable	4,289	3,734
	Accrued expenses and other liabilities	2,272	2,099
	Income taxes	—	28
	Total Current Liabilities	6,644	6,745
Non-Current Liabilities	Long-term debt	1,337	22
	Deferred income taxes	150	158
	Other non-current liabilities	1,410	1,285
	Total Non-Current Liabilities	2,897	1,465
Shareholders' Equity	Preferred stock, $.0625 par value; authorized 32 million shares; none issued	—	—
	Common stock, $.078125 par value; authorized 3.2 billion shares; issued 1,025,400,000 shares in 2008 and 2007	80	80
	Paid-in capital	575	559
	Employee stock loan receivable	(36)	(52)
	Retained earnings	13,792	12,027
	Accumulated other comprehensive income (loss)	9	(4)
	Treasury stock at cost, 36,223,782 shares in 2008 and 34,258,643 shares in 2007	(1,551)	(1,506)
	Total Shareholders' Equity	12,869	11,104
	Total Liabilities and Shareholders' Equity	$22,410	$19,314

The accompanying Notes to Consolidated Financial Statements are integral parts of these statements.

Balance sheets:

1. Resources controlled.
2. Claims on those resources.
3. Levels of those resources and claims at a point in time ("snapshots").
4. Resources = Claims (the Accounting Equation)
5. Requirement that at least two balance sheets be presented.

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	Total Assets	**$22,410**	$19,314

- Assets of the entity
  1. Future benefits acquired in past transactions
  2. Benefits can be estimated with reasonable certainty
- Usual types of assets
  1. Cash and investments
  2. Amounts others owe us
  3. Things purchased for future use
- Current/noncurrent classification based on one year or one operating cycle

Liabilities and Shareholders' Equity

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The accompanying Notes to Consolidated Financial Statements are integral parts of these statements.

- Liabilities of the entity
  1. Future obligations arising from past transactions/events
  2. Amount can be estimated with reasonable certainty
- Current/noncurrent classification

Liabilities and Shareholders' Equity

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The accompanying Notes to Consolidated Financial Statements are integral parts of these statements.

- Shareholders' equity of the entity
  1. Contributed capital
  2. Retained earnings
  3. "Other"

- Shareholders have a *residual claim*
- Accounting equation:

Assets = Liabilities + Shareholder equity

Consolidated Statements of Earnings

Walgreen Co. and Subsidiaries for the years ended August 31, 2008, 2007 and 2006 *(In millions, except shares and per share amounts)*

Earnings	2008	2007	2006
Net sales	**$59,034**	$53,762	$47,409
Cost of sales	**42,391**	38,518	34,240
Gross Profit	**16,643**	15,244	13,169
Selling, general and administrative expenses	**13,202**	12,093	10,467
Operating Income	**3,441**	3,151	2,702
Interest (expense) Income, net	**(11)**	38	52
Earnings Before Income Tax Provision	**3,430**	3,189	2,754
Income tax provision	**1,273**	1,148	1,003
Net Earnings	**$ 2,157**	$ 2,041	$ 1,751
Net earnings per common share – basic	**$ 2.18**	$ 2.04	$ 1.73
Net earnings per common share – diluted	**2.17**	2.03	1.72
Average shares outstanding	**990,609,865**	998,633,559	1,010,252,562
Dilutive effect of stock options	**4,933,681**	7,706,509	9,148,162
Average shares outstanding assuming dilution	**995,543,546**	1,006,340,068	1,019,400,724

The accompanying Notes to Consolidated Financial Statements are integral parts of these statements.

Statement of Earnings (aka Income Statement)

Flows measured over a period of time

Revenues – reflection of inflows of resources (net assets) from operations

Expenses – reflection of outflows of resources (net assets) from operations

Consolidated Statements of Shareholders' Equity

Walgreen Co. and Subsidiaries for the years ended August 31, 2008, 2007 and 2006 *(In millions, except shares and per share amounts)*

