Definition, Classification and Measurement of Liabilities

Liability defined
- Liability: a present obligation of the entity that arises from a past event and the settlement of which is expected to result in an outflow of economic benefit

Recognition
- Even if you are unsure of the amount or timing of payments it doesn't mean that you can't reliably measure it
- Provision: a liability in which there is some uncertainty as to the timing or amount of payment

Financial and non financial liabilities
- Financial liability: a contractual obligation to deliver cash or other financial assets to another party
- Non financial liabilities
  - They are typically settled through the delivery of goods or provision of services
  - Liabilities established by legislation (i.e. income or sales taxes payable)

Current vs noncurrent liabilities
- Current liabilities: obligations that are expensed to be settled within one year of the balance sheet date of the operating cycle, whichever is longer

Measurement
- Three categories of indebtedness:
  - Financial liabilities at fair value through profit or loss (FVPL) are measured at fair value. Fair value: the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date
  - Other financial liabilities should initially be measured at fair value minus the transaction costs directly associated with directly incurring the obligation. Subsequent to the date of acquisition the financial liabilities not FVPL are measured at amortized cost using the effective interest method
  - Non Financial liabilities:
    - Some are recorded at the management’s best estimate of the future cost of meeting the entity’s contractual obligations (E.x warranty)
    - Some are valued at the consideration initially received less the amount earned to date through performance
- As it might be hard to determine the face value of current liabilities, standards allow firms to simply record certain current liabilities at face value since the time value of money is usually immaterial
Current Liabilities
- Current liabilities arise from past events the amount to be paid is known or can be reasonably estimated
- Contingencies arise from past events: the amount to be paid is determined by future events
- Financial guarantees arise from contracts previously entered into the amount to be paid is determined by future events
- Current assets: assets that are expected to be consumed or sold within one year of the balance sheet date or the operating cycle

Trade payables
- Trade payables: obligation to pay for goods received or services used
- Accrued liability: have not received invoice but has an obligation to pay
- 2 issues to consider
  - Cut-off: make sure that the obligation is properly reported in the period in which it pertains
  - Gross versus net: should the company report that their obligation is the full amount (e.g. 100,000) or the net amount after discount (E.g 98,000)
    - Net method should be used because for example, the $98,000 is the cost of goods and the $2000 is the cost of financing the purchases
    - If the net method is used and the company does not take the discount then the firm needs to record purchase discounts lost and this is seen as bad practise. Therefore, gross method is more common
    - When the gross method is used and a discount is taken the discount amount is credited to inventory

Common non-Trade Payables
Sales taxes Payable
- The application of taxes is not as simple because:
  - Taxes are not uniformly applied to all sales. Some products exempt from PST or GST
  - Regulations and rates in each province differ
  - Businesses are generally permitted to deduct GST and HST paid on their purchases from the GST and HST collected and to remit the net amount owing to the federal government
- Usually HST collected exceeds the HST paid
- IFRS allows netting of taxes receivables and payable

Income Taxes Payable
- Income taxes normally recorded as a current liability

Dividends Payable
- Usually recorded as current liabilities
• Declaration of stock dividend does not give rise to a liability as there is no outflow of resources
  ○ Stock dividends can be revocable
  ○ Dr. retained earnings
    ■ Cr. stock dividends distributable

Royalty Fees Payable
• Can be paid because of a franchise or could be because of oil and gas industry to the Province (cost of doing business)

Notes Payable
• Trade payables are not supported by a written promise to pay
• Without transaction costs, interest bearing notes are recorded at fair value of the consideration received (which is normally the transaction price)
• Many companies measure the obligation at the face value of notes payable in 90 days or less and at a discounted amount for longer periods
• If the stated interest rate approximates the market rate of interest, record the obligation at fair value

Credit (loan) Facilities
• A common revolving line of credit is one where the company can borrow up to an agreed upon limit and pay interest only on the amount actually borrowed
• The outstanding amount of the line of credit is reported as a current liability and disclose the terms of the line of credit in notes

Warranties
• 2 common forms of warranties
  ○ Warranties provided by the manufacturer included in the sales price of the product
  ○ Warranties sold separately either by the manufacturer or by another party
• warranty: a guarantee that a product will be free from defects for a specified period of time
• Expected value: the value determined by weighting possible outcomes by their associated probabilities
• If the warranty is longer than a year, the entire obligation would be expensed in the year of the sale, however, the liability would be split into current and noncurrent liabilities
• Example 1:
  ○ Dr Warranty expense. Cr Provision for warranty payable
  ○ Dr Provision for warranty payable. Cr Parts Inventory Cr Wages Payable
• If management estimate is incorrect then adjust prospectively (don't change the things you did before)
• If warranty expense is immaterial (hardly claimed), they can just expense it immediately
  ○ Dr Warranty Expense .Cr Inventory
Deferred Revenues

- Non financial obligation arising from the collection of assets that have not been earned
- Can have current and noncurrent portion of obligations

Customer Incentives

*Customer Loyalty Programs*

- 2 requirements for loyalty programs
  - They grant the customer a material right to future goods for services for free or at a discount
  - The underlying transaction involves at least two performance obligations
    - Fulfilling the terms of sale
    - Meeting the loyalty plan commitment. These collective obligations are commonly referred to as multiple deliverables
- Factors to be considered when determining the amount of the liability to be recognized for unsatisfied performance obligations
  - The liability recognized should reflect the portion of the transaction price allocated to the future performance obligation (allocated based on stand-alone sales price)
  - If the stand alone price is not directly known the firm must estimate the amount based on the method stated in IFRS
    - Estimate should factor in the likelihood that the option to the material right might not be exercised
  - The transaction price should be adjusted to incorporate the effect of time value of money if the contract includes a significant financing component
    - Customer loyalty programs are exempt from this requirement

- There are three ways to offer awards:
  - Companies offer rewards that they supply themselves
  - Businesses offer awards that are supplied by third party (E.g. Air Canada offers Aeroplan)
  - Firms offer customers the choice of receiving awards from their own programs or those of a third party (e.g. can receive points from their company or collect points from another company)
- Accounting treatment depends on who supplies the award
  - Awards supplied by the entity
    - There are 2 obligations for the firm (i.e. providing services for the ticket sale and the customer’s right to the miles)
    - Can only earn the income when the transaction has occurred
  - Third-party awards
    - Company records the full transaction price as revenue at the time of sale
  - Choice of awards
    - No specific accounting treatment
- Example 2: Awards supplied by the entity
  - Hotel received $5 million in room revenue and awarded $50,000 in award points
- Proportional stand-alone sales price of the room revenues and the points are estimated to be $4,950,000 and $50,000. Anticipated that 80% of points will be redeemed
  - Yr 1: 30,000 points redeemed
  - Yr. 2: 10,000 points redeemed
  - Journal entry to record cash given
    - Dr. Cash 5M
    - Cr. Room Revenue 4,950,000
    - Cr. Unearned Revenue 50,000
  - Recognize award point revenue in year 1
    - (50,000 x 80% = 40,000) estimated points to be redeemed.
      - $50,000/40,000= $1.25/point. 30,000 points x $1.25= $37,500
    - Dr. Unearned Revenue 37,500
    - Cr. Award revenue 37,500
  - Look at Exhibit 11-14A on pg 519-520 (accounting for customer loyalty programs with inventory)

**Rebates**
- The transaction price recognized should be lowered because they have to take into account the rebate to be disbursed
- Rebates are classified under current liability because the incentive can be redeemed at any time at the holder’s discretion

**Other current Liabilities**

*Maturing debt to be refinanced*
- At maturity, the company can either pay back the debt or negotiate with the lender to refinance the obligation.
- If negotiation successful, they would disclose
- If unsuccessful, they would record as current liability

*Non current debt in default*
- If the borrower defaults on non current liability, the loan becomes payable on demand (so current liability)
Contingencies

