

1. INTRODUCTION

Companies invest in the debt and equity securities of other companies for various reasons, for example, to:

- Diversify their asset base.
- Enter new markets.
- Obtain competitive advantages.
- Achieve additional profitability.

Example of Debt Securities:

- Commercial paper
- Corporate and government bonds and notes
- Redeemable preferred stock
- Asset-backed securities

Example of Equity Securities:

- Common stock
- Non-redeemable preferred stock

Factors that determine the percentage of equity ownership a company acquires in an investee include:

- Resources available
- Ability to acquire the shares
- Desired level of influence or control

2. BASIC CORPORATE INVESTMENT CATEGORIES

Investments in marketable debt and equity securities can be categorized as follows:

- 1) Investments in financial assets in which the investor has no significant influence or control over the operations of the investee (typically less than 20% ownership interest*).
- 2) Investments in associates in which the investor can exert significant influence but not control over the investee (typically between 20% -50% ownership interest).

- 3) Joint ventures where control is shared by two or more entities.
- 4) Business combinations i.e. investments in subsidiaries in which the investor obtains a controlling interest over the investee. (Greater than 50% ownership interest).

* Ownership percentage is only a guideline; the investment classification depends on the investor's ability to influence or control the investee.

	In Financial Assets	In Associates	Business Combinations	In Joint Venture
Influence	Not significant	Significant	Controlling	Shared control
Typical % interest	Usually < 20%	Usually 20% to 50%	Usually > 50% or other indications of control	
U.S.GAAP	FASB ASC Topic 320	FASB ASC Topic 323	FASB ASC Topics 805 and 810	FASB ASC Topic 323
Financial Reporting	Classified as: <ul style="list-style-type: none"> ▪ Fair value through profit or loss ▪ Fair value through other comprehensive income ▪ Amortized cost 	Equity method	Consolidation	IFRS: Equity method
Applicable IFRS	IFRS 9	IAS 28	IAS 27 IFRS 3 IFRS 10	IFRS 11 IFRS 12 IAS 28
U.S.GAAP	FASB ASC Topic 320	FASB ASC Topic 323	FASB ASC Topics 805 and 810	FASB ASC Topic 323

Source: CFA Institute's Program Curriculum, Reading 13, Exhibit 1.

3. INVESTMENTS IN FINANCIAL ASSETS: IFRS 9

The new standard i.e. IFRS 9 is not based on portfolio approach of the current standard and it does not use terms available-for-sale and held-to-maturity.

IFRS 9 is based on approach that take into account contractual characteristics of cash flows and management of the financial assets.

Another difference in IFRS 9 from IAS 39 relates to loan impairment. Companies are required to shift from an incurred loss model to an expected credit loss model. This shift helps companies in loan performance by evaluating historical, current and forward-looking information.

Under the new standard, financial assets can be measured at amortized cost only if they meet the following two criteria:

- 1) *Business model tests*: The financial assets are being held to collect contractual cash flows.
- 2) *Cash flow characteristic test*: The contractual cash flows are solely payments of principal and interest on principal.

3.1 Classification and Measurement

Under the new standard, there are three classifications for financial assets:

- 1) Amortized cost
- 2) Fair value through profit or loss (FVPL)
- 3) Fair value through other comprehensive income (FVOCI)

- When initially acquired, all financial assets are measured at fair value.
- Subsequently, financial assets are measured at either fair value or amortized cost.

Under the new standard, financial assets can be measured at amortized cost only if they meet the following two criteria:

- 1) *Business model tests*: The financial assets are being held to collect contractual cash flows.
- 2) *Cash flow characteristic test*: The contractual cash flows are solely payments of principal and interest on principal.

However, management is allowed to use "fair value through profit or loss" option to avoid an accounting

mismatch. Accounting mismatch is an inconsistency that results from differences in the measurement bases for assets and liabilities.

- **Debt** instruments are measured either at amortized cost or at fair value through profit or loss or fair value through other comprehensive income.
- **Equity** instruments are measured at fair value through profit or loss (FVPL) or at fair value through other comprehensive income (FVOCI).
 - Equity investments held-for-trading must be measured at fair value through profit or loss (FVPL).
 - Other equity investments can be measured at FVPL or FVOCI; however, once measured at FVPL or FVOCI, the company cannot reverse the choice.
- Financial assets that are derivatives are measured at fair value through profit or loss (except for hedging instruments).
- If the asset falls within the scope of this standard, then embedded derivatives are treated as the hybrid contract.
- Financial liabilities other than derivatives are initially recognized at fair value and subsequently measured at amortized cost (i.e. initial amount net of principal repayments adjusted by the amortization of any difference between the initial amount and the maturing amount using the effective interest method).

