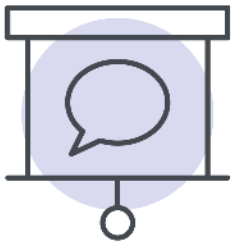
Brock U

ACTG 1P91
FINAL EXAM
STUDY GUIDE



Lecture Notes

OneClass find more resources at oneclass.com

ACTG 1P91

May 6, 2014

Business Decisions and Financial Accounting: Chapter 1

Accounting

- Is an information system for measuring the results of business activities and communicating these measurements to intended users

Communication

- Intended to be
  - Useful
- Need to know
  - Who are the users
    - Managerial
    - Financial
  - What are their needs

Managerial Accounting

- Reports used inside the company
- Detailed financial plans and reports about the operating performance of the organization

Financial Accounting

- Reports used outside the company by creditors, investors, and others
- Financial statements

Annual Reports tell a story

- Learn to read the story
- Understand the conventions
- Understand the limitations
- Understand the philosophy
- Understand the origin of numbers

Accounting Equation

- Resources owned by the company = Resources Owed to creditors and to shareholders
- Assets = Liabilities + Shareholders' Equity
- Accounts accumulate and report the effects of each different business activity

Assets

- Resources controlled by the company that have measurable value and are expected to provide future benefits to the company

Liabilities

OneClass find more resources at oneclass.com

- Amounts owed by the business to creditors

Shareholders' Equity

- Owners' claims on the business resources
  - Contributed Capital
    - Amount owners directly invested in the company in exchange for shares
  - Retained earnings
    - Amount the company has earned through profitable business operations

Net Income

- Revenue
  - The amount earned by selling goods or services to customers
- Expenses
  - The cost of doing business that are necessary to earn revenues
- Revenue – Expenses = Net Income

Retained Earnings

- Dividends
  - The distribution of a company's earnings to its shareholders as a return on their investment
  - Dividends are not an expense
- Retained Earnings
  - Increases with Net Income (Profit generated)
  - Decreases with Dividends (Profit distributed)

Financial Statements

- Typically prepared in this order
- Income statement
- Statement of Retained Earnings
- Balance Sheet
- Statement of Cash Flows

Income Statement

- Reports the amount of revenues less expenses for a period of time

Statement of Retained Earnings

- Reports the way that net income and the distribution of dividends affected the financial position of the company during a period of time

Balance Sheet

- Reports the amount of assets, liabilities and shareholders' equity of a business at a point in time
- Assets = Liabilities + Shareholders' Equity

Statement of Cash Flows

OneClass find more resources at oneclass.com

- Reports the operating, investing and financing activities that caused increases and decreases in cash during a period of time

Objectives of financial reports

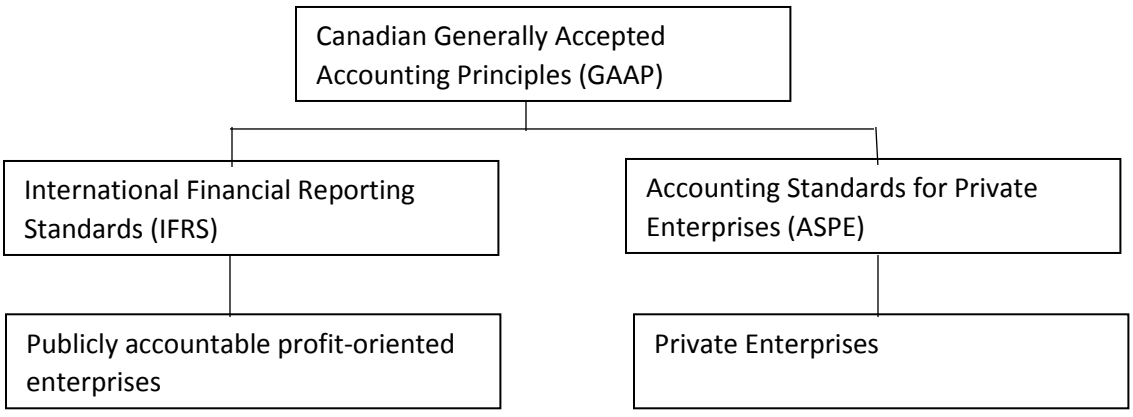
- Provides information
  - Useful for making rational investment and funding decisions
  - About economic recourses and funding of resources
    - Historical
  - About entry's operating performance
    - Historical
  - Sources and uses of cash

Using financial statements

- Financial statements are a key source of information for external users to help make decisions concerning a company
- Creditors assess
  - Is the company generating enough cash to make payments on its loans?
  - Does the company have enough assets to cover its liabilities?
- Investors expect a return on their contributions to company, either immediate or long-term

Useful Financial Information

- Communication done through language
- Accounting is a language
- Language needs rules
- Generally Accepted Accounting Principles (GAAP)
  - Rules of accounting approved by the Canadian Institute of Chartered Accountants for use in Canada
  - Can be used by private enterprises
- International Financial Reporting Standards (IFRS)
  - Rules of accounting created by the Internal Accounting Standards Board (IASB) for international use
  - Must be used by publicly accountably profit-oriented enterprises



OneClass find more resources at oneclass.com

OneClass find more resources at oneclass.com

Key Concepts of External Financial Reporting

- Useful financial information must be
  - Relevant
  - Faithful Representation of the business
  - Comparable, verifiable, timely and understandable
- Elements to be measured and reported are
  - Assets
  - Liabilities
  - Shareholders' equity
  - Revenues
  - Expenses
  - Dividends
- Concepts for measuring and reporting are
  - Assumptions: unit of measure, separate entity, going concern, time period
  - Principles, Cost, Revenue Recognition, matching, full disclosure
  - Exceptions: cost-benefit, materiality, industrial practices

OneClass find more resources at oneclass.com

OneClass find more resources at oneclass.com

ACTG 1P91

May 8, 2014

Reporting Investing and Financing Results on the Balance Sheet: Chapter 2

Accounting

- Accounting is a language used to communicate
  - Useful information regarding
    - Economic resources
- In business to generate those resources
  - To distribute to
    - Creditor
    - Owners

Balance Sheet

- Statement of financial position
- Anchor to which all other statements are tied
- Details the financial position of the entity at a point in time
- Resources at a point in time
- Source of resources at a point in time

Concept of an entity

- Accountants kept for entities
  - Distinct from persons associated
    - Owners
    - Creditors
    - Employees
    - Suppliers
- Entity
  - Organization or activity for which accounting reports are prepared
    - Business
    - Church
    - School
    - Government
- One entity may be part of a larger entity

Balance Sheet

- Resources must equal sources of resources
  - Assets = sources
  - All information must impact 2 things – dual-aspect of accounting
- Assets
  - Resources presently owned by a business that will generate future economic benefits
- Liabilities
  - Amounts presently owned by a business to creditors

OneClass find more resources at oneclass.com

OneClass find more resources at oneclass.com

- Shareholders' Equity
  - The amount invested and reinvested in a company by its shareholders

Duality of Accounting

Assets	=	**Liabilities**	+	**Shareholders' Equity**
+ Assets –		– Liabilities +		– Shareholders' Equity +
Increase using **Debit** / Decrease using **Credit**		Decrease using **Debit** / Increase using **Credit**		Decrease using **Debit** / Increase using **Credit**

Duality of Accounting

- Accounts increase on the same side as they appear in A = L + SE
  - Assets increase on the left side on the left side of the account
  - Liabilities increase on the rights side of the account
  - Shareholders' equity increase on the right side of the account
    - Decrease on the opposite
- Left is debit
- Right is credit

Assets

- Economic resource
- Controlled/owned by the entity
- Measureable
  - Objectively
- Record at TOTAL original cost
  - Includes debit and owner funding
- List in balance sheet in decreasing order of liquidity
  - Labelled as current if realized (consumed) or sold during normal operating cycle OR within one year

Current Assets

- Cash
- Marketable securities
- Accounts Receivable
  - Less uncollectible estimates
- Inventories
- Prepaid expenses
  - Insurance – right to protection

Assets

- Long-term
  - Provide enduring benefits
    - Fixed assets
      - Plant, property and equipment (PP&E)
      - Net of depreciation
- Other

OneClass find more resources at oneclass.com

- Investments
- Intangibles
    - Start-up costs
    - Goodwill

Liabilities

- Obligations to outsiders
    - Existing commitment to transfer resources to others in the future
- Sources
- Claims
    - Generally not on specific assets
    - If on specific assets, disclose
- Amount that would be required to satisfy obligation

Liabilities – Financing

- Equity financing – obtained through owners' contributions and reinvestments of profit
    - Issuing stock
- Debt financing obtained through loans
    - Obligated to repay debt financing
    - Promissory note