	Common Stock Shares	Common Stock Amount	Paid-In Capital	Employee Stock Loan Receivable	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Treasury Stock Amount
Balance, August 31, 2005	1,013,512,047	$80	$565	$(77)	$ 8,836	$ —	$ (515)
Net earnings	—	—	—	—	1,751	—	—
Cash dividends declared ($.2725 per share)	—	—	—	—	(275)	—	—
Treasury stock purchases	(15,033,000)	—	—	—	—	—	(669)
Employee stock purchase and option plans	9,383,072	—	(159)	—	—	—	420
Stock-based compensation	—	—	153	—	—	—	—
Employee stock loan receivable	—	—	—	7	—	—	—
Balance, August 31, 2006	1,007,862,119	80	559	(70)	10,312	—	(764)
Net earnings	—	—	—	—	2,041	—	—
Cash dividends declared ($.3275 per share)	—	—	—	—	(326)	—	—
Treasury stock purchases	(23,842,749)	—	—	—	—	—	(1,064)
Employee stock purchase and option plans	7,121,987	—	(98)	—	—	—	322
Stock-based compensation	—	—	98	—	—	—	—
Employee stock loan receivable	—	—	—	18	—	—	—
Adjustment to initially apply SFAS No. 158, net of tax	—	—	—	—	—	(4)	—
Balance, August 31, 2007	991,141,357	80	559	(52)	12,027	(4)	(1,506)
Net earnings	—	—	—	—	2,157	—	—
Cash dividends declared ($.3975 per share)	—	—	—	—	(394)	—	—
Treasury stock purchases	(8,000,000)	—	—	—	—	—	(294)
Employee stock purchase and option plans	6,034,861	—	(55)	—	—	—	249
Stock-based compensation	—	—	71	—	—	—	—
Employee stock loan receivable	—	—	—	16	—	—	—
FIN No. 48 adoption impact	—	—	—	—	2	—	—
Additional minimum postretirement liability, net of tax	—	—	—	—	—	13	—
Balance, August 31, 2008	989,176,218	$80	$575	$(36)	$13,792	$ 9	$(1,551)

The accompanying Notes to Consolidated Financial Statements are integral parts of these statements.

Transactions affecting shareholders' equity over a period of time

Note the link between the income statement and the balance sheet.

Consolidated Statements of Cash Flows

Walgreen Co. and Subsidiaries for the years ended August 31, 2008, 2007 and 2006 *(In millions)*

		2008	2007	2006
Cash Flows from Operating Activities	Net earnings	**$ 2,157**	$ 2,041	$ 1,751
	Adjustments to reconcile net earnings to net cash provided by operating activities –			
	Depreciation and amortization	**840**	676	572
	Deferred income taxes	**(61)**	23	(104)
	Stock compensation expense	**68**	74	103
	Income tax savings from employee stock plans	**3**	6	8
	Other	**11**	3	(20)
	Changes in operating assets and liabilities –			
	Accounts receivable, net	**(365)**	(40)	(619)
	Inventories	**(412)**	(676)	(376)
	Other assets	**(24)**	(28)	(9)
	Trade accounts payable	**550**	(128)	876
	Accrued expenses and other liabilities	**84**	277	205
	Income taxes	**80**	25	(68)
	Other non-current liabilities	**108**	104	121
	Net cash provided by operating activities	**3,039**	2,357	2,440
Cash Flows from Investing Activities	Purchases of short-term investments – available for sale	**—**	(6,397)	(12,282)
	Proceeds from sale of short-term investments – available for sale	**—**	6,826	12,388
	Additions to property and equipment	**(2,225)**	(1,786)	(1,338)
	Proceeds from sale of assets	**17**	41	23
	Business and intangible asset acquisitions, net of cash received	**(620)**	(1,086)	(485)
	Net proceeds from corporate-owned life insurance policies	**10**	6	10
	Net cash used for investing activities	**(2,818)**	(2,396)	(1,684)
Cash Flows from Financing Activities	Net (payment) proceeds from short-term borrowings	**(802)**	850	—
	Net proceeds from issuance of long-term debt	**1,286**	—	—
	Payments of long-term debt	**(28)**	(141)	—
	Stock purchases	**(294)**	(1,064)	(669)
	Proceeds related to employee stock plans	**210**	266	319
	Cash dividends paid	**(376)**	(310)	(263)
	Bank overdrafts	**—**	(214)	214
	Other	**(29)**	(13)	(14)
	Net cash used for financing activities	**(33)**	(626)	(413)
Changes in Cash and Cash Equivalents	Net increase (decrease) in cash and cash equivalents	**188**	(665)	343
	Cash and cash equivalents, September 1	**255**	920	577
	Cash and cash equivalents, August 31	**$ 443**	$ 255	$ 920