3.2 Reclassification of Investments

Under IFRS 9, companies are not allowed to reclassify equity instruments because the initial classification of FVPL and FVOCI is irrevocable.

However, if there is a change in business model for the financial assets (objective for holding the financial assets), then debt instruments can be reclassified from FVPL to amortized cost (or vice versa).

On reclassification, prior periods are not restated.

- If the financial asset is reclassified from amortized cost to FVPL, the asset is measured at fair value with gain or loss recognized in profit or loss.
- If the financial asset is reclassified from FVPL to amortized cost, the fair value at the reclassification date becomes the carrying amount.

Summary: Major Changes in IFRS 9

- For classification of Debt Instruments ⇒ business model approach
- 3 classifications of Financial Assets
 - i) FVPL ii) FVOCI iii) amortized cost
- Reclassification of debt instrument is only allowed when business model changes.

- The decisions to measure equity instruments at FVOCI or FVPL is irreversible.
- Loan impairment ⇒ earlier recognition ⇒ Redesign of recognition criteria from an incurred loss model to an expected loss model.

4. INVESTMENTS IN ASSOCIATES AND JOINT VENTURES

Joint ventures are arrangements in which the parties with joint control have rights to the net assets of the arrangement. Joint ventures are required to use equity method under IAS 28. They can use proportionate consolidation in rare cases under IFRS and U.S. GAAP.

Under both IFRS and U.S.GAAP:

- The investor is presumed to have significant influence, but no control, over the investee's business activities when an investor holds 20 to 50% of the voting rights of an associate (investee), either directly or indirectly (i.e. through subsidiaries). In this case, it is preferred to use equity method of accounting because it reflects the economic reality of this relationship and provides a more objective basis for reporting investment income.
- The investor is presumed to have neither influence nor control over the investee's business activities when an investor holds less than 20% of the voting rights of an associate (investee), either directly or indirectly (i.e. through subsidiaries).

Factors that may indicate significant influence include:

- Representation on the board of directors;
- Participation in the policy-making process;
- Material transactions between the investor and the investee;
- Interchange of managerial personnel; or
- Technological dependency
- Currently exercisable or convertible warrants, call options, or convertible securities owned by the investor that gives the investor additional voting power or reduce another party's voting power over the financial and operating policies of the investee. By contrast, under U.S. GAAP, an investor's voting stock interest is determined only on the basis of voting shares outstanding at the time of purchase.

Types of Joint Ventures include:

- a) Partnerships
- b) Limited liability companies (corporations)
- c) Other legal forms (unincorporated associations).

Under IFRS, common characteristics of joint ventures are as follows:

- 1) A contractual arrangement exists between two or more ventures.
- 2) A contractual arrangement establishes joint control.

Under both IFRS and U.S.GAAP, companies are required to use the equity method of accounting for joint ventures.

4.1 Equity Method of Accounting: Basic Principles

Equity Method of Accounting is used for investments in associates. Equity method is also known as "**One-line Consolidation**". The equity method provides a more objective basis for reporting investment income because the investor can potentially influence the timing of dividend distributions.

Under equity method of accounting:

- The investor's proportionate ownership interest in the asset and liabilities of the investee is disclosed as a single line item (i.e. net assets) on its balance sheet.
- Equity method investments are classified as non-current assets on the balance sheet and the carrying amount of those investments must be separately disclosed on the balance sheet.
- The investor's share of the revenues and expenses and profit and losses of the investee is disclosed as a single line item on its income statement.
- Dividends or other distributions received from the investee are not reported in the investor's income statement.
- Initially, the equity investment is recorded at cost on the investor's balance sheet.

- In subsequent periods, the carrying amount of the investment is adjusted for two things i.e.
 - Investor's proportionate share of the investee's earnings or losses.
 - Dividends or other distributions received from the investee.

Total value of the investment = Original investment + (Earnings – Dividends)

- If the investment value reduces to zero, the investor discontinues using equity method and no further losses are recorded. If in subsequent period investee reports profits then investor can resume using the equity method provided that the investor's share of the profits equals the share of losses not recognized during the suspension of the equity method.

Practice: Example 1, Volume 2, Reading 13.