Liabilities

- Current liabilities
    - Expected to be satisfied by use of current assets or creation of other current liabilities
    - Accounts Payable
        - Claims of suppliers (usually no interest)
    - Notes/Short-term loans
        - Non-supplies (usually charge interest)
    - Tax Payable
    - Accruals
        - Earned by outsiders
        - Not yet paid
    - Deferred revenue
        - Received cash but haven't provided service/product
    - Current portion of long-term debts

Cost Principle

- Record assets at price paid to acquire
    - Real worth may change
    - Accounting measurement does not reflect this
- The longer the asset has been held, the less likely that reported accounting numbers and fair market value are equal

Owners' equity/shareholders' equity

- Amount owners have invested
    - Paid-in capital (contributed)
    - Retained earnings
        - Total earnings from entity inception
        - Less
            - Amounts returned to owners
                - Dividends
- Earnings belong to entity either
    - Retain and reinvest in additional resources (assets)
    - Distribute to owners
- No connections between retained earnings and cash

Debits vs. Credits

- Generally these types of accounts are increased with a debit
    - **D**ividends (Draws)
    - **E**xpenses
    - **A**ssets
    - **L**osses
- You might think of **D-E-A-L** when recalling the accounts that are INCREASED with a debit
- Generally these types of accounts are increased with a credit
    - **G**ains
    - **I**ncome
    - **R**evenues
    - **L**iabilities
    - **S**tockholders' (Owners') Equity
- You might think of **G-I-R-L-S** when recalling the accounts that are increased with a credit
- To decrease an account you do the opposite of what was done to increase the account. For example, an asset account is increased with a debit. Therefore it is decreased with a credit

Current Ratio

- Shows whether current assets are sufficient to pay current liabilities
- A higher ratio means better ability to pay
- Rule of thumb – 2:1
    - Desirable for manufactures
- Current Ratio = Current Assets/Current Liabilities

OneClass find more resources at oneclass.com

ACTG 1P91

May 13, 2014

Reporting operating results on the Income Statement: Chapter 3

Income Statement

- Summarizes the financial impact of operating activities undertaken by the company during the accounting period
- Revenue – amounts earned by selling goods or services to customers
- Expenses – costs of business necessary to earn revenues
- Net Income – the excess of revenues over expenses
    - The amount by which shareholders' equity increases (decreases) as a result of the company's profitable (unprofitable) operations

Revenue

- Sales of products
- Sales of services
- Revenue from lending money
- Accounts receivable
    - Revenue not yet received
    - Collectability
        - Bad debt

Reporting Revenues

- Cash basis accounting
    - Reports revenues when cash is received and expenses when cash is paid
    - Not allowed under GAAP
- Accrual basis accounting
    - Reports revenues when they are earned and expenses when they are incurred, regardless of the timing of cash receipts or payments
    - Required under GAAP

Revenue Principle – Revenue Recognition

- Revenues must be measured and recorded when they are earned, not necessarily when cash is received
- Revenue is recognized when three conditions are met:
    - Risks and rewards have passed or the earnings process is substantially complete
    - Measurability is reasonably certain
    - Collectability is reasonably assured

Manufacturing production cycle

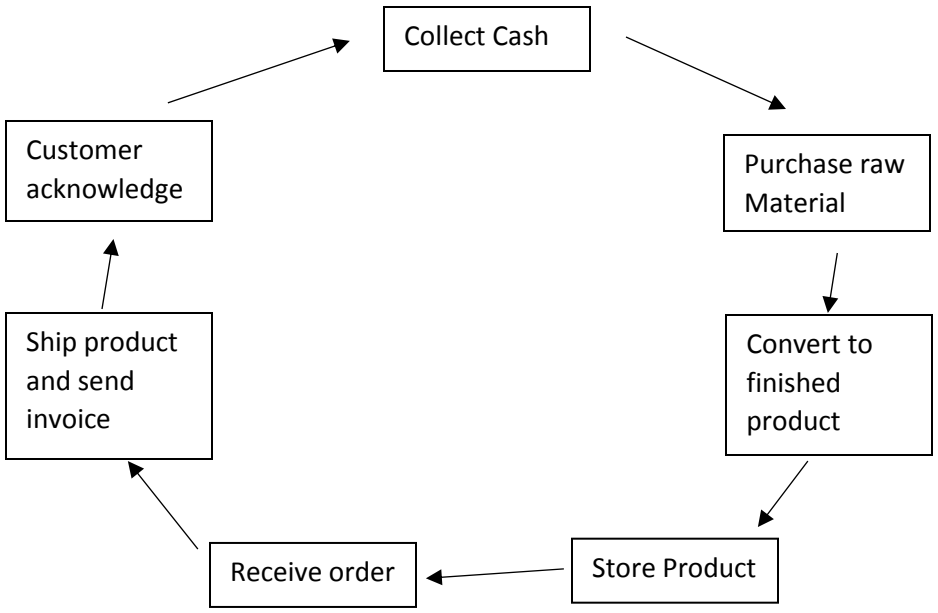
Usual (delivery) method

Production method

Cash/collection method

OneClass find more resources at oneclass.com

OneClass find more resources at oneclass.com



Revenue Recognition timing

1. Completed production
   - Limited circumstances
     - Ready/guaranteed markets
     - Minimal marketing costs
     - Gold, grain, crops
2. When cash received
   - Doubts regarding collectability
   - Speculative real estate sales
   - Instalment sales
     - Percent of amount collected
     - Cost-recovery first, then revenue
3. After cash received
   - Not common
   - Guarantees/refunds

Revenue

- Unearned revenue occurs when a business receives cash before goods or services are provided
  - Gift cards, gift certificates etc.
- Unearned revenue is a liability that represents a company's obligation to provide goods and services to customers in the future

Matching expenses

- Expenses must be recorded in the same period as the revenues generated by the expenses, not necessarily when cash is paid

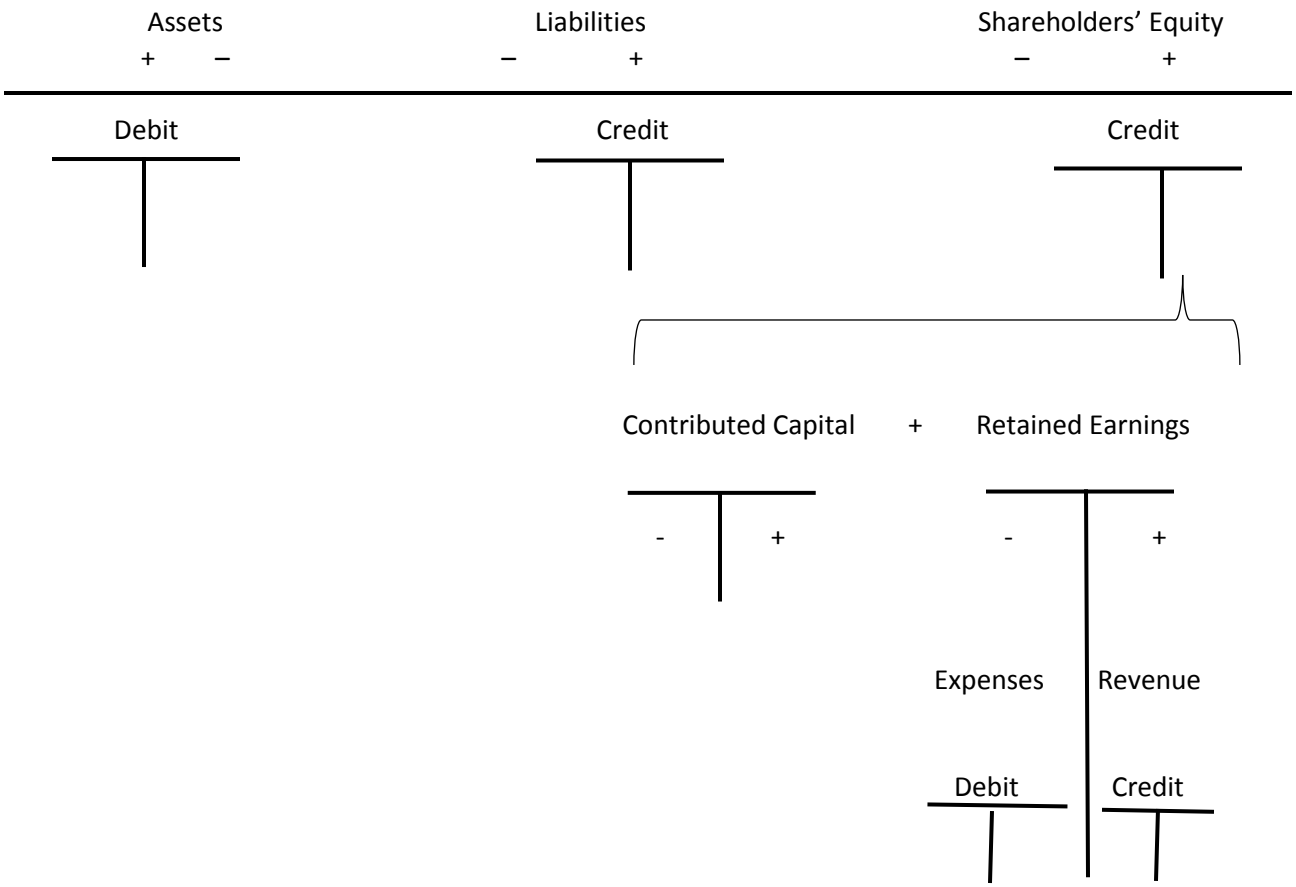
OneClass find more resources at oneclass.com