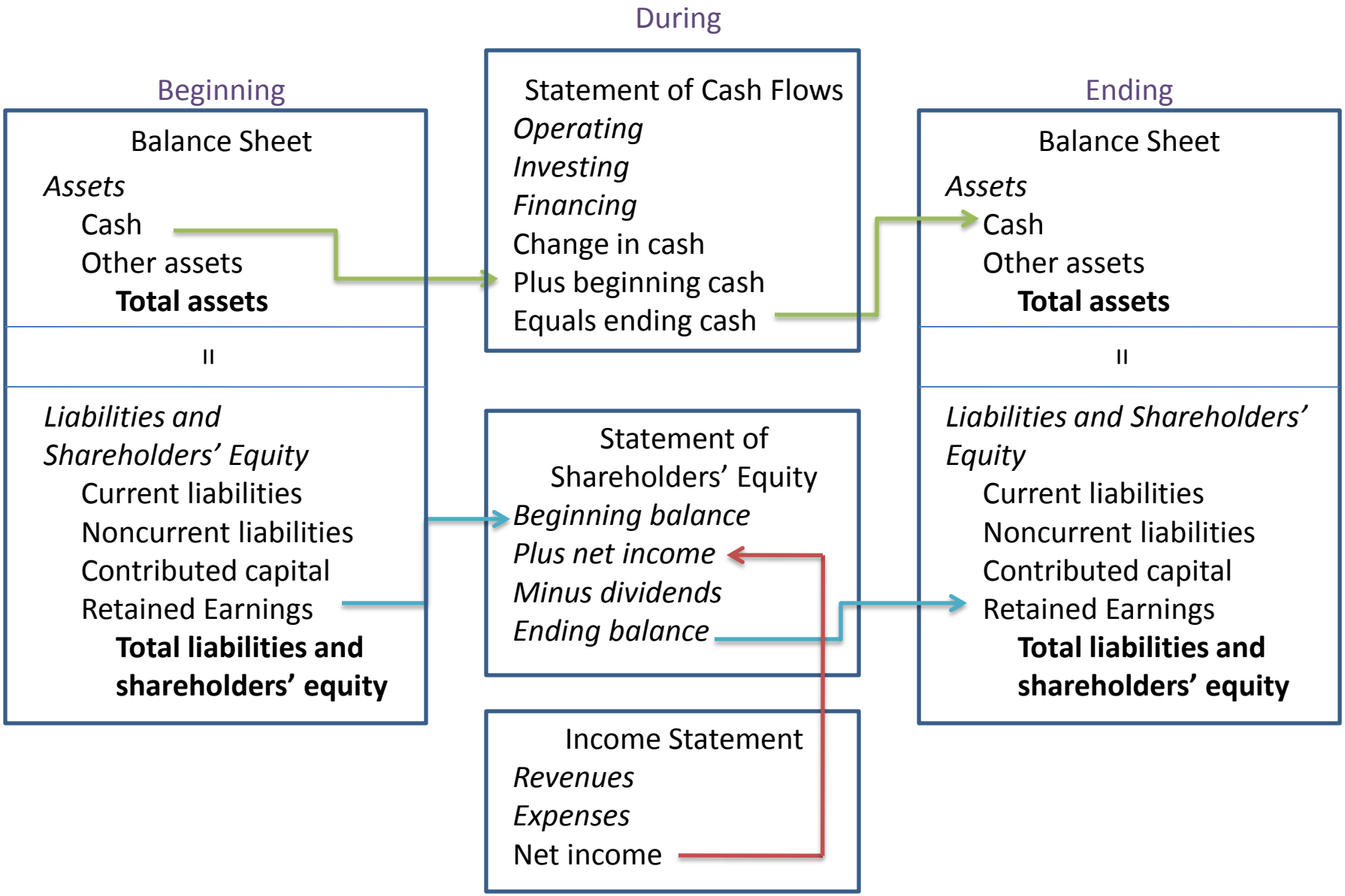
The accompanying Notes to Consolidated Financial Statements are integral parts of these statements.

Flows of cash over a period of time

Three types of activities:

- Operating
- Investing
- Financing

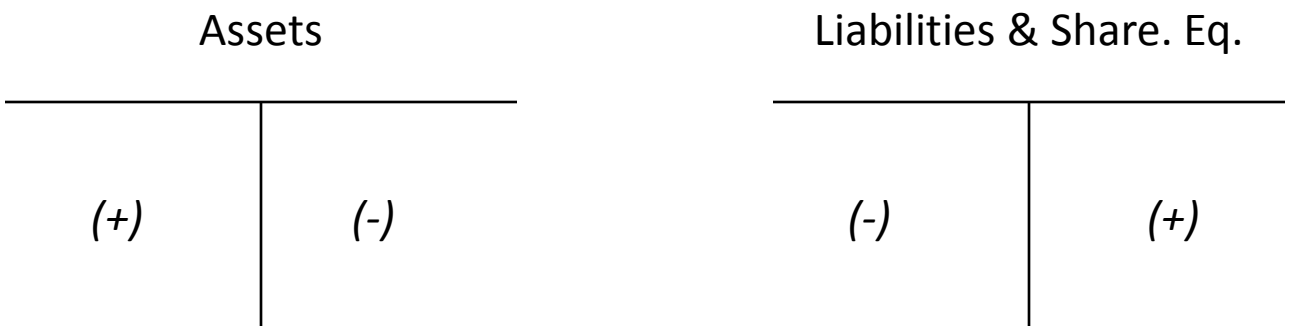
Financial Statement Linkages



Basic accrual accounting principles

- Accounting equation always holds
  - Assets = Liabilities + Shareholders' Equity.
  - Double-entry accounting
  - Balance sheet (levels) and income statement (flows) "articulate!"
- Timing of revenue recognition
  - Revenue must have been "earned."
  - Amount to be received can be estimated with reasonable certainty.
- Timing of expense recognition
  - Match expenses with the revenues they produce.
  - Occasional conflict with accounting's "conservatism" in the recognition of assets and liabilities. (Research and Development is an example.)

T-accounts;Debits & Credits



debit: a left-hand entry

credit: a right-hand entry

debits = credits maintains the accounting equation

Journal entry to record an entry:

DR Account #1

CR Account #2

Income Statement - Revenues (and gains) are credits; Expenses (and losses) are debits

Contra-assets are credit accounts that reduce the value of an asset account. E.g., Accumulated Depreciation or Allowance for Uncollectible Accounts.

Accounting Measurement Principles

- Timing of revenue recognition
  - Revenue must have been “earned”
  - Amount to be received can be estimated with reasonable certainty
- Timing of expense recognition
  - Match expenses with the revenues they produce (proper recognition of assets and liabilities)
  - Occasional conflict with accounting’s “conservatism” in the recognition of assets and liabilities

Accrual Principles

- Revenue may occur before or after a cash inflow.
- Expenses may occur before or after a cash outflow.
- Operating assets represent future cash flow potential.
- Operating liabilities represent future cash flow obligations.
- The combination of flows (income statement) and levels (balance sheet) enables us to analyze what has happened at the organization.

Alternative Profitability Measures

Earnings per share

= Net profit to common ÷ Average common shares outstanding

Gross margin ratio = Gross profit ÷ Sales revenue

Return on sales (Profit margin) = Net income ÷ Sales revenue

Total asset turnover = Sales revenue ÷ Average total assets

Return on assets (pre-tax) = EBIT[1] ÷ Average total assets

Return on assets (after-tax)

= {Net income + (1-tax rate)*Interest expense} ÷ Average assets

= {(1-tax rate)*EBIT} ÷ Average assets

Return on shareholders' equity

= Net income ÷ Average shareholders' equity

[1] EBIT is defined as earnings before interest expense and tax expense.

SCF - Basic Structure (Direct Method)

Operations:	+	Receipts from Customers
	-	Payments to Suppliers, Employees, etc.
	+	Interest/dividends received from investments
	-	Interest paid to lenders
	-	Taxes paid
Investing:	+	Proceeds from Sales of Investments
	-	Cash used for New Investments
Financing:	+	Proceeds from New Borrowing
	-	Retirement of Debt
	+	Proceeds from New Issues of Stock
	-	Repurchases of Stock
	-	Dividends Paid to Shareholders
		NET CHANGE IN CASH

Indirect Method

Indirect Statement of Cash Flows	Examples
Net Income	
Add back expenses and charges that don't involve cash	Depreciation, impairment charges
Subtract gains (add back losses) on non-operating transactions	Gains/losses on sales of assets (including marketable securities); early retirement of debt
Adjust revenues and expenses for short-term differences from cash flow reflected in current operating assets and liabilities	Subtract changes in A/R, Inventories, Prepaid expenses, Dividends and interest receivable; add back changes in A/P, Taxes payable, Accrued expenses, Interest payable, etc.
Cash from Operations	

DP P3-54 Cash from Operations - Indirect

Net income	$ 8,690
Plus depreciation expense	120
- Change in fees receivable	(9,450)
- Change in inventory	(710)
+ Change in operating accounts payable	0
+ Change in wages payable	270
Cash from Operations	**($ 1,080)**