- contingency: an existing condition that depends on the outcome of one or more future events
- 3 ranges of probability
  - probable: probability is > than 50%
  - Remote: 5% to 10% (upper bound)
  - Possible: < 50%, but greater than remote
- The combination of measurability and probability determines the accounting treatment for the contingency

Contingencies involving Potential outflows
Recognition of a provision
• When it is probable and measurable able, the firm should record a provision obligation
• E.g manufacturer provides a warranty with it's products
• The best estimate with the highest probability is used

**Disclose as a contingent liability**
• When the outflow is possible and not probable or you can't reliably measure the amount then disclose as contingent liability

**No action needed**
• When obligation is remote no action needed

**Contingencies involving potential inflows**
• Need to be more conservative because its assets

**Recognition as an asset**
• Must be virtually certain (about 95%-100%) to be recorded as a contingent inflow (record as an asset account)

**Disclose as a contingent asset**
• When it is probable (>50%) disclose as a contingent asset only in notes
• Contingent asset: a possible asset that arise from past events and whose existence will be confirmed only be some future event

**No action required**
• When the event is not probable do not recognize or disclose it

**Treatment of contingencies under ASPE**
• IFRS
  ▪ Uses “probable” (>50%)
  ▪ More balance sheet focused so contingent asset/liability
  ▪ If there is a range of obligations, use the best estimate of the expenditure
  ▪ Below the range is equally likely

<table>
<thead>
<tr>
<th>Dr. Lawsuit settlement expense</th>
<th>150,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cr. Provision for liability settlement costs</td>
<td>150,000</td>
</tr>
</tbody>
</table>

([($100,000 + $200,000) / 2 = $150,000])

• ASPE
  ▪ uses the word likely which is about 70% probability
    ▪ >70% write as a contingent loss
    ▪ <70% (i.e. 60%) disclose as contingent loss
Uses “contingent gains” and “contingent liabilities”
If there is one estimate that is better than another, the company would use that estimate
When no estimate is better (all equally likely) then only need to recognize a contingent loss for the min amount in the range and disclose the remainder

Commitments and Guarantees
Commitments
- Even if the company does not complete the contract yet, if the contract will eventually arise, then it must be disclosed in the notes
- Onerous contract: when a contract’s costs to fulfill it is higher than benefits

Guarantees
- Financial guarantee contract: a contract that requires the issuer to make specified payments to reimburse the holder for a loss it inquired because the specified debtor fails to make payment when due
- Guarantor must recognize a liability for the fair value of the guarantee and disclose the details and usually they use the maximum amount that they could be called to be paid on

Presentation and Disclosure
- Private companies are allowed to disclose less because the costs of disclosures is higher than the benefit

Substantive Difference Between IFRS and ASPE
Chapter 12

Introduction
Overview

- Non current liabilities: obligations expected to be settled more than 1 year after the balance sheet date or the business’ normal operating cycle, whichever is longer.
- There are two key reasons why companies borrow:
  - They have insufficient cash available to pay for the acquisition.
  - They expect to profit by investing in assets that will generate income in excess of borrowing costs.

Financial Leverage

- Financial leverage: quantifies the relationship between the relative level of a firm’s debt and its equity base.
- Financial leverage gives shareholders an opportunity to increase their return on equity but it also exposes them to increased risk of loss (since they need to pay interest now). Therefore it amplifies the success or unsuccessful rate of the company.
- What is a safe level of debt? You would consider:
  - The nature of the industry, degree of operating leverage, stability of cash flows, competitive factors and economic outlook.

<table>
<thead>
<tr>
<th>ISSUE</th>
<th>IFRS</th>
<th>ASPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contingencies—focus on balance sheet or income statement</td>
<td>Standard refers to contingent assets or liabilities.</td>
<td>Classified as contingent gains or losses.</td>
</tr>
<tr>
<td>Contingencies—terminology</td>
<td>Contingent assets and contingent liabilities refer to contingencies that are not recognized as provisions.</td>
<td>Contingent gains and contingent losses refer to the potential for gains or losses that depend on future events, irrespective of accounting treatment.</td>
</tr>
<tr>
<td>Contingencies—range of estimates for recognition of contingent loss</td>
<td>Use the amount of the most probable outcome in the range. If no estimate in the range is more likely than another, recognize the midpoint of the range as a provision.</td>
<td>Use the amount for the most probable outcome in the range. If no estimate in the range is more likely than another, recognize the minimum value in the range as a contingent loss and disclose remainder.</td>
</tr>
<tr>
<td>Customer loyalty programs</td>
<td>IFRS 15 requires sales transactions to be segregated into components: earned revenue arising from the sale of goods or service, and unearned revenue for the obligation to provide an award credit at a later date.</td>
<td>ASPE does not specifically address accounting for customer loyalty programs.</td>
</tr>
<tr>
<td>Disclosures for liabilities</td>
<td>Disclosure requirements are complex. Relevant standards that must be observed include IAS 37 and IFRS 7.</td>
<td>Disclosure requirements are much less demanding because users have the ability to obtain additional details from the reporting enterprise.</td>
</tr>
<tr>
<td>Onerous contracts</td>
<td>IAS 37 requires companies to provide for the cost of onerous contracts.</td>
<td>ASPE does not specifically address accounting for onerous contracts.</td>
</tr>
</tbody>
</table>
Debt Rating Agencies
- Debt-rating agency provides an independent and impartial evaluation of the riskiness of debt securities issued
- They evaluate the government and company that issues bonds or shares and give information so that investors can make informed investment decisions
- The evaluation helps to reduce information asymmetry between bondholders and investors and this reduces the cost of financing
- Dominion Bond Rating Services (DBRS): rates bonds in range of AAA to D

Common Non-Current Financial Liabilities
- Financial liabilities: a contractual obligation to deliver cash or other financial assets to another party (i.e. notes payable and bonds)

Notes Payable
- Most privately owned companies will issue notes to a bank or a supplier and the notes are not publicly traded
- Mortgages are special types of notes payable secured by collateral over real estate
- Many large companies issue notes directly to the investment community, which then trade the notes on exchanges and over the counter markets
- In simple terms, banks make money by making a spread. So they provide an interest on loans that is higher than the rate they pay on deposits
  - Banks can do this because lenders obtain a safe place to put their money and banks have a system to access the creditworthiness of borrowers
- If borrowers and depositors bypass the bank, they can deal with each other and pay less interest on borrowed money /earn more interest on deposited money.

Bonds
- Covenants: restrictions on the borrower’s activities
  - positive - maintain current ratio in excess of 1.5: 1
  - Negative - agreeing not to pay dividends to excess of $1 million a year
- Bond indenture: a contract that outlines the terms of the bond including the maturity date, interest rate, interest payment dates, security pledged and financial covenants
- Usually interest payments are paid semi-annually (but quoted as a nominal annual rate)
- Reasons for issuing bonds instead of bank loan is because of the large amount of capital. The minimum size of bond is $100 million
  - Lenders want to diversify their investments and so bonds are issued in $1000 multiples
- Investment banks: a financial institution that acts as an agent or underwriter for corporations and governments to issue securities, so the investment bank sells the bonds for the company on their behalf
  - Services provided by investment banks: advice regarding the structure of the bond issue (term, yield and covenants) and regulatory and legal issues
• Firm commitment underwriting: the investment bank guarantees the borrower a price for the securities
• Best efforts approach: the broker tries to sell as much of the issue as possible
• Primary market: where new bond issues are sold and there are mostly institutional and small investors in this market
• Secondary Market (over the counter market): after bonds are sold in the primary market, they are traded in the secondary market
• Individual investors can’t participate in the over the counter markets directly, so they would have to arrange it through a broker (E.g. CIBC)