OneClass find more resources at oneclass.com

- Recognize expenses when it is reasonably possible they have been incurred. Match the expenses incurred with the time period in which revenues generated
  - Match to revenues

Expanded debit/credit framework

Assets = Liabilities + Shareholders' Equity



- Expenses decrease Net Income, which decreases Retained Earnings, so expenses are recorded with debits.
- Revenues increase Net Income, which increases Retained Earnings, so revenues are recorded with credits

Trial Balance

- Internal report
  - Lists all accounts and their balances to check on the equality of total recorded debits and total recorded credits
- Unadjusted trial Balance
  - Prepared before all final adjusting entries have been entered

OneClass find more resources at oneclass.com

Help for when your TB doesn't balance

- If the trial balance doesn't balance, look at the difference between total debits and total credits. If it is:
  - The same as one of your T-account balances, you probably forgot to include the account in your trial balance
  - Twice the amount of an account balance, you may have included it in the wrong column of the trial balance
  - Twice the amount of a transaction, you may have posted a debit as a credit or a credit as a debit in your T-accounts
  - Evenly divisible by 9, you may have reversed the order of two digits in a number (a transposition error) or zero off the end of a number
  - Evenly divisible by 3, you may have hit the key above or below the one you intended to hit on your numeric keypad

Review of Revenue

- Cash is received before the revenue is earned

  Dr. Cash
  Cr. Unearned Revenue

  Dr. Unearned Revenue
  Cr. Revenue

- Cash is received in the same period as the revenue is earned

  Dr. Cash
  Cr. Revenue

- Cash is received after the revenue is earned

  Dr. Accounts Receivable
  Cr. Revenue

  Dr. Cash
  Cr. Accounts Receivable

Review of Expenses

- Cash is paid before the expense is incurred

  Dr. Prepaid
  Cr. Cash

  Dr. Expense
  Cr. Prepaid

- Cash is paid in the same period as the expense is incurred

  Dr. Expense
  Cr. Cash

- Cash is paid after the expense is incurred

  Dr. Expense
  Cr. Accounts Payable

  Dr. Accounts Payable
  Cr. Cash

Limitations

- Net income does not equal the amount of cash generated by the business

- Net income does not always represent the change in a company's value
- Net income may not be exact because the income statement often contains estimates

Additional notes

- Dividends are not expenses
- Distortions
    - Income smoothing
    - "Big Bath" reporting

Income statement analysis

- % relationships to sales
- Gross margin = (Net sales revenue – COGS / Net sales revenue) * 100
    - Average margin on products
    - Look at industry differences
- Profit margin = (Net income / Net sales revenue) * 100
    - Industry differences
        - Common
        - Supermarket – 1.5%
        - Manufacturing – 8%

OneClass find more resources at oneclass.com

ACTG 1P91

May 15, 2014

Adjustments, Financial Statements and Financial results: Chapter 4

Review

- Revenues must be recorded when earned
- Expenses must be recorded in the same period as the revenues to which they relate
- Assets must be reported at amounts that represent the economic benefits that remain at the end of the current period

Adjustments

- Adjusting entries are made at the end of every accounting period to report revenues and expenses in the proper period and assets and liabilities at appropriate amounts
- Adjusting journals entries record the effects of each period's adjustments in a debits-equal-credits format

Accounting process

1. Transactions/source documents
2. Analyze transactions
3. Journalize
4. Post to ledger
5. Trail balance
6. Gather data for adjustments
7. Worksheet
8. Financial statements

   At interim – stop here
9. Journalize and post adjustments
10. Journalize and post-closing
11. Post-closing trial balance
12. Journalize and post reversing entries

Adjustments

- Deferrals
  - Apportion recorded costs to period benefitted
    - Asset account/expense account
  - Apportion recorded revenue to period earned
    - Liability account/revenue account

Deferral adjustments

- An expense or revenue had been deferred if we have postponed reporting it on the income statement until a later period

OneClass find more resources at oneclass.com

OneClass find more resources at oneclass.com

Sept. 1 Use-up rent Sept. 30

Benefits

Cash paid for rent in advance Adjustment needed

- Deferral adjustments decrease balance sheet accounts and increase corresponding income statement accounts
- Each deferral adjustment involves one asset and one expense account or one liability and one revenue account

Accrual adjustments

- Accrual adjustments are needed when revenue is earned or an expense incurred in the current period but the transaction has not been recorded yet because the cash will be paid or received in a future period

Sept. 1 Incur income sept. 30 Dec. 31

Taxes

Adjustment Needed Cash Paid for income taxes

- Accrual adjustments are used to record revenue or expenses when they occur prior to receiving or paying cash, and to adjust corresponding balance sheet accounts
- Each accrual adjustment involves one asset and one revenue account, or one liability and one expense account

OneClass find more resources at oneclass.com

Adjusting journal entries

- Adjustments are not made every day because it is more efficient to do them all at once at the end of each period

- Adjusting journal entries never involve cash
- Adjusting journal entries always include one balance sheet account and one income statement account
- Dividends are not expenses; they are a reduction of retained earnings

Adjusted trial balance

- An adjusted trail balance is prepared to check that the accounting records are still in balance after all adjusting entries have been posted
- Accounts are listed in the order they appear on the balance sheet, statement of retained earnings and income statements

Preparing financial statements

- Use they adjusted trial balance to prepare the
    - Income statement
    - Statement of retained earnings
    - Balance sheet

Temporary accounts

- Closing temporary accounts is the last step of the accounting process
- Track financial results for a limited period of time. Their balances are zeroed at the end of each accounting year
    - Revenue, expense and dividends declared accounts are temporary accounts
- Permanent accounts track financial results from year to year. Their ending balances carry forward to the next year
    - Balance sheet accounts are permanent accounts

Closing process

- Transfer net income (or loss) and dividends to Retained Earnings
- Establishes zero balances in all income statement and dividend account

Revenue

Expenses

Retained Earnings

Retained Earnings

Dividends declared

OneClass find more resources at oneclass.com

Adjusted financial results

- Adjusting entries had ensure that a company's financial statement faithfully represent the company's financial position
- Without adjusting entries, the financial statements can present an incomplete and misleading picture

OneClass find more resources at oneclass.com

OneClass find more resources at oneclass.com

ACTG 1P91

May 20, 2014

Financial Reporting and Analysis: Chapter 5

Financial Statement users

- Internal
  - Unlimited access to information
  - Management
  - Board of directors
  - Owners if closely held
- External
  - Limited access to information
  - Owners (stockholders) if public company
  - Creditors – access varies
    - Bondholders
    - Banks (may be able to demand more)

Why Would you commit fraud?