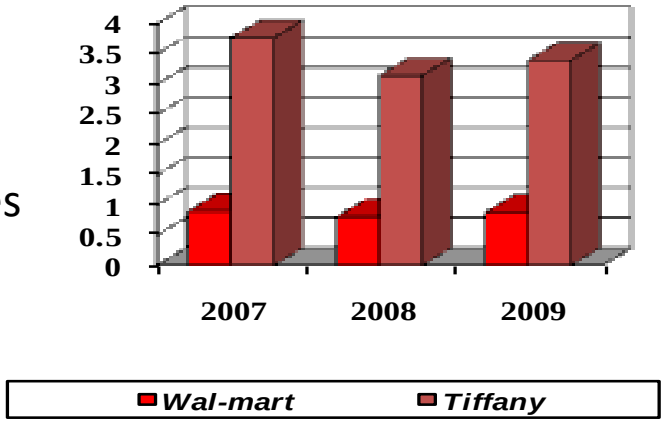
The Current Ratio

The Current Ratio compares the pool of resources that are expected to become cash within the year to the obligations that must be met within the year.

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

Wal-mart's 2009 Current Ratio is 0.88 ($48,949 ÷ $55,390).

This ratio should be high enough to prevent disruption of the company's operations without diverting resources from more profitable uses.



Other Liquidity Ratios

Current ratio = Current assets ÷ Current liabilities

Quick ratio = (Current assets – inventory) ÷ Current liabilities

A/R turnover = Sales revenue ÷ Average A/R

Days receivables = Average A/R ÷ (Sales revenue ÷ 365)

Inventory turnover = Cost of goods sold ÷ Average inventory

Days inventory = Average inventory ÷ (Cost of goods sold ÷ 365)

A/P turnover = Cost of goods sold ÷ Average A/P

Days payables = Average A/P ÷ (Cost of goods sold ÷ 365)

Cash operating cycle = Days receivables + Days inventory – Days payables

Days to flame-out = (Cash + Marketable securities) ÷ (-Free cash flow ÷ 365)

Recognition Criteria

- The revenue must have been *earned*.
- The revenue must be *realized or realizable*.
- SEC's Staff Accounting Bulletin 104:
  - Revenue can be recognized when
    - Persuasive evidence of an exchange agreement exists, and
    - Delivery of goods or services has occurred, and
    - Seller's price to buyer is fixed or determinable, and
    - Collectibility is reasonably assured.
  - Judgments based on "large pool of homogeneous transactions."

Accounts Receivable

***Present value* of the amount *expected* to receive.**
(If less than 1 year, ignore present values.)

Time	Event	Entry
Time of Sale	Sale to customer	DR A/R CR Sales Revenue
Period of Sale	Adjusting entry	DR Bad Debt Expense (I/S) CR Allowance for Uncollectible Accounts (X-A)
Later	Collection	DR Cash CR A/R (all who pay)
Yet later	Write-off	DR Allowance for Uncollectible Accounts CR A/R (those who don't pay)

Note: The expected I/S impact occurs during the period in which the sale is recorded, not when the account is actually written off. This provides proper matching of expenses with revenues.

Accounting for Investments in Securities (<50% Ownership)

- Two Balance Sheet Classifications:
  - Marketable Securities (Current Asset)
  - Investments (usually Noncurrent Asset)
- Four Methods of Accounting:
  - Minority, Passive Methods (3 of them)
  - Minority, Active Method
- Fundamental questions:
  - How do we recognize income from these investments?
  - How do we recognize fluctuations in the market value of these investments?
- New developments in next class

Three Possibilities

	HC		MV		AFS	
Events	**B/S**	**I/S**	**B/S**	**I/S**	**B/S**	**I/S**
Purchase @ 100	100	--	100	--	100	--
Price rises to 110	100	--	110	+10	110	--
Price falls to 90	100	--	90	-20	90	--
Sell @ 95	95	-5	95	+5	95	-5

Securities Available for Sale (AFS) looks like MV on the Balance Sheet and like HC on the Income Statement! That is, market fluctuations are recognized in the asset values as they occur, but only realized gains and losses go into income!

Which of these do we use?

Accounting for Minority, Active Investments

- The “Equity Method” is used when one company (“the investor”) has an active investment in another (“the affiliated company”).
- The investor recognizes as investment income a proportionate share of the affiliated company’s net income.
- The investor’s share of affiliated company dividends is not recognized as investment income. Instead, it reduces the Investment value on the Balance Sheet.
- Market fluctuations in the affiliated company’s stock are not recognized.