Types of Bonds
• Secured bonds: bonds backed by a collateral (E.g. mortgage)
• Debentures unsecured bonds
• Stripped (Zero coupon bonds): bonds that do not pay interest. They are sold at a discount and mature at face value
• Serial bond: set of bonds issued at the same time but the mature at regularly scheduled dates rather than all on the same date
• Callable bonds: allow the issuing company to call the bonds (bonds are redeemed before maturity). A call premium is the excess over par value to the bondholders when the security is called
• Convertible bonds: allow bondholder to exchange the bonds into another security like common shares. This type of bond is an example of compound financial instruments
• Inflation linked or real return bonds: these bonds protect investors against inflation. Each bond can be different but the basics is that cash flows are indexed to inflation
• Perpetual bond: bonds that never mature

Initial Measurement
• Usually, companies record financial liabilities at fair value minus debt issue costs
  ○ say a company issues a bond for gross proceeds and fair value of $100 million and has $2 million of bond-issue costs, it would record the bond at the amount of the net proceeds ($98 million)
• Exception to the rule above is the fair value profit and loss (FVPL) liabilities. These liabilities are recorded on the balance sheet at fair value with all transaction costs expensed
  ○ I.e. the company records a $100 million debt and it expenses the $2 million transaction costs it faced
  ○ If the bond had a fair value of $98 million in the beginning of the year. It would be recorded as $98 million on the balance sheet. But at the end of the year if the bond is revalued at the corporation thinks the fair value of the bond is $100 million then the company will have to a record an increase in $2 million of liability and $2 million increase in expense
● If the company issues a standard bond at par value for cash on a date that matches the interest payment date, the fair value of the notes equals the cash received
  ○ However, fair value is not equal to cash received if: there's non-cash assets, bonds are issued at a discount, premium, issuance of hybrid financial instruments and debt issuance dates differ from the interest payment date

Debt Exchanged for Non-Cash Assets
● Notes or other debt instruments that are exchanged for non cash assets are recognized at fair value

Debt Issued at Non-Market Rates of Interest
● If the bond has a different interest rate than the market rate or it pays no interest the fair value of the debt will differ from the face (maturity) value

Compound financial Instruments
● A compound financial instrument is when it has both debt and equity parts (convertible bonds is an example)
● When initially recognized, the components parts must normally be accounted for separately

Issuing Bonds at Par, a Premium or a Discount
● Coupon or stated rate: interest rate specified in the bond indenture
● Yield or market rate: the rate of return on a bond actually earned by the investor at a particular time
● Effective interest rate: the yield on the date of issuance of a debt security
● For a given amount of coupon and maturity value, the more that the borrower is able to sell the bond for, the lower the effective rate of interest that will be paid

Determining the sales price of a bond when the yield is given
● Usually, we determine the sales price of a bond after knowing the yield that investors want because their yield requirement drives the price
● Compute the sale price of the bond
  ○ 1) Compute the PV of the coupons
  ○ 2) Compute the present value of the maturity amount
  ○ 3) Sum up the two parts above to get the sales price

Timing of bond issuance

Selling bonds after the specified issue date
● When bonds are sold between the interest payments dates (sold after the regular issuance date) the purchaser will pay the seller the agreed price for the bond plus the interest that was accrued since the last interest payment date. Therefore when the next interest payment comes, the seller will pay the usual full amount of interest
If the bond is sold after the specified issuance date the premium or discount is amortized over the length of time between when the debt is sold and the maturity date.

Subsequent Measurement
- Amortized cost: the amount initially recognized for the debt adjusted by the amortization of premium or discount
- Steps to determine the amortized cost of a financial liability
  - 1) establish the effective interest rate
  - 2) amortize the premium or discount using the effective interest method

Effective interest rate
- The method used to calculate the interest depends on the type of financial instrument
- If the term note includes a set payment amount that includes principal and interest (e.g., Bonds, leases), interest is calculated based on number of months outstanding
- If the notes is repayable on a principal plus interest basis or does not have a set repayment schedule, interest is calculated on daily basis

Amortization using the effective interest method
- Key ideas to notice
  - At maturity, the amortized cost of the bond (the carrying value or net book value) equals the maturity (face) value of the bond
  - The original discount or premium is charged to interest expense over the life of the bond. Amortizing bond discounts increases interest expense relative to the coupon payment, premiums decrease interest expense
  - for bonds sold at a discount, the interest expense per period increases each period. This is because the amortized cost of the bond increases each period and interest expense is a function of the bonds’ book value. Whereas for bond sold at a premium, the interest expense decreases each period
When interest payment coincide with year end: Example #1 (pg 574):

Step 1—Calculate the interest expense for the period:

Carrying (book) value of the obligation at the beginning of the period \times \text{Effective interest rate for the period (may not be a year)} = \text{Interest expense}

Step 2—Determine the amount of the discount or premium to be amortized:

\text{Interest expense} - \text{Interest paid or accrued} = \text{Amortization amount}

Step 3—Compute the new amortized cost of the outstanding liability:

\text{Beginning of the period amortized cost} \pm \text{Amortization for the period} = \text{End of the period amortized cost}

If the obligation is carried at a **discount**, add the period amortization to the opening balance to determine the end-of-period amortized cost.

If the obligation is carried at a **premium**, subtract the period amortization from the opening balance to determine the end-of-period amortized cost.
**Bond issuance:**
Dr Cash
Cr Cash (transaction cost)
Cr Bond Payable

**Interest Payment:**
Dr Interest Expense
Cr Cash
Cr Bond Payable

*When interest payments do not coincide with fiscal year end*

Year end: Oct 31
Bond sold at premium

- On Oct 2018, since four months have passed since the last interest payment we need to prorate the interest costs that will be paid on Jan 1 2019
- $28,403 x 4 months / 6 months = $18,935
- $1,597 x 4 / 6 = 1,065
- Dr Interest Expense $18,935
- Dr Bond Payable  1,065
- Cr Interest Payable 20,000

**Amortization using the straight line method**
- Simple to use and usually don’t differ materially from the effect interest method
- Steps to calculate bond amortization using straight line method
  - 1) determine the amount of discount/premium (FV-price that bond is sold for)
  - 2) determine the amount to be amortized each period, divided by the number of periods until maturity (discount amount calculated in 1) divided by number of periods)
  - 3) interest expense for each period is the sum of interest or accrued and the discount amortized (interest paid + amount calculated in step 2)

**Derecognition**
- Obligation is extinguished when the underlying contract is discharged, cancelled or expires (pay the liability or not legally responsible for it)
- The most common way to extinguish an obligation is by paying the creditor cash or provide the goods and services that were specified in the contract

**Derecognition at maturity**
- Pay the face value of the debt and any interest accrued

**Derecognition Prior to Maturity**
- Steps to derecognize liability prior to maturity
  - 1) Company should update records to account for interim interest expense, including the amortization of discounts/ premiums up to the derecognition date
  - 2) the company should record the outflow of assets given to eliminate the obligation
  - 3) the company records a gain/loss from retiring earlier (difference between the amount paid and the book value of the liability derecognized )
- Example 2 on page 580
Repurchase bond on Oct 1, 2019 for $980,000 cash

Calculate the interest that has occurred since the last interest payment to Oct 1, 2019

Callable debt

- The total consideration for the repurchase is the FV + accrued interest + call premium
- All the calculations are similar to above
- A feasible method to calculate the amortized cost of bond (explained using an example)
  - Issuance date: Jan 2018 (since there are semi coupons there are 6 periods)
  - Called on Oct 2019
  - Last interest paid date July 1, 2019 so there has been 3 periods that have gone by since the issuance date
  - The Maturity date of the bond is January 1, 2021
  - 1) You start off at the interest payment date prior to the redemption, so July 1, 2019
2) There are 18 months left until maturity, or 3 periods
3) Using effective interest rate:
   - PV of coupons = coupon payments x Present value factor of annuity(effective rate, periods left)
     - PV of coupons = 30,000 x PVFA (3.64%, 3)
     - =30,000 x 2.7941 = 83,823
   - PV of principal= $1,000,000/1.03641^3 = $898,266
   - Sum of above 83,823 + 898,266 = $982,089 this is the amortized cost at July 1, 2019