- The Fraud Triangle
  - Incentive
    - Business opportunity
    - Personal greed
  - Opportunity
  - Personality

Corporate governance

- Counteract Incentives
  - Stiffer fines and prison terms
- Reduce opportunities
  - Internal control report from management
  - Stronger oversight by directors
  - Internal control audit by external auditors
- Encourage Honesty
  - Anonymous tip lines
  - Whistle-blower protection
  - Code of ethics

Information characteristics

- To make decisions
  - Must have useful information
- Characteristics of useful
  - Reliable – accurate, can trust
  - Relevant – will matter or make a difference

OneClass find more resources at oneclass.com

- Consistent – handle event in same way
- Comparable – different companies handle events in same way

Financial statement formatting

- Comparative financial statements report information for two or more time periods; often the most recent and the previous year

Multiple-step Income Statement

- Displays subtotals that provide measures of profit in addition to net income

Statement of Shareholders' Equity

- Shows change to retained earnings and changes to contributed capital
- Beginning and ending balances correspond to the balance sheet

Finding financial statement information

- Indicate whether each of the following would be reported on the balance sheet (B/S), income statement (I/S), or statement of shareholders' equity (SSE)
  - Insurance costs aid this year, to expire next year **B/S**
  - Insurance costs expired this year **I/S**
  - Insurance costs still owed **B/S**
  - Cost of equipment used up this accounting year **I/S**
  - Equipment book value (carrying value) **B/S**
  - Amounts contributed by shareholders during the year **SSE**
  - Cost of supplies unused at the end of the year **B/S**
  - Cost of supplies used during the accounting **I/S**
  - Amount of unpaid loans at the end of the year **B/S**
  - Dividends declared and paid during this year **SSE**

Financial statement analysis

- Most understand business activities
- Must understand the industry
- Common to all
  - Obtain financing – leaders and owners
  - Use funds to invest in assets
  - Generate revenue
    - By using assets
  - Produce net income
    - Revenues generated less assets used up

Evaluation of financial statements

- Is management
  - Optimizing financing choices
  - Optimizing investing choices
  - Using investments efficiently and effectively

- Need:
  - Points of comparison
  - Company benchmarks
  - Industry benchmarks
- Tools:
  - Ratio Analysis

Financial Statement ratios

- **Debt-to-assets ratio**: indicates financing risk by computing the proportion of assets financed by debt
- A higher ratio means a greater financing risk
- Total liabilities/Total Assets

- **Asset Turnover ratio**: indicates how well assets are being used to generate revenues
- A higher ratio means greater efficiency
- Sales Revenue/Average total assets

- **Net Profit margin ratio**: indicates how well expenses are controlled
- A higher ratio means better performance
- Net income/Sales revenue

Sources of information

- SEC filings
- Press releases
- Pro forma numbers
- Annual report
- Analyst reports
- Industry
- Websites

How transactions affect ratios

- To determine the impact of transactions on a ratio
  1. Analyze the transaction to determine its effect on the accounting equation
  2. Relate the effects in step 1 to the ratio's components to determine whether the component will increase, decrease or stay the same
  3. Evaluate the combined impact of the effects in step 2 on the overall ratio

The impact of transactions on ratios

If	Ratio
Only the top increase	Increases
Only the bottom decreases	Increases

OneClass find more resources at oneclass.com

The top increases and bottom decreases	Increases
Both top and bottom same increase and ratio <1	Increases
Both top and bottom same decrease and ratio is >1	Increases
Only the top decreases	Decreases
Only the bottom increases	Decreases
The top decreases and bottom increases	Decreases
Both top and bottom increase and ratio >1	Decreases
Both top and bottom same decrease and ratio is <1	decreases

OneClass find more resources at oneclass.com

OneClass find more resources at oneclass.com

ACTG 1P91

May 22, 2014

Internal control and financial reporting for cash and merchandise sales

Business goals

- Use resources (assets)
- To generate increases resources
- First concern
    - Protect what you have

Operating cycles

- Service companies sell services rather than physical goods
    - Sell services
    - Collect cash
    - Incur operating expenses
- Merchandise companies sell gods that have been obtained from a supplier
    - Sell products
    - Collect cash
    - Incur operating expenses
    - Buy products
- Manufacturing companies sell goods that they company has made from raw materials
    - Sell products
    - Collect cash
    - Incur operating expenses
    - Buy raw materials
    - Make products

Internal controls

- Procedures to protect assets
    - Contribute to efficient management of assets
- Thus the goal is to
    - Ensure adequate records maintained
    - Ensure transactions are
        - Authorized
        - Properly recorded
    - Prevent (or detect)
        - Unauthorized activities involving assets
            - Segregation of duties a key feature

Five common principles of internal control

1. Establish responsibility
    - Assign each task to only one employee
2. Segregate duties

OneClass find more resources at oneclass.com

- Do not make one employee responsible for all parts of a process

3. Restrict access
    - Do not provide access to assets or information unless necessary
4. Document procedures
    - Prepare documents to show activities that have occurred
5. Independently verify
    - Check other's work

Cash controls

- Cash generally a vulnerable asset
- Ensure
    - Cash handling segregated from cash record keeping
    - Cash receipts promptly deposited
    - Control and track cash disbursements
        - Checks
        - Internet banking documentation

Cash Controls

- Key control technique
    - Bank Reconciliation
        - Ensure all deposits recorded
        - Ensure all disbursements recorded
        - Find unauthorized transactions
        - Manage cash
- Problem: timing
    - Bank cut-off for reporting verses cash account
    - Must reconcile
        - Outstanding checks and deposits
        - Interest
        - Possible NSF checks

Receipt of cash

- The primary goal of internal control for cash receipts is to ensure that the business receives the appropriate amount of cash and safely deposits it in the bank
- Cash received in person
- Cheques received
- Electronic funds transfers

Cash Payments

- Primary goal of internal control for cash payments is to ensure that the business pays only for properly authorized transactions
- Cheque
- Electronic funds transfer

Bank procedures and reconciliation

- Banks help control cash by
  - Restricting access
  - Documenting procedures
  - Independently verifying activities
- It is common for the balance on the bank statement and the balance in the cash account to be different
- A bank reconciliation is an internal report prepared to verify the accuracy of both the bank statement and the cash account of the business

Bank reconciliation

- Tour bank may not know about
  - Errors made by the bank
  - Time lags
    - Deposits you made recently
    - Cheques toy wrote recently (not cashed yet)
- You may not know about
  - Interest the bank has put into your account
  - Electronic fund transfers
  - Service charges taken out of your account
  - Bounced cheques
  - Errors made by you

Bank reconciliation

1. Identify the deposits in transit
2. Identify the outstanding cheques
3. Record other transactions on the bank statement
4. Determine the impact of errors

Inventory systems

- Strong accounting system helps control inventory by providing information about
  - Quantities to help control inventory levels
  - Costs to help set appropriate selling prices
  - Profit generated from sales
- Inventory
  - Sold
    - Expense on the income statement
  - Unsold
    - Asset on the balance sheet

Periodic inventory system

- Only updates inventory records at the end of the accounting period
- To determine how much have been sold, inventory must be counted at the end of the period

Beginning Inventory + Purchases = Goods available for sale

Goods available for sale – Ending Inventory = Cost of Goods Sold

Perpetual inventory system

- Updates inventory records every time inventory is bought, sold or recorded
- Provides better control because inventory is constantly updated which allows managers to better manage the inventory, control costs and estimate shrinkage

Perpetual inventory journal entries

- Sales transactions have two components and require two journal entries
    - The selling price is recorded as an increase in sales revenue and an increase in either cash or accounts receivable
    - The cost is removed from inventory and reported as an expense called cost of goods sold
- Sales returns and allowances
    - Refunds and price reductions given to customers after goods have been sold and found unsatisfactory
- Sales discounts are price reduction given to customers for prompt payment of their account balances
    - 2/10, n/30
- Sales returns and allowances and sales
    - These are contra-revenue accounts

Gross Profit analysis

- Gross profit is also called gross margin or simple margin
  Net Sales – Cost of Goods Sold = Gross Profit
- Gross Profit percentage indicates the percentage of profit earned on each dollar of sales, after deducting the cost of products sold
- A higher ratio means that greater profit is available to cover operating and other expenses
  *Gross Profit Percentage = (Net Sales – COGS/Net Sales)*100*

Gross profit percentage

- Can be used to compare
    - Changes in the company's operating over time
    - One company to another
    - The company's results with industry averages

OneClass find more resources at oneclass.com

ACTG 1P91

May 27, 2014

Reporting and interpreting inventories and cost of goods sold: Chapter 7

Expense recognition matching

- Inventory measurements
  - Asset
    - Use
    - Sell
  - Key issue
    - Cost of sales/revenues generated
  - Key factor
    - Cost of inventory produced or acquired to sell

Types of inventory

- Merchandiser
  - Merchandise inventory
- Manufacturer
  - Raw materials inventory
  - Work in process inventory
  - Finished goods inventory

Cost of goods sold

Beginning inventory + Purchases = Goods available for sale – ending inventory = Cost of goods sold

- Goods available for sale = maximum cost of goods sold
- Ending inventory = next years beginning inventory
- Measurement issues
  - Purchases
  - Accounts payable
  - Inventory
- Purchases
  - Amount
  - Historical cost
    - Discounts
      - Trade
      - Cash

Inventory

- Record at cost
  - For all companies
- Merchandising company
  - Invoice cos

OneClass find more resources at oneclass.com

- Freight
- Unpacking
    - Materiality
    - Cash discounts

Inventory

- Manufacturing
    - Track historical costs through production process
    - Includes
        - Materials
        - Direct labour
        - Indirect costs
            - Indirect labour (security, janitor etc.
            - Overhead
                - Depreciation
                - Utilities
- Product costs versus period costs