Minority Active vs. Minority Passive

- Starting point for this assessment is 20% ownership.
  - Less than 20% – presumed not to exert significant influence
  - 20% or more – presumed to exert significant influence
- But the real test is "significant influence," consistent with the differences in income recognition.
- If the affiliated company is recording losses, we might find the investor buying 19.9%!

Consolidation Policy

- Except in rare circumstances, companies are supposed to issue consolidated reports that include subsidiaries in which they own a majority interest.
- Advantage
  - makes it difficult to hide aspects of operations that are risky or unprofitable
- Disadvantage
  - analysis of financial statements often relies on comparisons with companies in the same business -- consolidation makes such comparisons difficult
- Segment reports are supposed to help, but provide very limited information.
- This is also an issue for not-for-profit organizations. Should unrestricted "funds" be kept separate or consolidated? Current standard requires that they be reported together.

Effects of Consolidation

General objective is to present financial statements as if the parent and subsidiaries were one economic entity. Under this view, the parent purchases a bundle of assets and liabilities rather than shares of stock.

General approach is to add together the financial results of the parent and subsidiaries, while eliminating those items that would not have been recorded if they were one entity.

Examples

Consolidated cash will (usually be the sum of the cash in the individual balance sheets.
Must eliminate the effects of
- Intercompany sales
- Intercompany receivables and payables
- Parent company's "Investment" and Subsidiaries' "Common Stock" accounts

Must recognize
- Goodwill purchased in acquisitions
- Interests of minority shareholders in subsidiaries

Intercompany Sales-1

- On the Income Statement, only Revenues and Cost of Goods Sold from external transactions should appear.
- Sub 1 produces unit for X and sells it to Sub 2 for Y. Sub 2 sells the unit to an outside customer for Z.

	Sub 1	Sub 2
Revenue	Y	Z
CGS expense	X	Y
Gross profit	Y-X	Z-Y

- Eliminating entry leaves only outside expenses and revenues. Gross profit is unaffected.

DR Revenue	Y	
CR CGS expense		Y

Intercompany Sales-2

- Sub 1 produces unit for X and sells it to Sub 2 for Y. Sub 2 still has the unit in inventory at the end of the period.

	Sub 1	Sub 2
Revenue	A	-
CGS expense	B	-
Gross profit	A-B	-

- Eliminating entry leaves no expenses and revenues because there has been no transaction with external parties. Inventory value is reduced to cost.

DR Revenue	A	
CR CGS expense		B
CR Inventory		A-B

Acquisitions can affect the analysis of accounts

Accounts receivable	
Beginning balance	
Revenues	Collections
Acquired receivables	Write-offs
Ending balance	

- Accounts can be affected by both operating items and investing items.
  - Only the former will show up in the adjustments to NI under an indirect method Cash from Operations
- Other reasons why the adjustments to NI may not match changes in the balance sheet
  - Fluctuations in foreign currency
  - Impairment charges (e.g., an inventory write-down)

Factoring the Concept of Control into Consolidation Accounting

- Consolidation must extend to all entities controlled by the group's management and governing board.
- Transactions with unconsolidated "off-balance sheet" entities under management's control could
  - inflate income and cash flow
  - overstate assets and equity
  - hide debt.
- Identifying control relationships between the group and another entity is sometimes difficult.
  - Not necessarily based on share ownership.
  - Sometimes based on customs or personal relationships.
- The Enron scandal stemmed from Enron's success at setting up off-balance sheet "special purpose entities" in which it held little stock, but which it fully controlled.

LIFO/FIFO Timing Differences

- What effect does this LIFO/FIFO choice have on
  - Collections from Customers?
  - Payments to Suppliers?
  - Payments to IRS?
- What causes this effect? What types of firms would use LIFO?
- What happens when a company liquidates its inventory in the following years? Note: LIFO is always used on a *periodic, annual basis*!
- This is the one significant area in which the IRS requires conformity between tax reporting and financial reporting. If you use LIFO for tax purposes, you must use it in reporting to shareholders. However, firms may use different methods for different types of inventory.
- Note: LIFO is predominantly a US phenomenon (and a potential IFRS roadblock)

Where are the New and Old Costs?

	Cost of Goods Sold	Inventory
FIFO	Old	New
LIFO	New[1]	VERY Old

Concerns for the financial statement user:

Ratios like inventory turnover may be distorted.

A company that liquidates old layers of LIFO inventory could be matching current revenues with very old costs, distorting reported profits.