Derecognition Through Offsetting and in-substance defeasance

Offsetting
- offsetting : showing the net amount of related assets and liabilities on the balance sheet
- Usually you can't offset financial assets/ liabilities
- Exception: you can offset if you have a legally enforceable right and the company decides to settle the asset and liability simultaneously

In-substance defeasance
- In substance defeasance: an arrangement where the company has the funds sufficient to satisfy a liability and places this amount due in a trust with a 3rd party who pays the money directly to the creditor at maturity
- Sometimes, companies have enough money to satisfy the liability, but because of restrictions in the loan agreement or onerous prepayment penalties, they can't do so
- Therefore, companies may put money in the trust.
  - However, this arrangement does not necessarily take your liability off the books unless the creditor agrees you are no longer liable

Putting It All Together- A Comprehensive Bond Example
- Interest expenses = amortized amount x effective interest rate

Other Issues
Decommissioning and site restoration obligation
- The government requires firms to dismantle and return all PPE and land to the original purpose and these costs should be recognized and discounted by an appropriate interest rate
- Example 3 :
  - Future value of restoration costs = $10,000,000
  - Discount rate = 5%
  - Present value = 6,139,133 (10,000,000/(1.05)^10)
  - Depreciate using straight line over 10 years
Example 4:
- $10 million restoration costs over 10 years. Interest rate would increase from 5% to 6% in year 5
- At Yr 5:
  - Obligation for restoration: $7,835,262 (10,000,000 / 1.05^5)
  - Cost of land: $6,139,133
  - $10,000,000 / 1.06^5 = $7,472,582
  - The liability and asset will be reduced by $362,680 = $7,835,262 - $7,472,582
  - New net book value = original cost - revision cost - accumulated depreciation
  - New depreciation cal = net book value / remaining years

Off Balance Sheet obligation
- Before, firm were able to remove accounts off their balance sheet but now they must record all accounts (i.e. derivatives, decommissioning costs and SPE)
- SPEs are entities that are created to perform a specific function such as undertaking research and development activities.
  - Reasons for creating it is for tax considerations and isolating the backer from financial risk

Bond denominated in foreign currency
- Translation of the foreign currency debt into the functional currency at the exchange rate evident on the transaction date
- Revaluation of the foreign currency obligation at the end of a period using the exchange rate at that time
- Recognition of the gain or loss from revaluation on the income statement
- Example 5: denominated in foreign currency
  - The date the bond is issued use the spot rate (exchange rate) on that date
○ On year end, reevaluate the price of the bond using the spot rate on that date
  ■ Losses or gains will go through foreign exchange loss/gain
○ To calculate interest, the interest expense uses the average exchange rate of the period
  ■ To calculate the cash account for the same transaction, we would use the spot rate
  ■ Dr Interest Expenses
  ■ Cr Foreign exchange gain (or Dr Foreign exchange loss)
  ■ Cr Cash

**Differences between ASPE and IFRS**

<table>
<thead>
<tr>
<th>Issue</th>
<th>IFRS</th>
<th>ASPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amortization of premiums and discounts on financial liabilities</td>
<td>Enterprises must use the effective interest method.</td>
<td>Enterprises may use either the effective interest method or the straight-line method.</td>
</tr>
<tr>
<td>Increase in the provision for site restoration costs (AROs) due to the passage of time</td>
<td>Charged to interest expense</td>
<td>Charged to accretion expense</td>
</tr>
<tr>
<td>Decommissioning and site restoration obligations (AROs)</td>
<td>Recognized for both legal and constructive obligations</td>
<td>Recognized only for legal obligations</td>
</tr>
</tbody>
</table>
AFM 391 – Chapter 13

A) Introduction

- Equity has a legal priority (rank of a liability or an equity claim when a company liquidates, where they have preferential payout before other claimants) below liabilities in general. So debtors don’t really care about equity.
- Equity holders who have residual claims to enterprise are concerned about size of their claims, and need to be aware of changes to their share of profits. Lots of information asymmetry between management and owners, especially with many types of equity.
- Equity holders are interested in distinguishing
  - i) changes in equity due to direct contributions or withdrawals of capital from
  - ii) changes in equity derived from ROE capital (income)

B) Components of Equity for Accounting Purposes

- 1) Contributed capital
  - Contributed Capital: amounts received by the reporting entity from transactions with shareholders, net of any repayments from capital (rather than accumulated income)
  - a) Common shares (or ordinary shares)
    - Common shares: lowest priority and represents the residual ownership interest in the company. AKA ordinary shares.
      - Every company must have at least one class of common shares
  - b) Preferred Shares
    - Preferred shares: any shares not common shares. Have priority over common shares with respect to the receipt of dividends and a claim on entity’s net assets in liquidation
  - c) Shares with or without par value
    - refers to the nominal value of a share, not the actual share price
    - CBCA does not permit companies to issue shares with par value, but some provinces do, if companies are incorporate under those laws
    - Par value shares: shares with a dollar value stated in the articles of incorporation; for preferred shares, the dividend rate may be stated as a % of par value
    - For common shares, par value has no particular economic significance
    - When a company issue shares with par value, we identify the amount form the par value separately from the amount received above par, in contributed surplus.
  - d) Cumulative vs non-cumulative dividends
Dividends are always discretionary. Only paid when declared payable, even if there is a stated dividend rate on the shares.

Preferred shares may be cumulative – must pay dividends they missed before paying common shares.

Not paying dividends is a strong sign that company is in financial difficulty.

- **e** voting rights
  - Most shares have 1 voting right. Some assign them differently according to their articles of incorporation.

- **f** number of shares authorized, issued or outstanding
  - **Shares authorized**: number of shares allowed to be issued by a company’s articles of incorporation. Many specify as unlimited.
  - **shares issued**: number of shares issued by the corporation, whether held by outsiders or by corporation itself.
  - **shares outstanding**: issued shares owned by investors (including company officers/employees).
  - **treasury shares**: shared issued but held by issuing corporation, treasury shares are not outstanding.

- **2) Retained Earnings**
  - **Retained Earnings**: component of equity that reflects the cumulative net income (profit/loss) minus dividends paid.
    - Doesn’t represent cash available. Some reserves of it is required by law.
  - **Appropriation**: process that allocates a portion of retained earnings to an appropriated reserve. E.g. University have reserves from donors – ensure they aren’t spending donations. To make annual appropriation of retained earnings:
    - Debit retained earnings, credit sinking fund reserve (or appropriated retained earnings).
    - Debit restricted cash, credit cash.

- **3) Accumulated other comprehensive income (AOCI)**
  - AOCI accumulates OCI from all prior periods, then reported on B/S as equity.
    - AOCI not reported for ASPE.
    - AOCI is referred to as ‘reserves’.
  - OCI usually represents the unrealized change in fair market value of select assets including FVOCI investments.
  - **Recycling (OCI)**: process of recognizing amounts through OCI, accumulating that OCI in reserves and after recognizing those amounts through net income and retained earnings.
    - OCI from investments in debt securities at fair value through OCI is recycled through net income (NI) and retained earnings (RE).
    - OCI from investments in equity securities is not. May reclassify directly to RE.
C) Equity Transactions Relating to Contributed Capital