Inventory

- Accounting methods
    - Perpetual
        - Continuous tracking
    - Periodic
        - Do not compute inventory on on-going basis
        - Determine purchases
        - Determine ending inventory
        - Difference between available and ending cost of goods sold

Inventory measurement

- Procedures generally followed whether using perpetual or periodic system
- Need
    - Physical count
        - Inventory count
    - Costing technique
        - Historical cost
        - Fail market value
        - Lower of cost of FMV
            - Most often used
        - Flow assumption

Costing Technique – Lower of cost and market (LCM)

- Do not record revenue for increases in value until inventory sold
- Record loss for decreases in value immediately
- LCM costing results in

- Decreased ending inventory
- Decreased net income

Lower of cost and net realizable value (market)

- A valuation rule that requires inventory to be written down when its net realizable value or current replacement cost falls below its original historical cost
  - What is lower, the cost you paid or the replacement cost you would have to pay
- Record loss for decreases in value immediately
  - Obsolete goods

Inventory measurement

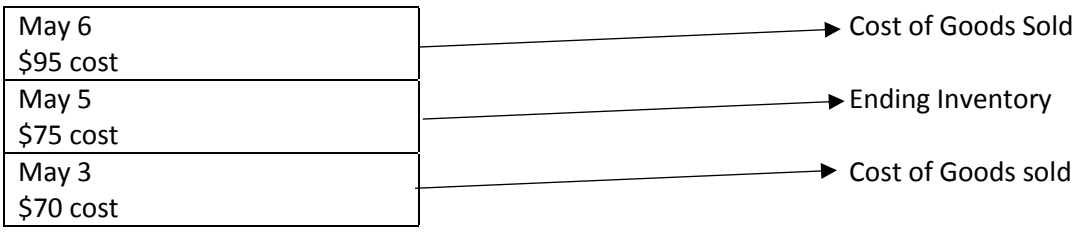
- Flow assumptions
  - Frequently considered the costing method because LCM is assumed
  - Procedure
    - Determine item count
    - Determine cost of items using LCM
    - Determine which item sold/which remain

Inventory Costing Methods

- Specific identification
  - Identifies the cost of the specific items that were sold
- First-in, First-out (FIFO)
  - Assumes the cost of the first goods purchased is the cost of the first goods sold
- Weighted average
  - Uses the weighted average unit cost for cost of goods sold and ending inventory
- Last-in, First-out (LIFO)
  - Assumes the cost of the last good purchased is the cost of the goods sold
    - Not permitted for tax purposes

Specific identification

- The items purchased May 3 and May 6 were sold
  - Therefore COGS is $165
- The item purchased May 5 is still in inventory
  - Therefore ending inventory is $75

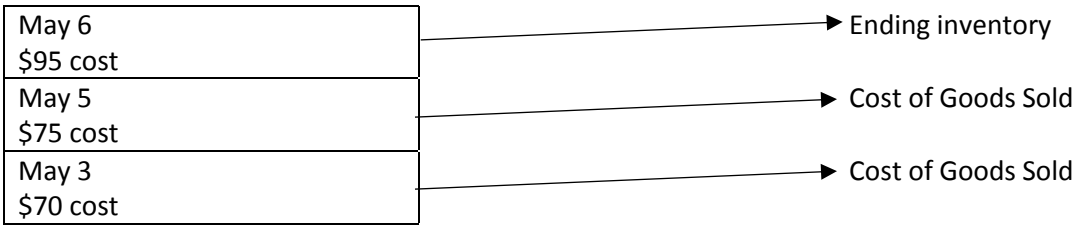


First-in, First-out (FIFO)

- The earliest item purchased are assumed to be sold

OneClass find more resources at oneclass.com

- The last item purchased assumed to be unsold



Inventory cost flow (FIFO)

Date	Description	No. of Units	Cost per Unit	Total Cost
Oct. 1	Beginning Inventory	10	$ 7	$ 70
Oct. 3	Purchase	30	8	240
Oct. 5	Purchase	10	10	100
Oct. 6	Sales	(35)	To calculate	To calculate
	Ending Inventory	15	To calculate	To calculate

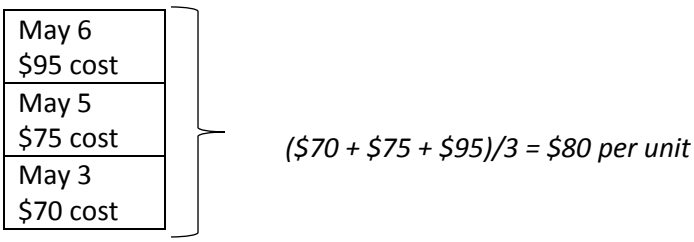
Beginning Inventory	10 units × $7	$ 70
+ Purchases	30 units × $8	240
	10 units × $10	100
Goods Available for Sale		410
− Ending Inventory (10 × $10) + (5 × $8)		140
Cost of Goods Sold (10 × $7) + (25 × $8)		$270

Inventory Costs – FIFO

- Most recent costs on balance sheet (inventory)
- Older costs in income statement
- Matches likely physical flow of goods
- May distort picture of company viability
  - Fi cannot sell for greater than replacement cost, sooner or later go under
- Be careful with pricing policies
  - If marking-up historical cost, price may be too low

Weighted average inventory

- The weighted average is calculated $240/3 = $80



Cost of Goods Sold = $160

OneClass find more resources at oneclass.com

OneClass find more resources at oneclass.com

Ending Inventory = $80

Inventory Cost flow – WA

Date	Description	No. of Units	Cost per Unit	Total Cost
Oct. 1	Beginning Inventory	10	$ 7	$ 70
Oct. 3	Purchase	30	8	240
Oct. 5	Purchase	10	10	100
Oct. 6	Sales	(35)	To calculate	To calculate
	Ending Inventory	15	To calculate	To calculate

Beginning Inventory	10 units × $7	$ 70
+ Purchases	30 units × $8	240
	10 units × $10	100
Goods Available for Sale	**50 units**	**410**
− Ending Inventory (15 × $8.20)		123
Cost of Goods Sold (35 × $8.20)		$287

Weighted Average Cost = $\frac{Cost\ of\ Goods\ Available\ for\ Sale}{Number\ of\ Units\ Available\ for\ Sale}$ *= $410/50 units = $8.20 per unit*

Weighted average inventory

- Commonly used with a standard cost system
- Will result in an average of both old and new costs in both
  - Inventory
  - Cost of goods sold
- Industry – high volume of generally indistinguishable items
  - Hardware store

Financial Statement Effects

Effects on the Income Statement	FIFO	Weighted Average
Sales	$525	$525
Cost of Goods Sold	270	287
Gross Profit	255	238
Operating Expenses	125	125
Income from Operations	130	113
Other Revenue (Expenses)	20	20
Income before Income Tax Expense	150	133
Income Tax Expense (assume 30%)	45	40
Net Income	$105	$ 93
Effects on the Balance Sheet		
Inventory	$140	$123

The costing method will determine Cost of Goods Sold, Net Income, Income Tax Expense, and Inventory

OneClass find more resources at oneclass.com

- When costs are rising, FIFO produces a higher inventory value, a lower Cost of Goods Sold, a higher Net income, and higher Income Tax Expense
- When costs are falling, FIFO produces a lower inventory value, a higher Costs of Goods Sold, a lower Net Income and lower Income Tax Expense

Inventory analysis: Turnover

- Inventory turnover ratio
    - The number of times inventory turns over during the period
    - Higher ratio means faster turnover

Inventory Turnover Ratio = Cost of Goods Sold/Average Inventory

- Days to sell
    - Average number of days from purchase of sale
    - A higher number means a longer time to sell

Days to Sell = 365/Inventry Turnover Ratio

OneClass find more resources at oneclass.com

ACTG 1P91

May 29, 2014

Reporting and interpreting receivables, bad debt expenses and interest revenue: Chapter 8

Business cycle

- Get cash
- Buy assets
- Use assets to generate revenue
    - Using assets results in expense
    - Revenues result in increased assets

Revenue Recognition amount

- Considerations
    - Discounts
        - Trade
        - Cash
        - Credit card
    - Possible returns or allowances
    - Unpaid credit sales

Revenue Discount Amounts

- Trade
    - Quantity
    - Generally record revenue net of discount
- Cash
    - Terms – 2/10, n30
    - Customers pay only 98%
        - If paid within 10 days
    - Options
        - Record at gross of net of discount
- Credit card
    - Expense of using Visa, MC, Amex etc.
    - Record sales at gross, discount as expense