4.2 Investment Costs that Exceed the Book Value of the Investee

There are two types of cost models used to report property, plant and equipment (PPE):

- 1) Historical cost model:** In this method, long-lived assets are reported at historical cost as follows:

Historical cost – Accumulated Depreciation or Amortization – Impairment loss

- 2) Revaluation cost model:** In this method, long-lived assets are reported at Fair value as follows:

Fair value – Accumulated depreciation or amortization – Impairment losses

- Under U.S GAAP, companies are allowed to use only historical cost model.
- Under IFRS, companies can use both models.

When the cost of the Investment > investor's proportionate share of the investee's (associate's) Net Identifiable tangible and intangible assets.

- The difference is first allocated to specific assets using fair values.
- These differences are then amortized to the investor's proportionate share of the investee's profit or loss over the economic lives of the assets whose fair values exceed book values.

Under both IFRS and U.S.GAAP,

Goodwill = Cost of acquisition – Investor's share of the fair value of the Net Identifiable assets

- Goodwill is included in the carrying amount of the investment and is not reported separately.
- Goodwill is not amortized; rather, it is assessed for impairment on a regular basis, and written down for any identified impairment.

Note: After initial recognition, a company can choose to use either a cost model or a revaluation model to measure its PP&E. Under the revaluation model, PP&E whose fair value can be measured reliably can be carried at a revalued amount i.e. fair value at the date of the revaluation less any subsequent accumulated depreciation.

Purchase price	xxx
Less: (% of Ownership Interest × Book Value of Investee's Net Assets)	(xxx)
= Excess Purchase Price	xxx
Less: Attributable to Net Assets:	
-Plant & Equipment (% of Ownership Interest × difference between book value & fair value)	(xxx)
-Land (% of Ownership Interest × difference between book value & fair value)	(xxx)
= Residual Amount (Treated as Goodwill)	xxx

When the investor's share of the fair value of the associate's net assets > cost of investment:

- Carrying amount of the investment is reduced by the difference between investor's share of the fair value of the associate's net assets and cost of investment.
- Difference between investor's share of the fair value of the associate's net assets and cost of investment is included as income in the determination of the investor's share of the associate's profit or loss in the period in which the investment is acquired.

Practice: Example 2, Volume 2, Reading 13.



4.3 Amortization of Excess Purchase Price

Investment in associate:

Purchase price	xxx
Add: Investor's share of Investee's Net Income (% of Ownership Interest × Investee's net income)	xxx
Less: Dividends received (% of Ownership Interest × Dividends paid)	(xxx)

Less: Amortization of excess purchase price attributable to plant & equipment (Amount attributable to PP&E* ÷ Remaining life of PP&E)	(xxx)
= Balance in investment in Investee	xxx

Where,

*Amount attributable to Plant & Equipment = % of Ownership Interest of investor × (Fair value of P&E – Book value of P&E)

Beginning net assets	xxx
Add: Net income	xxx
Less: Dividends paid	(xxx)
= Ending net assets	xxx
Add: Investor's proportionate share of Investee's recorded net assets (% of Ownership Interest × Ending net assets)	xxx
Add: Unamortized excess purchase price (Excess purchase price – Amount attributable to PP&E)	xxx
= Investment in Investee	xxx

Practice: Example 3, Volume 2, Reading 13.

4.4 Fair Value Option

Under both IFRS and U.S.GAAP, companies can report equity method at fair value at the time of initial recognition but the choice is irrevocable. Under U.S.GAAP, all entities can use this option whereas under IFRS, this option is restricted to following entities:

- Venture capital organizations
- Mutual funds
- Unit trusts
- Investment-linked insurance funds

In the subsequent periods, the investment is reported at fair value and unrealized gains and losses arising from changes in fair value as well as any interest and dividends received are included in the investor's profit or loss (income).

Under the Fair value method:

- The investor's proportionate share of the investee's profit or loss, dividends or other distributions, is not reported on the investor's balance sheet.
- Excess of cost over the fair value of the investee's identifiable net assets is not amortized and no goodwill is created.

4.5 Impairment

Both IFRS and US GAAP require periodic review of equity method investment for impairment.

IFRS: Investment is impaired when *Carrying amount of investment > Recoverable amount.*

Where,

- Recoverable amount is the higher of "Value in Use" or Net Selling Price.
- Value in use = PV of estimated future cash flows
- Net selling price = Fair value – Cost to sell

Under IFRS, an investment is considered impaired when:

- There is an objective evidence of impairment as a result of one or more loss events.
- Loss event has an impact on the investment's future cash flows, which can be reliably estimated.