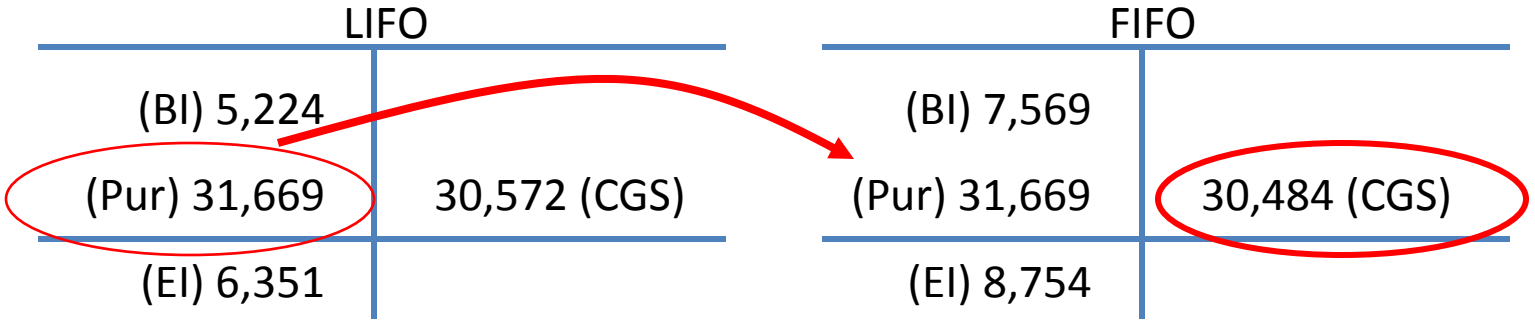
How can we compare companies that are using different inventory cost flow assumptions?

---

[1]As long as inventory levels are maintained!

DP: P6-33 Conversion of LIFO CGS to FIFO CGS

LIFO companies don't always disclose what their CGS or Income would have been under FIFO. But, we can use the "dueling accountants" method



LIFO Cost of Goods Sold for 2006 is higher than FIFO Cost of Goods Sold. This results because, on average, Caterpillar experienced (slightly) increasing costs for its inventory over the year. LIFO COGS was $88 million more than FIFO COGS for 2006, so Caterpillar saved 35%×$88 million, or $31 million in taxes for the year.

If a company uses LIFO for some of its inventories and FIFO for the rest, then this same procedure provides the CGS as if the company used FIFO for all of its inventories.

Inventory Accounting Summary

- Inventory accounting choice affects
  - net income
  - current assets
  - operating statistics (inventory turnover)
  - operating decisions
- Financial statement user must be aware of the cost flow assumption used.
- Most LIFO companies don't disclose what their CGS would be under FIFO, but we can figure it out!
- In high inflation environments (South America, Eastern Europe), the historical cost assumption is often abandoned.

Recognition of Intangible Assets

- What makes these assets valuable?
  - Advertising campaigns, promotions, etc. → "premium"
  - R&D over a period of years → monopoly on products
- U.S. GAAP accounting:
  - expense these costs in the period in which they occur
  - purchased intangibles can be recognized as assets and amortized
- IFRS requires capitalization of development costs under some circumstances
- Software development:
  - Three stages: "research" → "construction" → "maintenance"
  - Costs in middle stage are capitalized, others are expensed.
  - Electronic Arts versus Take Two Interactive
- Stock price effects
  - even though R&D reduces earnings in the U.S., there is not a corresponding decrease in stock price. In fact, the stock price is *positively* related to the level of R&D spending.
  - Google
    - Market capitalization ~ $178 Billion
    - Net assets at 30 September 2009 ~ $38 billion

Matching Costs and Benefits

Depreciation is a process by which the costs of long-lived assets can be matched with the benefits they produce. It is not a valuation process. The book value of an asset (original cost less accumulated depreciation) seldom corresponds to the asset's value.

Depreciation - Buildings, Equipment

(Land is not depreciated because it has an infinite life!)

Depletion - Wasting Assets (e.g., oil field)

Amortization - Intangible Assets (e.g., trademarks)

(Intangible assets with indefinite lives are not amortized.)

Time Value of Money
DCF, IRR, etc.

- Discounted Cash Flow (DCF) techniques are methods by which cash inflows or outflows at one point in time can be translated into values at another point in time. The focus is on **CASH**!
  - "How much must I put into an annuity today to have $1,000,000 when I retire?"
  - "Will we be able to recoup our investment in developing a new product line when sales will not occur until two years in the future?"
  - "We have promised health care benefits to our employees when they retire. What is the value of that promise in today's terms?"