- Paragraph 54(r): requires entity provide info in B/S for issued capital and reserves attributable to the parent
- Paragraph 78(e): if warranted by size/nature/function of amounts involved, equity capital and reserves should be disaggregated into various classes (e.g. paid in capital, share premium, reserves)
- Paragraph 79(b): a description of nature and purpose of each reserves within equity be provided in the B/S, statement of changes in equity or notes
- 1) Issuance of Shares
  - a) shares sold for cash
    - No par value: debit cash, credit common shares
    - Par value: Debit cash, credit common shares – par value (par value * # of shares), contributed surplus
  - b) shares sold on a subscription basis
    - sold to public/employee. Subscriber makes down payment towards cost of buying the shares, and agrees to make the remainder later.
    - Initial receipt of cash:
      - debit cash, subscriptions receivable [(total price/share – price paid now/share)*number of shares]; credit common shares subscribed
    - When later payments received:
      - Debit cash; credit subscriptions receivable (later payments * # shares)
    - When shares paid in full:
      - Debit common shares subscribed; credit common shares (total price/share * # shares)
    - Shares sold on subscription basis is reported as a contra equity account (IFRS does not directly address this). ASPE gives some discretion.
    - To account for defaulted contracts, has 3 outcomes: 1) refund cash paid and cancel contract 2) issue lesser # of shares to subscriber that reflects the amount paid 3) keep money paid as penalty for subscribed defaulting (recorded as contributed surplus, not net income).
      - Outcome depends on legislation and provision of subscription contract
  - c) bundled sales
    - 2 methods:
      - relative value method (proportional method)
        - sales price allocated proportionally to component based on estimated fair value of each component
        - use % of total * total proceeds
      - Residual value method (incremental method)
Estimate fair value of components and allocates amounts to these components in descending order according to the reliability of each component’s fair value – most reliable first.

Use most reliable market price, then total proceeds – most reliable market price

- Debit cash; credit common shares, preferred shares

- d) share issuance costs
  - expenses directly associated with issuing stock (underwriting, accounting, legal fees) are directly charged to equity as they represent capital transaction
  - can also deduct costs to related share capital accounts, reporting the net amount or charge them to RE

2) Stock Splits

- Stock split: increase in # of share issued without the issuing company recycling any consideration in return
- No changes in economic substance = no journal entry required, only a note that # shares changed
- Use this to bring share price to desired range

3) Reacquisition to Shares

- Buy back own shares because:
  - Are tax efficient alternative to give cash to shareholder (compared to dividends) – can choose when to give cash, allows better tax planning
  - Alleviates information asymmetry by giving positive signal to market – costly for company to buy back own shares
  - To offer stock compensation to executives/employees
  - Decreases # of shares outstanding, lowers denominator for EPS (increases EPS)

- a) cancellation of reacquired shares
  - business incorporated under CBCA cannot hold their own shares -> thus must retired them:
    - No par value:
      - Debit common shares (issue price/share * # shares); credit cash (repurchase price/share * # shares); credit contributed surplus – from repurchase of shares
    - Par value:
      - Debit common shares – par value (par value/shares * # shares); debit contributed surplus [(issue price/share – par value/share)*#share]; credit cash (repurchase price/share * # shares); credit Contributed surplus – from repurchase of shares
### Exhibit 13-9 Types of contributed surplus

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Created by the issuance of shares, being the amount in excess of par; this amount would have been recorded in common shares had there been no par value.</td>
</tr>
<tr>
<td>B</td>
<td>Created by repurchase and resale of previously issued shares.</td>
</tr>
<tr>
<td>C</td>
<td>Created by any transactions other than the above (e.g., issuance of stock options).</td>
</tr>
</tbody>
</table>

- Reduction in Type A Contributed surplus = # shares repurchased * Type A contributed surplus per share
- Reduction in Type C contributed surplus = # shares repurchased * Type C contributed surplus per share
- We withdraw as much type B contributed surplus as necessary and available in the account

### Exhibit 13-10 Journal entries for the repurchase and cancellation of 2,000 shares at $30/share

<table>
<thead>
<tr>
<th>Naples Inc.—no par value shares</th>
<th>Parksville Company—par value of $1/share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Common shares (2,000 sh × $20/sh)</td>
<td>40,000</td>
</tr>
<tr>
<td>Dr. Contributed surplus—from repurchase of shares (Type B)*</td>
<td>2,000</td>
</tr>
<tr>
<td>Dr. Contributed surplus (Type C) (2,000 sh × $3/sh)</td>
<td>6,000</td>
</tr>
<tr>
<td>Cr. Cash (2,000 sh × $30/sh)</td>
<td>12,000</td>
</tr>
<tr>
<td>Cr. Cash</td>
<td>60,000</td>
</tr>
</tbody>
</table>

- * From Exhibit 13-8, the previous repurchase and cancellation of 1,000 shares in 2019 created $2,000 Cr. of Type B contributed surplus. 2,000 shares repurchased × $1/share of Type C contributed surplus = $6,000

or

\[
\frac{2,000 \text{ shares repurchased}}{9,000 \text{ shares outstanding}} \times 27,000 \text{ of Type C contributed surplus} = 6,000
\]

- Type A contributed surplus comes from the issuance of shares, only when share have par value. – so only withdraw type A contribute surplus in amounts equal to recorded per share amounts
- Type B contributed surplus comes from share repurchase and resale transaction that generate gains; thus losses should offset prior gains to the extent there are such gains accumulated
- Type C contributed surplus comes from transaction not share repurchases or resales. Thus this is attributable to every share outstanding, so we withdraw type C contribute surplus at rate equal to their recorded per share amounts

- **b) holding reacquired shares in treasury**
  - Treasury sales have no voting rights and no dividends.
  - Two methods to account for them
    - Single transaction method
Treats reacquisition of shares and selling them off as 1 transaction
- Standards prefer this method
- Have a separate treasury stock account, which is a contra account in equity, until shares are sold

- Two transaction method
  - Treats two parts as components of two transactions: repurchase is the close of a transaction that began with initial issuance of shares, and the subsequent resale is beginning of next sale repurchase pair

To illustrate the accounting for treasury stock transactions, suppose Smithers Company reacquired 3,000 no par shares at $8 per share and subsequently sold 1,000 of these shares at $12. Assume that the average price of shares outstanding is $10 and there is no contributed surplus before this transaction. The journal entries would be as follows under each method:

<table>
<thead>
<tr>
<th>Exhibit 13-12</th>
<th>Journal entries for the repurchase of 3,000 shares and later resale of 1,000 shares at $12/share</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Single-transaction method</strong></td>
<td><strong>Two-transaction method</strong></td>
</tr>
<tr>
<td><strong>Repurchase 3,000 shares @ $8/share</strong></td>
<td><strong>Dr. Common shares (3,000 sh × $10/sh)</strong></td>
</tr>
<tr>
<td>Dr. Treasury stock</td>
<td>24,000</td>
</tr>
<tr>
<td>Cr. Cash (3,000 sh × $8/sh)</td>
<td>24,000</td>
</tr>
</tbody>
</table>

| **Resell 1,000 shares @ $12/share** | **Cr. Contributed surplus** |
| Dr. Cash (1,000 sh × $12/sh) | 12,000 | Cr. Cash | 12,000 |
| Cr. Treasury stock (1,000 sh × $8/sh) | 8,000 | Cr. Common shares | 12,000 |
| Cr. Contributed surplus—from repurchase or resale of shares (Type B) | 4,000 | |

- If companies resell treasury sales for less than repurchase cost, differences comes out of Type B contributed surplus to the extent available, and then out of RE
- Don’t involve Type C, as shares are issued but not outstanding

<table>
<thead>
<tr>
<th>Exhibit 13-14</th>
<th>Journal entry to record Smithers’s second resale of 2,000 shares of treasury stock @ $5/Share</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dr. Cash</strong></td>
<td>10,000</td>
</tr>
<tr>
<td><strong>Dr. Contributed surplus—from repurchase or resale of shares (Type B)</strong></td>
<td>4,000</td>
</tr>
<tr>
<td><strong>Dr. Retained earnings</strong></td>
<td>2,000</td>
</tr>
<tr>
<td><strong>Cr. Treasury shares</strong></td>
<td>16,000</td>
</tr>
</tbody>
</table>

