Accrual Accounting Process

15.501/516 **Accounting**

Spring 2004

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Feb 17/18, 2004

What is Cost of Goods Sold?

- Q Mart buys $10,000 worth of cereals from Special Foods for cash.
- Assets = L + OE
- Cash Inventory
- -10,000 +10,000

- Exchange of one asset for another asset
- Operating outflow = $10,000

What is Cost of Goods Sold?

- Q Mart sold one-half of the cereals for $8,000 cash
- Assets = L + Owners' Equity
- Cash Retained Earnings
- +8,000 +8,000

- What is the most significant matching expense?

What is Cost of Goods Sold?

- The cost to Q Mart of buying the cereal that was sold for $8,000
- one-half of $10,000 = $5,000
- = Cost of Goods Sold or Cost of Sales
- Assets = L + Owners' Equity
- Inventory Retained Earnings
- -5,000 -5,000

What is Gross Profit or Margin?

- Assets = L + Owners' Equity
- Cash Inventory Retained Earnings
- -10,000 +10,000
- +8,000 +8,000
- -5,000 -5,000
- Increase in retained earnings +3,000
- Gross Profit or Margin = Sales Revenue (-) Cost of Goods Sold = $3,000
- GM **rate** = $3,000/$8,000 = 37.5%

Components of Income

- Sales or Service Revenue
- (-) Cost of Goods Sold
- (-) Operating Expenses
- (-) Unusual **or** Infrequent items
- (-) Income Tax Expense
- = Income from Continuing Operations (ICO)
- All items disclosed below ICO are referred to as “below the line” items.
- The below-the-line items are each shown net of income tax.

Components of Income - Staples

Sales	**11,596,075**
Cost of goods sold& Occupancy costs	**08,652,593**
Gross Profit	02,943,482
<u>Operating expenses</u>	
Operating &selling	01,795,428
Pre-opening	00,008,746
General & administrative	00,454,501
Amortization on intangibles	00,002,135
Amortization on goodwill	0
Asset impairment charges	0
Store closure charge	0
Interest & other expenses	00,020,609
Total operating & other expenses	**02,281,419**
Income before taxes	00,662,063
Income taxes	00,215,963
Net income	**00,446,100**

Cash Flow Statement

- **Operating Activities**
  - Net income — ***0,446,100***
  - Adjustments,
    - Depreciation and amortization(+) — 0,267,209
    - ------
  - Cash flow from operating — ***0,468,250***
- **Investing activities**
  - Acquisition of property & equip (-) — (0,264,692)
  - Acquisitions of businesses (-) — (1,171,187)
  - -------
  - Net cash from investing — ***(1,436,226)***
- **Financing activities**
  - Proceeds from sale of capital stock (+) — 0,078,895
  - Proceeds from borrowings (+) — 0,730,897
  - Payments on borrowings (-) — (0,95,235)
  - ------?
  - Net cash from financing — ***0,714,083***
- **Net increase/(decrease)** — **0,201,240**

Cash Flow Versus Accrual Accounting

- Cash flow accounting
  - Measures performance by comparing the cash inflows of a certain time period to the cash outflows of that period (e.g., cash flow from operations).
- Accrual accounting
  - Measures performance by comparing revenues (which are recognized when the earning process is complete) with expenses (which are recognized when assets are consumed or liabilities are created).
  - Geared toward periodic performance measurement that is not skewed by investment, financing, and long-horizon operational activities

Cash Flow Versus Accrual Accounting

- Accrual accounting
  - Based not only on cash transactions but also on credit transactions, barter exchanges, changes in prices, changes in form of assets or liabilities, and other transactions.
  - records events that have cash consequences for an enterprise
  - but does not require a concurrent cash movement in order to record a transaction.

Cash Flow Versus Accrual Accounting

- Over the entire life of a corporation, total “income” under cash flow and accrual accounting is the same.
- However, cash receipts in a particular period may largely reflect the effects of activities of the enterprise in earlier periods.
- Similarly, many of the cash outlays may relate to activities and efforts to be undertaken in future periods.
- The matching principle in accrual accounting addresses this limitation of cash flow accounting.