Revenue – Returns and Allowances

- Returns and allowances
    - Decrease revenue when goods returned or allowances granted
    - May want to set up a reserve
- Record sales revenue at gross
- Sales returns and allowances a “contra-asset” account

Band Debts

- A cost of doing business

OneClass find more resources at oneclass.com

    - If you sell on credit, some customers probably wont pay
- Concerns
    - Matching costs of granting credit to period benefitted
    - Conservatism principle – how much do you write off?
- Options
    - Direct write-off method of accounting
    - Allowance method of accounting

Bad Debts: Direct Write-Off Method

- Direct write-off method
    - Record bad debt only when customer does to pay
- Problems
    - Violation of matching
    - Violation of conservatism
    - Usually don't discover who wont pay until 1-3 years after sale
- When to use
    - Industry/situation where bad debts are not common

Bad Debts: Allowance Method

- Allowance method
    - Attempt to match
        - Cost of granting credit to period in which you recognized credit sales revenue
    - At time of sale
        - Increase bad debt expense
        - Increase allowance for bad debts
    - When discovered specific amount that is uncollectable
        - Decrease allowance for bad debts
        - Decrease accounts receivable for specific accounts
    - Not at time estimate expense under allowance method
        - Don't know specific accounts that will not pay
        - Therefore you cant decrease A/R account itself

Bad Debts – On the Balance Sheet

- Balance sheet disclosure

$$\begin{array}{c} Accounts\ Reveivable \\ (Allowance\ for\ doubtful\ accounts) \\ \hline Net\ realizable\ value \end{array}$$

- Net realizable value
    - Amount you expect to collect
    - From total receivable outstanding

Bad Debts – Estimating the amount

- Percent of sales

    - Based on credit policies
    - Based on industry experience
    - Periodically check accuracy using aging method
- "aging" the receivables
    - Track the length of time account have been outstanding, the more likely it is uncollectible
- In Canada must use aging for income tax purposes

Percent of Sales Method

- Income statement approach
- Estimates bad debts based on a percentage

Credit sales this month	$100,000
X bad debt loss rate (1%)	x0.001
Bad debt expense this month	$1,000

Bad debt expense	1,000	
Allowance for doubtful accounts		1,000

Aging of Accounts Receivable Method

- Balance sheet approach
- Estimates uncollectable accounts based on the age of each account receivable
    1. Prepare an aged listing of accounts receivable
    2. Estimate bad debt loss percentages for each category
    3. Compute the total estimate

Aging of accounts receivable method

- The amount calculated is the required ending balance in the allowance for doubtful accounts
    - An adjusting entry is required at the end of the period

Revising estimates

- Bad debts are estimates. If there is a material difference they must revise their bad debts estimates for the current period
- Account recoveries
    - Collection of a previously written-off account is called a recovery and it is accounted for in two parts
        1. Reverse the write-off
        2. Record the collection

Speeding up collections

- Factoring receivables
    - Receivables are sold to another company (called a factor) for immediate cash (minus a fee)
- Credit card sales

- Credit card sales allows a company to receive cash quickly
- Credit card sales reduce bad debts
- Credit card companies charge a fee

Notes Receivable and Interest Revenue

- Notes receivable
  - A promissory note requires another party to pay according to a written agreement
  - Used when loaning money, selling expensive items with extended payment terms or converting account receivable to notes receivable
  - Notes receivable charge interest

Calculating interest

*Interest (I) = Principal (P) * Interest Rate (I) * Time (T)*

- Principal – the amount of the Note Receivable
- Interest Rate – the annual Interest Rate
- Time – The time period

Ex/

Terms of Note: $200,000, 6% due in two years
Interest Period: January 1-October 31

Calculation: *$200,000 * 6% * (10/12) months = $10,000 interest*

This calculation uses 12 months. In reality, interest is usually calculated using 365 days in Canada

Receivables turnover analysis

- Receivables turnover is the process of selling and collecting on account
- The receivables turnover ratio determine the average number of times this process occurs during one year
- Days to collect measures the average number of days from the time a credit sale is made until cash is collected

Receivables analysis

- Evaluate receivables management
- Receivable turnover
  - The number of times receivables turn over during the period
  - A higher ratio means faster (better turnover)

$$\textit{Receivable turnover} = \frac{Net\ Sales\ Revenue}{Average\ Net\ Receivables}$$

- Alternative: days to collect
  - Average number of days from sale on account to collection
  - A higher number means a longer (worse) time to collect

$$\textit{Days to Collect} = \frac{365}{Receivables\ Turnover\ Ratio}$$

OneClass find more resources at oneclass.com

ACTG 1P91

June 3, 2014

Reporting and interpreting long-lived tangible and intangible assets: Chapter 9

Fixed Assets

- Long-lived assets
  - The resources owned by a business that enable it to produce the goods or provide the services that are sold to customers
    - They are not intended for resale
  - Problems
    - Measurement of cost
    - Allocation of cost to periods benefitted
- Tangible assets
  - Have physical substance
    - Equipment
    - Building
    - Land
- Intangible assets
  - Have special rights, but no physical substance
    - Brand names
    - Trademarks
    - Licensing rights

Acquisition of tangible assets

- All reasonable and necessary costs to acquire and prepare an asset for use should be recorded as a cost of the asset
  - To capitalize is to record a cost as an asset rather than an expense
- Land
  - Purchase cost, legal fees, survey fees, title search fees
- Building
  - Purchase/construction cost, legal fees, appraisal fees, architect fees
- Equipment
  - Purchase/construction cost, sales taxes, transportation costs, installation costs

Measurement of cost

- FMV of all given up
  - Non-cash acquisition
    - EG. Acquire in exchange for stock
      - FMV of what was give up if available
      - FMV of what received if not
  - Basket purchase
    - Acquire existing business
      - A/R, inventory, land, building, intangibles

OneClass find more resources at oneclass.com

- Allocate to tangible and limited-life intangibles first
- Balance assumed to be good will

Use of tangible assets-allocation of cost

- Match expenses to producing revenue to periods when revenue generated
- Depreciation
  - Allocation of cost of tangible fixed asset
- Amortization
  - Allocation of cost of intangible fixed asset
- Depletion
  - Allocation of cost of wasting asset
- Two types of maintenance costs can be incurred
  - Ordinary repairs and maintenance for routine upkeep of long-lived assets
    - These costs are expenses
  - Extraordinary repairs increase a tangible asset's economic usefulness in the future
    - These costs are capitalized

Fixed Assets

- Not a measure of fair market value of asset
  - Going concern assumption
    - Says going to use, NOT sell
  - No objective, verifiable way to measure FMV
- Not a cash reserve for replacement
  - Increase depreciation (amortization) expense
  - Decrease net assets (increase accumulated depreciation)
    - THERE IS NO CASH IN THIS ANALYSIS

Fixed assets: allocation of cost

- Depreciation expense a current account on income statement
- Accumulated depreciation a contra-asset on balance sheet
  - Disclose original cost and accumulated depreciation
    - Results in net book value of asset
    - "unexpired cost"
    - Remaining usefulness
- Measurement of expired usefulness
  - Two times
    - Deterioration/physical life
    - Obsolescence/service life
- Judgements required – all unique to entity using asset
  - Timing of expiration of usefulness
  - Patter of expiration of usefulness
  - Possible "residual" or "salvage" value at end of usefulness
    - An estimate of FMV at end of usefulness to a particular entity
- Calculations required

- Acquisition cost
- Service life (to user)
- Estimate of residual or salvage value at end of usefulness
- Technique for allocating cost which reflects pattern of use
    - Any systematic and rational method accepted
- Alternative methods
    - Straight-line
        - Reflects even usefulness over time
        - Units-of-production a modification
            - Reflects even usefulness over production life in units
    - Accelerated
        - Assumes efficiency decreases over time
        - Repair and maintenance costs increase
        - Combination of depreciation and R&M costs results in even stream of cost allocations

Amortization Methods

Example Purchase of a New Long-Lived Tangible Asset:

Cost, Purchase on January 1, 2012	$62,500
Estimated residual value	$2,500
Estimated Useful life	3 years, 100km

- Asset cost
    - Includes the purchase cost, sales tax, legal fees and other costs needed to acquire and prepare the asset for use
- Residual (or salvage) value
    - Is an estimate of the amount the company will receive when it is disposes of the asset
- Useful life
    - Is the expected service life of an asset to the present owner. Land is the only tangible asset that has an unlimited life
- Amortizable cost
    - Is the portion of the asset's cost that will be used in generating revenue; calculated as asset cost minus residual value