D) Equity Transactions Relating to Retained Earnings

- Very few companies pay all RE as dividends, as there are CF implications, uncertainty to future performance, contractual restrictions and signalling effects
- 1) Cash Dividends (most common dividends)
o a) Declaration Date
   ▪ once BOD declares dividend, they should record a dividend payable

o b) Ex-dividend date and date of record
   ▪ date of record is when company compiles list of shares to determine who is paid how much in dividends.
   ▪ Ex dividend date is 2 business days prior to date of record (Toronto). Before this date, investor can received the dividend.
     • E.G. dividend record date Monday, ex dividend date Thursday. Those with the shares on Wednesday have dividends, those who buy on Thursday don’t.

o c) payment date
   ▪ date when funds for dividends are transferred to shareholders

o d) summary
   ▪ only declaration date and payment are relevant for accounting

• 2) Stock Dividends
  o Increase number of shares and no cash outflow. Each shareholder owns same fraction of company
  o Need journal entry for this. Different from stock split because of legal/tax requirements. no tax consequences from stock splits, but stock dividends result in adjustment to share’s tax basis relevant to windup of company
  o Stock dividend: debit retained earnings; credit common shares (stock price ex-dividend/share * # shares)
  o Companies not publically traded -> stock dividend recorded using book value/share.- can choose whatever dividend rate results in their desired amount of transfer

• 3) Property dividends (dividends in kind)
  o Can pay dividends using non-cash assets – but uncommon because investors value them differently.
  o Practically, this can be used to transfer assets form a subsidiary to parent company
  o Also used by parent company to distribute shares of an associate/subsidiary to shareholders (can be significant)
  o Necessary to estimate fair value of assets for recording the value of divined. Fair value – book value = profit/loss
  o ASPE is different from IFRS. ASPE specifies no gains/losses (using book value).

• 4) Dividend preference
  o Cumulated and non cumulated preferred shares must be paid before any common shareholders are paid

E) Statement of Changes in Equity

• ASPE says profit oriented companies normally have a statement of RE. IFRS say complete set of F/S includes a statement of changes in equity
• Statement of changes in equity reconcile the change in RE. IFRS require this statement to:
• Each component of equity requires a conciliation of opening/closing balances, separately disclosing changes resulting from profit/loss; OCI; and capital transactions
• Total comprehensive income for the period
• Effect of retrospective changes in accounting policies

• The following must be in the statement of changes in equity or notes:
  o For each component of equity, an analysis of OCE by item
  o Change in entity’s equity between the beginning and end of reporting period
  o Amount of dividends declared, including dividends per share amounts
• Reporting entity should also disclose, either in B/S, statement of change in equity, or notes
  o Equity disaggregated into its component (par value, contributed surplus, RE, etc...)
  o # of shares authorized, issued, and outstanding for each class of shares; reconciliation of shares outstanding at beginning and end of year; whether shares have par value; and any rights, preferences or restrictions on shares
  o Description of the nature and purpose for each reserve

• Three components of equity we consider
  o Contributed capital – amount of funds provided by owners, net of any repayments to owners or repurchases of ownership units (shares)
  o Retained earnings – amount of cumulative profits/losses recognized through I/S less dividend (and other adjustments)
  o Reserves – amounts accumulated from events/transactions increasing equity that are not transactions with owners and which have not flowed through profit/loss; E.G. AOCI

• Potentially up to 5 classes of transactions that explain change in these 3 components:
  o 1. Profit/loss – income and expenses recognized in I/S, other than (2) below
  o 2. Other comprehensive income (OCI)
    ▪ Each type needs to be tracked as a separate component of reserves
  o 3. Dividends
  o 4. Capital transaction – transaction with owners such as shares issuance/repurchases
  o 5. Effect of changes in accounting policy and correction of errors

<table>
<thead>
<tr>
<th>Exhibit 13-19</th>
<th>Content and alternative presentations of the statement of changes in equity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class of transaction</td>
<td>Component of equity affected</td>
</tr>
<tr>
<td>1. Profit or less (also called net income)</td>
<td>Retained earnings</td>
</tr>
<tr>
<td>2. Other comprehensive income</td>
<td>Accumulated other comprehensive income (a component of reserves)</td>
</tr>
<tr>
<td>Total comprehensive income (1 + 2)</td>
<td></td>
</tr>
<tr>
<td>3. Dividends*</td>
<td>Retained earnings</td>
</tr>
<tr>
<td>4. Capital transactions (e.g., share issuance or repurchase)</td>
<td>Contributed capital and sometimes retained earnings</td>
</tr>
<tr>
<td>5. Effect of changes in accounting policy and correction of errors</td>
<td>Contributed capital or retained earnings</td>
</tr>
</tbody>
</table>

* Dividends may be disclosed outside the statement of changes in equity.
F. Presentation and Disclosure
• Has sample statement of changes in equity

G. Comprehensive Illustration of Equity Transactions
• Has sample equity transactions and journal entry examples

H. Substantive Differences Between Relevant IFRS and ASPE

<table>
<thead>
<tr>
<th>ISSUE</th>
<th>IFRS</th>
<th>ASPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting for repurchase and resale of shares</td>
<td>No specific guidance.</td>
<td>ASPE prescribes the allocation of repurchase costs and proceeds from resale of shares.</td>
</tr>
<tr>
<td>Accounting for treasury shares</td>
<td>No specific guidance.</td>
<td>ASPE permits the use of the single-transaction or the two-transaction method, although the former is preferred.</td>
</tr>
<tr>
<td>Accumulated other comprehensive income (AOCI)</td>
<td>AOCI is a component of equity.</td>
<td>There is no concept of “other comprehensive income” in ASPE, and therefore no AOCI.</td>
</tr>
<tr>
<td>Dividends in kind</td>
<td>Distribution to the owners of shares of a subsidiary or investee is normally measured at book value.</td>
<td>Distribution to the owners of shares of a subsidiary or investee is measured at book value unless the asset is impaired.</td>
</tr>
<tr>
<td>Presentation</td>
<td>A statement of changes in equity presents balances and transactions for all equity components.</td>
<td>A statement of retained earnings presents balances and transactions for retained earnings. Information relating to other equity components should be disclosed.</td>
</tr>
</tbody>
</table>
Chapter 14: Complex Financial Instruments

Types of Financial Instruments

*Basic financial assets, financial liabilities, and equity instruments*

- An investor holding a bond has a financial asset, while the bond issuer has a financial liability
- An investor holding a share has a financial asset, while the company that issued that share has an equity instrument outstanding

<table>
<thead>
<tr>
<th>Financial assets can be accounted for using</th>
<th>Financial liabilities can be accounted for using</th>
<th>Equity instruments are accounted for using</th>
</tr>
</thead>
<tbody>
<tr>
<td>consolidation for controlled subsidiaries</td>
<td>amortized cost (most financial liabilities for non-financial companies)</td>
<td>historical cost</td>
</tr>
<tr>
<td>proportionate consolidation for joint operations</td>
<td>fair value through profit or loss for liabilities designated at FVPL*</td>
<td></td>
</tr>
<tr>
<td>equity method for joint ventures</td>
<td></td>
<td></td>
</tr>
<tr>
<td>equity method for associates</td>
<td></td>
<td></td>
</tr>
<tr>
<td>fair value through profit or loss for investments in financial assets at FVPL*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>fair value through OCI** for investments in financial assets at FVOCI***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>amortized cost for investments in financial assets at amortized cost</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Derivative financial instruments*