Cash Flow Versus Accrual Accounting

- Stock price = Present value of **expected** future cash flows.
- Changes in stock prices = f(changes in expectations about future cash flows).
- Isn’t cash flow more important than earnings?

Cash Flow Versus Accrual Accounting

- What cash flows are important?
  - Future cash flows!
- When compared to current cash flows, current earnings more highly associated with future cash flows
- When compared to cash flows, earnings have a stronger association with stock prices.
- Earnings are superior indicators of expected future cash flows.

Accounting Earnings versus Stock Prices

- Top management’s incentive compensation is usually linked to stock prices and accounting earnings.
- Why not link it to stock prices alone?
  - Stock prices are affected by economic factors that are outside of a manager’s control (e.g., macroeconomic, political factors).
  - Consequently, stock prices may be a poor indicator of managerial performance.
  - Combining both mitigates this problem

Accounting Earnings versus Stock Prices

- A second reason for using accounting earnings
- Expected versus delivered performance
  - Firm X hires manager Y on December 31, 1997.
  - Stock price of X jumps by 10%!   Why?
  - Market's **expectations** regarding the company's future performance improve.
  - Accounting earnings of 1998 increases by 10%!
    - Why?
    - Manager Y's actions produce an **actual** improvement in the financial performance of X in 1998. Stock prices anticipated this improvement in 1997 at the time of the earnings announcement.

Accounting Earnings versus Stock Prices

- By combining stock prices and earnings to reward managers, a firm can reward a manager for his/her strategic planning and operational execution.
- Of course, stock prices do reflect the **delivered** performance of the manager as well.
  - But if payment is on the basis of expected performance, then what do you do if the manager shirks subsequently? (Moral hazard problem)
  - Earnings provide a straightforward measure of **delivered** performance.

Accrual Accounting and Periodic Adjustments

- Accountants record exchange transactions.
- But this does not capture all economic activities.
- Periodic adjusting
  - Required to record activities that have taken place, but which have not yet been recorded.
  - To reduce accounting costs
    - Some economic activities may be continuous in nature. The effect of such activities are accumulated over a period and then recorded periodically rather than continuously, e.g., consumption of stationary.

Recall Joe's Landscaping Service

- **Company pays $9,000 for expenses (wages, interest, and maintenance)**
- Assets = Liabilities + Owners' Equity
- Cash Retained Earnings
- -$9,000 -$9,000

Recall Blockbuster - Matching

	Year1	Year2
Estimate:	50x	17x

How much does Blockbuster recognize as an expense each year?

$\frac{50}{67}$ **($20)** $\frac{17}{67}$ **($20)**

Yearly Expenses **$15** **$5**

Recording video expenses

	Cash	Video Asset	Retained Earn.
Buy Video	(20)	20	
Rent 50x @$3each	150		150
End of Y1		(15)	(15)
Rent 17x @$3each	51		51
End of Y2		(5)	(5)

Total video expenses = $20

Accrual Accounting and Periodic Adjustments

- In many cases, assets and liabilities are created or discharged without the occurrence of a visible documentable exchange transaction
  - Interest is earned continually on a bank savings account as **time passes**
  - Machinery depreciates **as it is used** in a company's operations.
- Periodically, adjusting journal entries are made to record these effects.
- Recall Blockbuster example