Amortization cost = Cost – Residual value
$62,5000 - $2,500 = $60,000

Straight-line method

- A systematic and rational allocation of the cost of the asset in *equal periodic amounts* over its useful life

$$(Cost - Residual\ Value) * \frac{1}{Useful\ life} = Amortization\ Expense$$

*($62,500-$2,500) * (1/3) = $20,000 per year*

- Amortization Expense is constant each year
- Accumulated Amortization increases by an equal amount each year
- Book Value decreases by the same equal amount each year

Units-of-production Method

- Allocates the cost of an asset based o the relationship of its periodic output to its total estimated output

*(Cost – Residual Value) * $\frac{Actual\ production\ This\ Period}{Estimated\ Total\ Production}$ = Amortization Expense*

*($62,500 - $2,500) * (30,000/100,000) = $18,000 in year 1*
*($62,500 - $2,500) * (50,000/100,000) = $30,000 in year 2*
*($62,500 - $2,500) * (20,000/100,000) = $12,000 in year 3*

- Amortization expense, Accumulated Amortization and Book Value vary from period to period, depending on the number of units produced

Declining-Balance Method

- Assigns more amortization to early years of an asset's life and less amortization in later years

*(Cost – Accumulated Amortization) * $\frac{2}{Useful\ Life}$ = Amortization Expense*

*($62,500 – 0) * (2/3) = $41,667 in year 1*
*($62,500 – 41,667) * (2/3) = $13,889 in year 2*
*($62,500 – 55,556) * (2/3) = $4,629 in year 3*

- Amortization Expense is higher in the early years of an asset's life
- The calculated Amortization Expense of $4,629 would not be recorded because the Book Value would fall below the Residual Value. The maximum amortization expense is $4,444

Summary of Amortization Methods

- The amount of amortization expense recorded in each year depends on the method of amortization used
- Depending upon the amortization method used, Net Income can vary
- Different amortization methods can be used for different assets, provided they are used consistently

Partial-Year Amortization

- When an asset is acquired during the year, amortization is calculated for the fraction of the year the asset is owned
- Straight-line and declining-balance methods require partial year calculations; units-of-production does not

Tax Amortization

- Capital cost allowance (CCA) is the amortization process required by the Canada Revenue Agency
- CCA is similar to the declining-balance
- Companies usually have two sets of records:
  - Using an appropriate amortization method to report to shareholders
  - Using CCA to determine income taxes

Changes in Amortization

- Amortization is based on estimates, and estimates may change

Original information: Cost $60,000,000 Useful Life 20 years, Residual Value $3,000,000

Original Amortization Expense:

*($60,000,000 – 3,000,000) * (1/20) = $2,850,000 per year*

At the beginning of year 5 the estimates are revised

Revised information: useful life 25 years, Residual Value $2,400,000

*(Book Value – Residual Value) * $\frac{1}{Remaining\ Life}$ = Amortization Expense*

Revised Amortization Expense:

*($48,600,000 - $2,400,000) * (1/21) = $2,200,000 per year*

Original Asset Cost	$60,000,000
Less: Accumulated Amortization (4 years)	$11,400,000
Current Book Value	$48,600,000

25 years – 4 years = 21 remaining years

Disposal of tangible assets

- Disposal usually requires one entry to update Amortization expense and accumulated amortization, and another entry to record disposal

Intangible Assets

- Trademarks
  - A special name, image, or slogan identified with a product or company
- Copyrights
  - A forms of protection provided to the original authors of literary, musical, artistic, dramatic and other works of authorship
- Patents
  - A right to exclude others from making, using, selling or importing an invention
- Licensing Rights
  - The limited permission to use property according to specific terms and conditions set out in a contract
- Franchises

    - A contractual right to sell certain products or services, use certain trademarks, or perform activities in a certain geographical region
- Goodwill
    - The premium a company pays to obtain the favourable reputation associated with another company

Acquisition of intangible assets

- The costs of intangible assets are recorded as assets only if purchased
- If developed internally, the costs are considered Research and Development expense
- The treatment of impairment and disposal of intangible assets is the same as tangible assets

Valuing goodwill

- The amount paid that exceeds the fair value of net assets is goodwill

Use of intangible assets

- Limited Life
    - An intangible asset with a limited life is amortized using the straight-line method
    - Copyrights, patents, licensing rights and franchises have limited lives
- Unlimited Life
    - An intangible asset with an unlimited life is not amortized
    - Trademarks and goodwill have unlimited lives

Impact of amortization differences

- Amortization varies from company to company
- Amortization can be calculated using different methods
- Amortization is based on estimates:
    - Useful life
    - Residual value
- In the early years, the straight-line method provides lower amortization expense
- In the early years, the declining-balance method provides higher amortization expense
- If the asset is sold at the end of year 4 for $6,000,000 straight-line will show a loss while declining-balance will show a gain

Fixed Asset turnover ratio

- Companies use long-lived (fixed) assets to generate revenue
- The fixed asset turnover ratio measures the sales dollars generated by fixed assets
- A higher ratio implies greater efficiency

$$\frac{Net\ Sales\ Revenue}{Average\ Net\ Fixed\ Assets}$$

OneClass find more resources at oneclass.com

ACTG 1P91

June 5, 2015

Reporting and Interpreting Liabilities: Chapter 10

Review

- Assets (resources) = Liabilities + SE (Sources of resources)
- Use resources to generate revenues
    - As we use resources, they become expenses
    - Revenues minus expenses = net increase or decrease in resources for a period
- All resources must come from somewhere
    - Outsiders: Creditors
    - "Insiders": Owners
        - Investments in company
        - Net income reinvested in business
            - Increases in resources
            - Used to acquire more resources

Debt Funding

- Generally two types
    1. Short-term (current) liabilities
        - Accounts Payable (to suppliers)
        - Various accruals
            - Salaries
            - Interest
            - Taxes
    2. Long-term (non-current) liabilities
        - Notes payable
        - Mortgages
        - Bonds
- Generally considered measurement issues for short-term in the context of the income statement discussion

Long-term debt

- Try to match nature of resource with funding source
- Short-term resources financed with short-term obligations
- Long-term resources financed with long-term obligations
    - Plant assets
- Financial management
    - Identify funding needs and balance acquisition of funds
        - Debt funding
        - Owner funding

Long-term Funding

OneClass find more resources at oneclass.com

- All long-term funding has a cost attached
- The greater the risk the investor takes
    - The greater will be the return the investor expects to generate
- The expected return of the investor is the cost to the company
- Generally, the more risk the company takes, the lower the cost of the funds
    - The more risk the investor takes, the higher the cost of the funds
- Financial management
    - Balance the risk the company is taking with the cost of the funding sources

Debt funding

- Main sources
    - Long-term debt
        - Requires payment of two cash flows
            - Periodic interest
            - Principal repayment
        - HIGH risk to company
        - LOW cost to company
    - Capital stock (common)
        - Requires no cash flow
            - Dividends are optional
            - Rarely, rarely “principal” unless liquidate
        - LOW risk to company
        - HIGH cost to company
            - Investor expectations

Long-term debt

- Term loans
    - Generally obtained from bank
    - Repayable according to specified schedule
        - Usually instalments of combined interest and principal
    - Generally no specific asset as security
    - Generally no longer than 5 years
- Mortgages
    - Similar to term loans
    - Specific assets as security
        - Must disclose
- Bond financing
    - Sale of debt security in capital markets
    - Similar to sales of stocks
        - Prices will change based on changing interest rates and market expectations
        - Original interest rate on bond will not change
        - Issuing company not directly affect by market price fluctuations
- Bond instruments
    - Generally in units of $1,000 or $5,000

- Will have
  - Maturity date
  - Principal amount
  - Interest rate
- Price bonds will sell for a function of
  1. Interest rate on bond instrument
  2. Required interest rate in the market for bonds of similar risk and payment categories
- Price usually quotes as a percent of face value
  - Thus: a $1,000 bond selling at 90
    - Company will receive $980

Long-term debt bonds: measurement issues

- Bond accounting requires:
  1. Understanding of present value concepts
  2. Stated rate of interest
     - Rate specified on bond issue
  3. Required rate of interest
     - Rate demanded in the market so that present value (PV) of the interest and principal repayment results in a given return on the investment

Long-term Bonds: measurement

- If the market required return on the bond is greater than the stated rate of interest
  - The bond will sell at a DISCOUNT
- If the market required return on the bond is less than the stated rate of interest
  - The bond will sell at a PREMIUM

Present value of bond payments

	Market	Interest	Rates
	4%	6%	8%
Present value of $100,000 face value (principal)paid for years from now	$85,480	$79,210	$73,503
Present value of $6,000 (6% stated interest rate) paid once a year for four years	$21,780	$20,790	$19,873
Bond Price	**$107,260**	**$100,000**	**$93,376**