- **Derivative**: financial instrument that is derived from some other underlying quantity
- **Underlying quantity**: value of an asset, an index value, or an event that helps determine the value of a derivative
  - Doesn’t need to be financial in nature (ex. based on the min temperature in Florida in Jan – they can reduce their losses when the temperature drops below freezing)
  - Allows for risk sharing through the use of derivatives
- Parties enter into derivative contracts for two reasons: to hedge or to speculate
  - **Hedging**: involves identifying a risk and trying to mitigate that risk by using derivative contracts
  - **Speculation**: purposely takes on an identified risk with a view to making a profit
- 5 types of common derivatives:
  - Option, warrant, forward, future, swap
  - **Option**: a derivative contract that gives the holder the right (not obligation) to buy or sell an underlying financial instrument at a specified price
    - **Call option**: right to buy at exercise/strike price → most frequently encountered
      - **Out of the money**: when the share’s market price (S) < exercise price (K) → holder of the option won’t exercise the option
      - **In the money**: when the share’s market price (S) > exercise price (K) → may exercise
• Example of call option - **Employee stock option**: issued to employees, giving them the right to buy shares in the enterprise at a specified price
  - Used as a form of compensation and moral hazard

  ▪ **Put option**: right to sell at exercise/strike price
  - Intrinsic value increases when the underlying share price declines below the strike price

  ▪ **Value of an option**:  
    - **Intrinsic value of an option**: the difference between the market price and the strike price
      - $S=K \rightarrow$ Intrinsic value $= 0$
    - **Time value of an option**: probability that the future market price of the underlying instrument will exceed the strike price
      - Increases with the length of time to expiration and the volatility of the underlying instrument
      - Always positive until the option expires, thus the total value of an unexpired option is always greater than the intrinsic value
      - At expiration, total value $= \text{intrinsic value}$

  ▪ **Warrants**: right (not obligation) to buy a share at a specified price over a specified period of time
    - Similar to a call option but differences are:
      - Warrants are issued only by the company whose shares are the underlying instrument
      - Tend to have longer times to maturity (3-10 years)
      - Tend to be issued in combination with other financial instruments (ex. bond, common shares, preferred shares)
      - Exercised when they are in the money, which is when the company is doing well
      - Issue shares indirectly through investors exercising their warrants to purchase shares

  ▪ **Forward**: contract in which one party commits upfront to buy/sell something at a defined price at a defined future date
    - Differs from an option because a party to a forward contract doesn’t have a choice in the purchase/sale of the future
- Only possible if two parties have different expectations/risk tolerances regarding future price changes
- The two parties can specify any price and any maturity date agreeable to both, thus they are quite flexible in their contractual terms
  - **Future**: similar to a forward but written in more standardized terms (ex. price, maturity date) and involves commonly traded items
    - They are tradable in organized markets since standardization increases liquidity (more investors are trading the same contracts)
  - **Swap**: derivative contract in which two parties agree to exchange cash flows
    - Ability to complete a swap depends on whether one party desires to have the cash flow stream of the other party
- Companies sometimes require financial instruments that are more than just debt and equity

**Compound Financial Instruments**
- **Compound financial instruments**: financial instruments with more than one financial instrument component (ex. convertible bond, warrants attached to shares/bonds)
  - They solve problem of information asymmetry
  - Initially issues debt
  - Conversion occurs when the company performs well, thus decreasing debt and increasing equity (decreases leverage and increases debt capacity)
  - Issues shares indirectly, thus not giving a negative signal to investors
  - Provide the company with funds in more than one stage, which is helpful at alleviating moral hazard (don’t want to give too much money to management when outcomes are highly uncertain – misspend funds)
  - Commonly used when operational uncertainty is relatively high
- Issues of common shares send negative signal to investors because it indicates a lack of confidence in the future prospects of the company (issuance usually results in the decline in the share price) → usually last resort

**Accounting for Complex Financial Instruments**
**Derivatives**
- Derivatives investments are generally classified as at fair value through profit or loss and measure them at fair value, with changes in fair value recorded through income
  - 2 exceptions with derivatives that are part of hedging transactions and for derivatives that relate to the reporting entity’s own equity
- Warrants on common shares and employee stock options are examples of derivatives on the company’s own equity

**Derivative involving no transfers on the contract initiation** – nothing changes hand at initiation date

![Exhibit 14-5 Journal entries to record fair value changes in the currency forward contract between Axel and Bluebird](image)

**Derivatives that require entries upon initiation**
Compound financial instruments
- Compound financial instruments include at least 2 components:
  - Underlying financial instrument
  - The investors’ option to convert the financial instrument purchased into a different type of financial instrument
- If the components of the compound instrument are all equity, the component parts don’t need to be accounted for separately
- If the compound financial instrument includes the ability to convert debt into equity, the enterprise needs to account for each component separately
- When a compound financial instrument includes both debt and an equity, how should we allocate amounts to each of the 2 or more components:
  - **Proportional method (or relative fair value method):** estimate the fair values of all components and allocate them proportionally to all components
  - **Incremental method (or residual value method):** estimate the fair value of all but one of the components and allocate the balance to the remaining component \( \rightarrow \text{IFRS, ASPE} \)
    - When it is comprised of both debt and equity, the debt component must be initially recognized at its fair value with the residual of the consideration received ascribed to the equity component
    - 1. Need to determine the price of the bond that include the conversion option and the price of the comparable bonds that don’t include the option, 2. Allocate the purchase price, 3. Prepare journal entry

### Exhibit 14-6
Journal entry to record Axel’s purchase of a foreign currency futures contract

| Dr. Foreign currency derivative (classified as at fair value through profit or loss financial asset) | 10,000 |
| Cr. Cash | 10,000 |

### Exhibit 14-7
Two scenarios and journal entries to account for changes in value in Axel’s US dollar foreign currency futures contract

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Resulting exchange rate Dec. 31, 2018</th>
<th>Value of futures contract</th>
<th>Journal entry</th>
</tr>
</thead>
<tbody>
<tr>
<td>USD appreciates by C$0.03</td>
<td>US$1:C$1.88</td>
<td>$40,000</td>
<td>Dr. Foreign currency derivative 30,000</td>
</tr>
<tr>
<td>USD depreciates by C$0.03</td>
<td>US$1:C$1.02</td>
<td>-$20,000</td>
<td>Cr. Gain on currency derivative 10,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Dr. Loss on foreign currency derivative 30,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Cr. Foreign currency derivative 30,000</td>
</tr>
</tbody>
</table>

### Exhibit 14-8c
Journal entry to record issuance of bonds—incremental method (IFRS and ASPE)

| Dr. Cash | 104,330 |
| Cr. Bond payable | 100,000 |
| Cr. Contributed surplus—conversion option | 4,330 |
- **Zero common equity method**: no value is ascribed to the common equity component → **ASPE**

- the exercise of an option or warrant extinguishes that financial instrument in exchange for the issuance of common shares
  - **Common shares amount**: sum of the cash received and amount removed from contributed surplus

- 2 ways to record the conversion of bonds/preferred shares into an equity instrument: **book value and market value method**
  - **Book value method**: records the common shares at the current book value of the preferred shares or the convertible bond and related contributed surplus (no gain or loss is recorded) → **IFRS and ASPE mandate this method**
    - Acknowledges the compound nature of the convertible bond and the reason for its issuance

---

<table>
<thead>
<tr>
<th>Exhibit 14-10</th>
<th>Journal entry to record the conversion of bonds—incidental method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Bonds payable</td>
<td>100,000</td>
</tr>
<tr>
<td>Dr. Contributed surplus—conversion option</td>
<td>4,330</td>
</tr>
<tr>
<td>Cr. Common stock</td>
<td>104,330</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Exhibit 14-8d</th>
<th>Journal entry to record issuance of bonds—zero common equity method (ASPE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Cash</td>
<td>104,330</td>
</tr>
<tr>
<td>Cr. Bond payable</td>
<td>104,330</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Exhibit 14-11</th>
<th>Journal entry to record the conversion of bonds—zero common equity method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Bonds payable</td>
<td>104,330</td>
</tr>
<tr>
<td>Cr. Common stock</td>
<td>104,330</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Exhibit 14-9</th>
<th>Journal entry to record the exercise of warrants for Callisto Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Cash (200,000 warrants × 1 share/warrant × $15/share)</td>
<td>3,000,000</td>
</tr>
<tr>
<td>Dr. Contributed surplus—warrants (200,000/500,000 × $100,000 or 200,000 warrants × $0.20/warrant)</td>
<td>40,000</td>
</tr>
<tr>
<td>Cr. Common shares</td>
<td>3,040,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Exhibit 14-13</th>
<th>Book value method for bond conversion of Dante Corp. ($000's)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Book value method</strong></td>
<td></td>
</tr>
<tr>
<td>Dr. Bonds payable</td>
<td>9,000</td>
</tr>
<tr>
<td>Dr. Contributed surplus—convertible bond</td>
<td>2,000</td>
</tr>
<tr>
<td>Cr. Common stock</td>
<td>11,000</td>
</tr>
</tbody>
</table>
- **Market value method:** records the shares at their fair value at date of conversion, recording a loss for the differences between the market value and the book value
  - IAS 32 – page 679-680