Future Values and Compound Interest Methods

Assume that interest is compounded annually, and you invest $1.00 now. How much will that investment be worth in the future?

Interest Rate	Investment Duration	Value at Future Point
8%	1 year	$ 1.08
8%	2 years	$(1.08)^2$ = $ 1.166
8%	25 years	$(1.08)^{25}$ = $ 6.848
12%	1 year	
12%	2 years	

Future value depends on the rate of interest assumed and the number of periods for which interest will be earned.

$$F = P*(1+r)^n$$

Present Values: Putting Future Cash Flows in Today's Terms

Assume that interest is compounded annually, and you will receive $1.00 at some point in the future. How much will that investment be worth today?

Interest Rate	Time to Wait for $1	Value Today
8%	1 year	$\$1/1.08 = \$0.926$
8%	2 years	$\$1/(1.08)^2 = \$0.857$
8%	25 years	$\$1/(1.08)^{25} = \$0.146$
12%	1 year	
12%	2 years	

Present value depends on the rate of interest assumed and the number of periods you have to wait for the cash flow.

$$P = F/(1+r)^n$$

Leases: Two Approaches

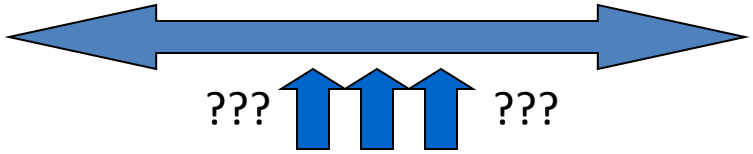
- Suppose we rent a car from Hertz on a day-to-day basis. Would we recognize an asset or liability?

- Suppose we take out a loan and purchase a car. Would we recognize an asset or liability?

  – As time passes, we depreciate the car and recognize interest expense and repayments of the loan.

Four Criteria

Executory Contract
(Operating Lease)



Installment Purchase
(Capital Lease)

- How do we distinguish between leases that represent executory contracts (and are operating leases) and leases that represent installment purchases (and are capital leases). FASB set four criteria; *if any one holds at the inception of the lease, the lease is treated as a capital lease*.
  - 1 - Legal title passes to the lessee.
  - 2 - The lease includes a "bargain purchase option"
  - 3 - Length of lease $\geq$ 75% of assets expected economic life
  - 4 - Present value of minimum lease payments $\geq$ 90% of fair value of the asset
- Who "owns" the asset economically? That is, who reaps the rewards and bears the risk of ownership?

Tax Expense ≠ Tax Due

$3000 asset, three year life, zero salvage. SL for financial reporting, Accelerated for tax

	Tax			Book		
Year	1	2	3	1	2	3
Revenues	2000	2000	2000	2000	2000	2000
Depreciation	1500	1000	500	1000	1000	1000
Income before tax	500	1000	1500	1000	1000	1000
Taxes due (40%)	200	400	600			
Tax expense				400	400	400
Net income				600	600	600

This approach to interperiod tax allocation achieves matching of tax expense with income before tax (and should lead to better predictions).

Journal Entries/Liability Balances

				End-of-year Deferred Tax Liability
Year 1:	DR Tax expense	400		
	CR Tax payable (cash)		200	
	CR Deferred tax liability		200	200
Year 2:	DR Tax expense	400		
	CR Tax payable (cash)		400	200
Year 3:	DR Tax expense	400		
	DR Deferred tax liability	200		
	CR Tax payable (cash)		600	0

If we called the IRS at the end of year 1 and asked how much we still owed, they would say "nothing." Therefore, the deferred tax liability is not like other liabilities. It arises from the fact that we have recognized more income for financial reporting purposes than for tax purposes, and this difference comes from timing differences that will reverse.

Repurchasing Shares

- Purchase “treasury shares”:

DR Treasury shares (contra-SE)
CR Cash

- Sell “treasury shares” for greater amount than paid:

DR Cash
CR Treasury shares (contra-SE)
CR Additional paid in capital

- Sell “treasury shares” for lesser amount than paid:

DR Cash
DR Additional paid in capital
CR Treasury shares (contra-SE)

Employee Stock Options

- Options issued to employees (use option pricing methods):

DR Compensation expense (IS)
CR Additional paid-in capital

- Options exercised:

DR Cash
CR Common shares at par (SE)
CR Additional paid-in capital (SE)

- Options expired unexercised:

No entry