- The value of a bond is equal to the present value of the face amount plus the present value of the annual interest payments
- If the bond interest rate (6%) is higher than the rate required by investors (4%), investors will pay a premium

- If the bond interest rate (6%) exactly matches the rate required by investors (6%), investors will pay face value
- If the bond interest rate (6%) is lower than the rate required by investors (8%), investors will demand a discount

Bond – measurement

$150,000 bond
20 years to maturity
10% stated rate of interest
Semi-annual interest payments
Required yield: 18%

- Price received for bond

NPV – $150,000 in 20 years	$4,776
NPV – $7,500 semi annual	$80,680
Total price received	$85,680

- Selling at a DISCOUNT

$150,000 bond
20 years to maturity
10% stated rate of interest
Semi-annual interest payments
Required yield: 8%

- Pricing received for bond

NPV – $150,000 in 20 years	$31,243
NPV – $7,500 semi annual	$148,446
Total price received	$179,689

- Selling at a PREMIUM

Bonds – measurement

- Report on balance sheet
  - Interest expense equal to:
    - Cash interest payment required
    - Plus amortization or discount
      OR
    - Minus amortization of premium
  - Thus:
    - Net interest expense reported will be at the rate of the reqired market return on the bond
- Straight line amortization
- Bond issued at discount

- Interest expense =

Cash (7,500 * 2)	15,000
Plus discount/20	3,227
NET	18,227

- Bond issued at premium
- Interest expense =

Cash (7,500 * 2)	15,000
Less premium/20	(1,484)
NET	13,516

Bond measurement

- Cash flow streams are identical subsequent to initial issue
    - Bond at discount
        - Receive less than face amount at issue
    - Bond at premium
        - Receive more than face amount at issue
    - Bond bonds pay $15,000 per year cash interest
    - Both bond pay $150,000 at the end of 20 years
- Stated rate controls the cash receipts and payments
- Required rate (effective rate) controls the actual cost to the company
- Note: in face must amortize using the effective interest rate
- Note control over cash flows
- Deep discount bond
    - Sale $150,000 bond
    - Stated rate 4%
    - Required return 20%
- Company received $32,651 at issue
- Company pays cash of only $6,000 per year with large payment at end
- Reverse
    - Stated rate 20%
    - Required yield 4%
- Company receives $478,266 at issue
- Company pays $60,000 per year cash interest, $150,000 at end
    - Begins to look like instalment obligation

Bond characteristics

- Company can alter risk profile of bond issue
- If decreased investor risk, increase price received, increase company risk
    - And, of course, vice versa
- Common possible features can attach to bond issue
    - Secured/unsecured
    - Callable (retire at company option)
    - Redeemable (retire at investor option)
    - Convertible
    - Subordinate

OneClass find more resources at oneclass.com

- Serial (retire in instalments, rather than only at one maturity date)
- Bond sinking fund

Unrecorded liabilities

- Leases
  - Capital
    - Record as asset and liability
  - Operating
    - No asset
    - Lease payments a current expense
- Contingent liabilities
  - "maybe" liabilities
  - Probably owe and can estimate number
    - Record
  - Otherwise footnote or ignore

Evaluating decisions

- Liquidity
  - Can company meet current obligations
  - Don't want too high because not earning anything

$$\textit{Current Ratio} = \frac{Current\ assets}{Current\ Liabilities}$$

- Can the company meet interest payment obligations?

$$\textit{Times interest earning ratio} = \frac{Net\ income + Interest\ Expense + Income\ Tax\ Expense}{Interest\ Expense}$$

- The higher the number, the better the coverage
- If the times interest earned ratio is less than 1.0, the company is not generating enough income to cover its interest expense

OneClass find more resources at oneclass.com

OneClass find more resources at oneclass.com

ACTG 1P91

June 10, 2014

Reporting and interpreting shareholders' equity: Chapter 10

Sources of long-term financing

- Owners investment
    - Sole proprietorship
    - Partnership
    - Corporation
        - Capital stock
            - Common
            - Preferred

Long-term funding – Stock

- Common vs. Preferred stock
- Bother are ownership securities
- Differ regarding
    - Dividend preference
    - Voting rights
    - Share in growth
    - Liquidation preference

Common Stock Financing

- Residual ownership interest
- Return a function of
    - Dividend payment stream
    - Appreciation on stock price
- Least risky funding to company
    - No required cash flows
- Most risky to investor
    - Therefore most expensive to company
- Record at FMV of what received for investor
    - Par value
        - Relatively meaningless
        - Contributed capital in excess of par
    - Book value
        - Total common equity as reported on balance sheet
            - Par value + Contributed in excess + Retained Earnings
                - Not attributable to preferred
- Distribution to common shareholders
    - Dividends
        1. Cash
            - Decrease cash/decrease retained earnings

OneClass find more resources at oneclass.com

        - Does NOT decrease net income
    2. Stock
        - Increase contributed capital/decrease retained earnings
        - Capitalize retained earnings
            - Maintain dividend history
            - Signal no cash dividends
- Distinguish
    - Stock dividend
    - Stock split
- Stock dividend increases shares outstanding
    - Reduces retained earnings
- Stock split
    - Increases shares outstanding
    - Does not reduce retained earnings
    - Generally expect that price/share will fall in market

Comparison of Stock Splits, Stock Dividends and Cash Dividends

- A 2-for-1 STOCK SPLIT doubles the number of outstanding shares, and halves the book value per share
    - There is no change in total shareholders' equity
- A 100% STOCK DIVIDEND doubles the umber of outstanding shares, but does not change the book value per share
    - The value of Common Shares increases and Retained Earnings decreases
    - There is no change in total shareholders' equity
- A CASH DIVIDEND does not change the number of outstanding shares or the book value
    - Retained Earnings decrease
    - Total Shareholders' equity decreases

Common stock Financing

- Treasury stock
    - Stock of same company
    - Purchased in open market
- Done for
    - Future acquisitions
    - Bonus plans
    - Have stock available for
        - Exercise of warrants
        - Convertible bonds or preferred stocks
- Is NOT an asset
- No voting rights
- No dividends rights
- Shown as a reduction to total stockholders' equity
    - At purchase price

Long-term funding – Stock

OneClass find more resources at oneclass.com

- Preferred stock
  - Generally restricted or no voting rights
  - Generally restricted or no share in growth
  - Generally has some characteristics in common with long-term debt and some with common stock
  - Cash flows
    - Dividends only upon declaration of board of directors
  - Stated redemption or liquidation value
  - Dividends may be limited
  - Possible characteristics
    - Dividends
      - Cumulative
      - Participating
    - Convertible

Preferred share dividends

- A Preferred Share may have CURRENT DIVIDEND PREFERENCE, which requires that preferred dividends be paid before paying any common share dividends

Consider the following example:

- Preferred shares outstanding – 6%
- Book value - $40,000, 2,000 shares
- Common shares outstanding
- Book value - $50,000, 5,000 shares

The company declares $8,000 dividends for 2011 and $10,000 dividends for 2012

Year	Total Dividends Declared	Dividends on 6% Preferred Stock*	Dividends on Common Stock†
2011	$ 8,000	$2,400	$5,600
2012	10,000	2,400	7,600

Preferred Dividends of $40,000*6% are paid first
The remainder is paid to common shares

- A preferred share may have CUMULATIVE DIVIDEND PREFERENCE, which requires that any position of preferred dividends not be paid be accumulated as dividends in arrears, which must be paid before any future common dividends

The company declares dividends for 2009 $0; 2010 $0; 2011 $8,000; 2012 $10,000

Year	Total Dividends Declared	DIVIDENDS ON 6% PREFERRED SHARES		Dividends on Common Shares‡
		In Arrears*	Current†	
2011	$ 8,000	$4,800	$2,400	$ 800
2012	10,000	—	2,400	7,600

2011 total preferred dividends = $7,200 (in arrears + current)

OneClass find more resources at oneclass.com

2011 total common dividends = $800 ($8,000 – $7,200)

2012 total preferred dividends = $2,400 (in arrears + current)
2012 total common dividends = $7,600 ($8,000 – $2,400)

Evaluate

- Earnings per share (EPS)
  - Fully diluted
    - Consider all possible shares in average number
    - Convertible issues, warrants, stock options

$$\frac{Net\ Income}{Average\ number - shares\ outstanding}$$

    - Current earnings predict future dividends and stock prices
- Return on Equity
  - Watch: stockholders' equity will no reflect price paid by shareholders

$$\frac{Net\ Income}{Average\ Stockholders'equity}$$

  - Decisions: amount of debt versus shareholders financing