**Stock compensation plans**

- Stock compensation plans are a common form of remuneration for employees
- Underlying theory behind stock compensation plans: if employees own shares in the company, then they will have a vested interest in working hard to ensure the company does well (aligns interest with shareholders) → reduces moral hazard
- Two common stock compensation plans:
  - **Employee stock options**
    - Not traded, their fair value is estimated (ex. using Black-Scholes/binomial pricing models)
    - Employee stock options are valued at their fair value on the grant date (includes intrinsic value and time value component)
    - Can’t be exercised until they have vested
    - The value granted is determined at the grant date and allocated as an expense over the vesting period
      - **Vesting period:** minimum length of time for which an option must be held before it can be exercised → the time between the date that the options are granted and the day they vest
      - The cost options that can be exercised immediately are fully expensed in the period granted since the vesting period is nil
  - **Stock appreciation rights (SARs)**
    - Benefit when the actual stock price rises above a pre-determined benchmark price
    - Form of share based compensation
    - If shares appreciate in value, the employee is entitled to receive the difference between the market price of the shares at the date of settlement and the benchmark price
    - Don’t need to make a cash outlay at the exercise date but receive an amount equal to the appreciation
    - Different types of SARs: those that are settled in cash, settled in cash or shares at the option of the granting entity, and settled in cash or shares at the option of the employee
    - Expense of SAR plans is allocated over the vesting period but the total cost of the plan can’t be determined at the grant date. The compensation expense needs to be updated at the end of each period to reflect the change in the fair value of the SARs.
    - The market price of the shares affects the fair value of the SARs, it doesn’t directly affect the valuation of the liability, the fair value of the SARs determines the value of the obligation
    - Journal entries are made at each redemption to record the cash outflow, and at the end of each reporting period to record the change in the underlying obligation
    - The fair value of SARs will never be less than $0 since employees aren’t required to exercise them
    - Accounting for SARs under ASPE (uses the intrinsic value of the SARs to determine the obligation until settlement) differs from under IFRS
      - Produce the same ending obligation and total compensation expense over the life of the SARs
### Exhibit 14-20  Journal entries pertaining to the SARs for Enchanted Forest (IFRS)

<table>
<thead>
<tr>
<th>Date</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>December 31, 2015</td>
<td>Dr. Compensation expense</td>
<td>Cr. Liability for stock appreciation rights</td>
</tr>
<tr>
<td></td>
<td>125,000</td>
<td>125,000</td>
</tr>
<tr>
<td>December 31, 2016</td>
<td>Dr. Compensation expense</td>
<td>Cr. Liability for stock appreciation rights</td>
</tr>
<tr>
<td></td>
<td>25,000</td>
<td>25,000</td>
</tr>
<tr>
<td>March 15, 2017</td>
<td>Dr. Liability for stock appreciation rights</td>
<td>Cr. Cash</td>
</tr>
<tr>
<td></td>
<td>22,000</td>
<td>22,000</td>
</tr>
<tr>
<td>December 31, 2017</td>
<td>Dr. Liability for stock appreciation rights</td>
<td>Cr. Compensation expense</td>
</tr>
<tr>
<td></td>
<td>88,000</td>
<td>88,000</td>
</tr>
<tr>
<td>December 31, 2018</td>
<td>Dr. Liability for stock appreciation rights</td>
<td>Cr. Compensation expense</td>
</tr>
<tr>
<td></td>
<td>40,000</td>
<td>40,000</td>
</tr>
</tbody>
</table>

The process for determining compensation expense in each period is as follows:

1. Determine the percentage to be accrued (column D). This is determined by dividing the time that has passed since the SARs were granted by the total time that it takes the SARs to vest.

2. Determine the required liability for the end of the period. This equals the fair value of each SAR (column B) times the number of SARs (column C) times the percentage to be accrued (column D).

3. Compare the required liability for the end of the period (column E) to the liability at the beginning of the period (column F) and prepare a journal entry for the difference. If the liability has increased, debit compensation expense and credit the obligation; if the liability has decreased, debit the liability and credit compensation expense.
- If employees exercise their options, they pay the company the exercise price (cash received), surrender the options (reduction of contributed surplus relation to the stock options), and receive the shares (increase in the common share account for the balance) ➔ book value method
  • If the options expire, the company only needs to remove the contributed surplus relating to the stock options by transferring the amount to contributed surplus – expired stock options
- Journal entry isn’t required at the date of the grant but a memorandum to the company’s books would be made specifying the details of the plan
- The transfer of contributed surplus is cosmetic and doesn’t change total equity
  • All the amounts increasing and decreasing contributed surplus for the employee stock options are Type C contributed surplus
    ▪ Entry is necessary to clean up the amount of contributed surplus that related to unexpired options and recording it as expired provides meaningful information to users
- When an entity grants an employee the right to choose to receive cash or shares from a share payment plan, they have issued a compound financial instrument.

- When an entity retains the right to determine whether settlement will be in cash or by issuing equity instruments, it will normally account for the arrangement in the same manner as equity settles share based payments.

**Presentation and Disclosure**

- Entity must provide complete details about each plan, the number and average exercise price of options that were outstanding at the beginning and end of the year, and details about the changes throughout the year categorized as to source.
<table>
<thead>
<tr>
<th>ISSUE</th>
<th>IFRS</th>
<th>ASPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial recognition of compound financial instruments</td>
<td>Use the residual value method. The debt component is initially recognized at fair value, the residual of the consideration received is ascribed to the equity component.</td>
<td>Use either the residual value method or the zero value method. The latter assigns a zero value to the common equity component.</td>
</tr>
<tr>
<td>Measurement of the value of cash-settled stock appreciation rights</td>
<td>Measures the obligation at the fair value of the stock appreciation rights (time value + intrinsic value = fair value).</td>
<td>Measures the obligation at the intrinsic value of the stock appreciation rights.</td>
</tr>
<tr>
<td>Hedge accounting</td>
<td>Employs a fair value-based model for hedge accounting that requires quantitative assessments for effectiveness.</td>
<td>Relies on a narrowly described set of hedging relationships.</td>
</tr>
<tr>
<td>Types of hedges</td>
<td>Identifies hedges as fair value hedges and cash flow hedges and prescribes the accounting treatment for each.</td>
<td>Does not use the terms fair value hedge or cash flow hedge. Rather, lists five specific transactions that qualify for hedge accounting and specifies the accounting treatment for each.</td>
</tr>
<tr>
<td>Eligible hedging instruments for fair value and cash flow hedges</td>
<td>Derivatives and in certain instances non-derivative financial assets and liabilities.</td>
<td>Only forward instruments and interest rate swaps can be used as hedging instruments.</td>
</tr>
<tr>
<td>Gains and losses on hedging items</td>
<td>Gains and losses on fair value hedging items normally flow through net income, while gains and losses on cash flow hedging items flow through other comprehensive income.</td>
<td>Gains and losses on all hedges flow through net income; ASPE does not permit the reporting of other comprehensive income.</td>
</tr>
</tbody>
</table>