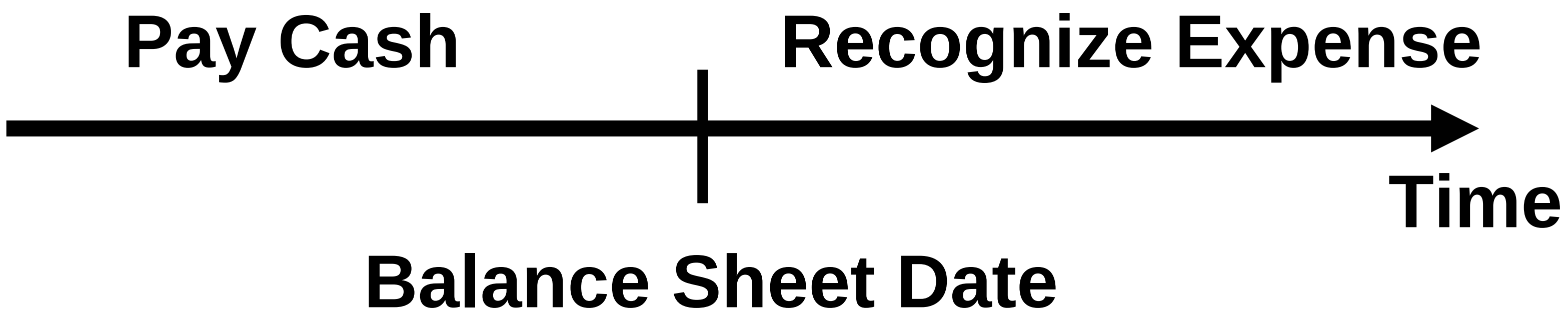
Accrual Accounting and Periodic Adjustments

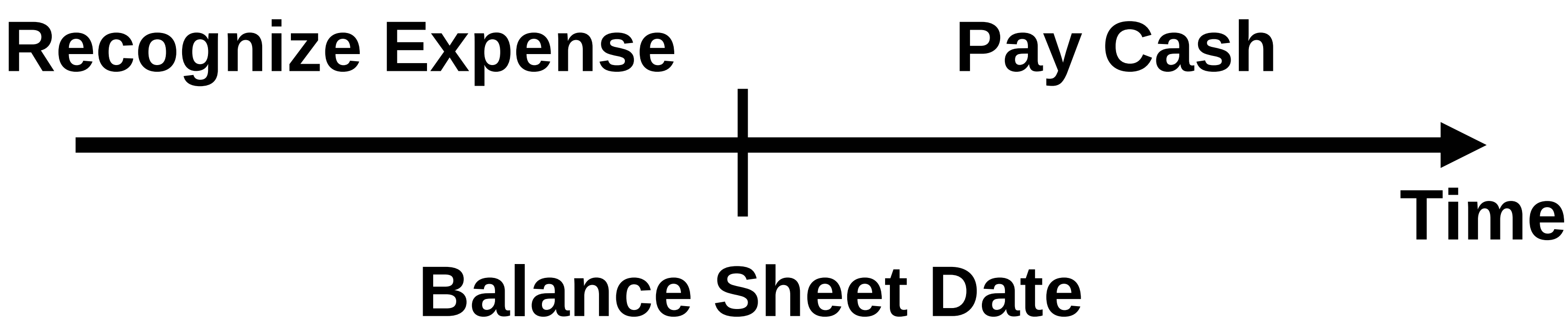
- Adjusting entries
  - Made whenever financial statements are prepared. Why?
  - Adjusting entries are designed to
    - Correctly compute periodic income
    - Correctly show balances of assets and liabilities at the end of the period

Periodic Adjustments

- Characteristics of an adjusting journal entry:
  - matching of expenses and revenues
  - involves at least one temporary (revenue, expense, or dividend) account and at least one permanent (asset or liability) account.
  - never involves the cash account

Four ways that recognition and cash do not coincide





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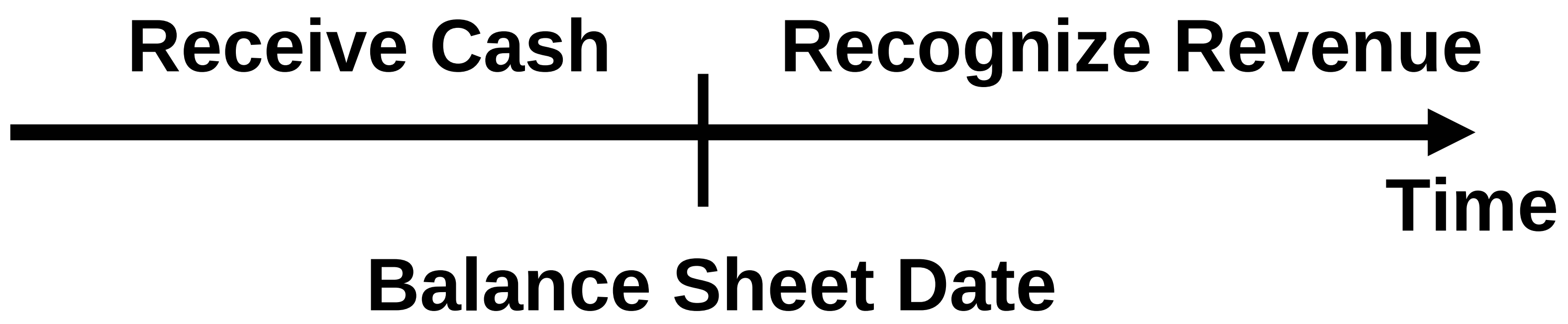

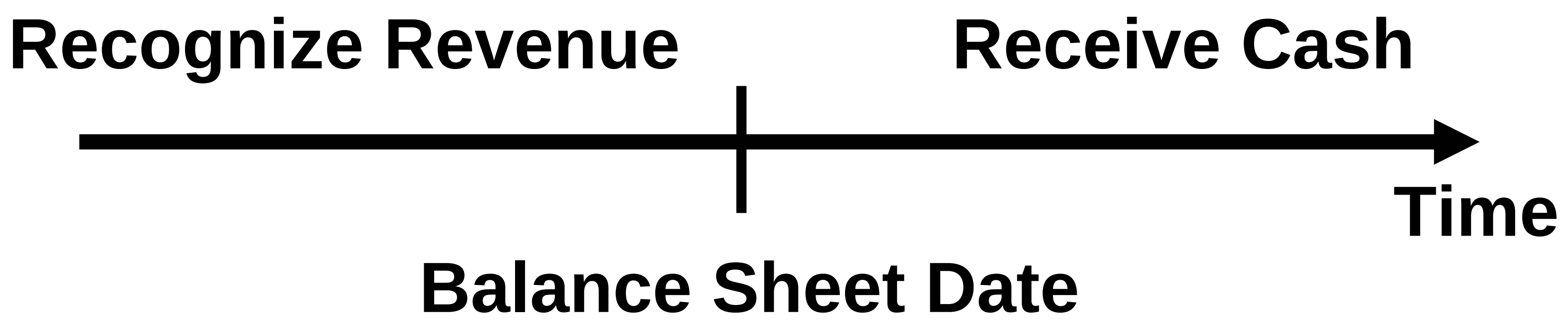

Types of Periodic Adjustments

- **Expense or Revenue before Cash**
- Expense **incurred** today, but cash paid tomorrow.
  - Salary earned by employees but not paid at the end of accounting period.
  - Employees earn salary when they perform their duties, not when they receive payment.
  - Unpaid salary is a Salary Payable liability
- Revenue **earned** today, but cash received tomorrow
  - Interest earned today, but cash received tomorrow.
  - Interest is a reward for lending money, so it is earned with passage of time
  - Interest receivable asset

Types of Periodic Adjustments

- **Cash before accruing Revenue or Expense (Cost Expirations or Revenue Expirations)**
- Cash paid yesterday, Expense **incurred** today.
  - 1998 rent paid in advance in 1997
  - Rent paid in advance asset
- Cash received yesterday, revenue **earned** today
  - Cash advance from customer for services not yet performed
  - Cash advance is Unearned Revenue liability
- Matching is the guiding principle in periodic adjustments.
- Objective: To match the revenue earned in a period (whether received **in that period** in cash or not) with all the expenses incurred to earn that revenue (whether paid **in that period** in cash or not).