Accounting Treatment of Impairment loss:

- Impairment loss is recognized on the income statement.
- The carrying amount of the security is reduced either directly or by increasing an allowance account.

U.S.GAAP: Investments are considered impaired only when *Fair value of investment < carrying value and this decline is determined to be permanent.*

Accounting Treatment of Impairment loss for Debt Securities:

- Impairment loss is recognized on the income statement.
- Carrying value of the investment on the Balance Sheet is reduced to its fair value.

Reversal of Impairment Loss: Under both IFRS and U.S GAAP, reversal of impairment losses is NOT allowed.

4.6 Transactions with Associates

There are two types of transactions with associates:

- 1) **Upstream Transactions:** Transactions from associate to investor are called upstream transactions. In case of upstream transactions,

- Profit on the inter-company transaction is recorded on the **associate's** income statement.
- The investor's share of the unrealized profit is included in the Equity income of the investor's income statement.

Investor's share of Associate's reported net income (% of Ownership Interest × Reported net income)	xxx
Less: Amortization of excess purchase price	(xxx)
Add: Unrealized profit (% of Ownership Interest × Profit from the upstream sale in Associate's net income)	(xxx)
= Equity Income to be reported as a line item on Investor's Income statement*	xxx

Balance in the investment in Associate to be reported at the end of year:

Purchase price	xxx
Add: Equity income (as calculated above)*	xxx
Less: Dividends received (% of Ownership Interest × Dividends paid)	(xxx)
= Value of Investment in Associate's company at the end of year	xxx

Composition of Investment account:

Investor's proportionate share of Associate's net equity (i.e. net assets at book value) = [(% of Ownership Interest × beginning Book value of net assets) + (Reported net income of associate – Profit from the upstream sale in Associate's net income) – Dividends paid by the associate]	xxx
Add: Unamortized excess purchase price (Excess purchase price – Amortization of excess purchase price)	xxx

2) **Downstream Transactions:** Transactions from investor to associate are called downstream transactions. In case of downstream transactions,


- Profit on the inter-company transaction is recorded on the **investor's** income statement.
- The unrealized (unearned) profits are removed (to the extent of the investor's ownership interest in the associate) from the equity income of investor.

Investor's share of Associate's reported net income (% of Ownership Interest × Reported net income)	xxx
Less: Amortization of excess purchase price	(xxx)
Less: Unrealized profit (% of Ownership Interest × Profit from the downstream sale in Associate's net income)	(xxx)
= Equity Income to be reported as a line item on Investor's Income statement	xxx

Unrealized profit = % of goods unsold × Profit on the sale to investee

Investor's share of the unrealized profit = Unrealized profit × % of goods unsold

Investor's share of associate's reported net income (% of Ownership Interest × Reported net income)	xxx
Less: Amortization of excess purchase price	(xxx)
Add: Realized profit (% of goods unsold × Unrealized profit)	xxx
= Equity Income to be reported as a line item on Investor's Income statement	xxx

Practice: Example 4 7 5, Volume 2, Reading 13. 

4.7 Disclosure

Under both IFRS and U.S.GAAP, companies are required to provide disclosure about the assets, liabilities and the results of equity method investments. Dividends from associated companies are not included in investor income because it would be a double counting.

4.8 Issues for Analysts

An analyst should recognize whether it is appropriate for the company to use the equity method or not because:

- 1) A company may prefer to use equity method simply to enhance its profits by including associate income as equity income even if it has no significant influence on the investee.
- 2) A company may prefer to use equity method to enhance its financial performance even if it has significant control on the investee because under equity method:

- An investor is not required to report asset or liability of the investee on its balance sheet. This results in understated debt ratio.
- Associate income is included in the investor's net income but associate revenue is not included. This leads to overstated net margin ratios.

In addition, it is also important for an analyst to determine the quality of the equity method earnings.

5.

BUSINESS COMBINATIONS

Business combinations involve the combination of two or more entities into a larger economic entity. In business combinations, investor usually has greater than 50% ownership interest in the investee.

Motivations behind Business Combinations:

- Synergies
- Cost savings
- Tax advantages
- Coordination of production process
- Efficiency gains in the management of assets

Under IFRS, business combinations have no categories, that is, in every business combination one party is identified as acquirer and other as target. Under U.S.GAAP, business combinations have following categories:

1. **Merger:** Acquirer acquires 100% of the target and only one of the entities remains in existence. In a merger, an acquirer can acquire the net assets of the target using various types of payments i.e.
 - Issue common stock
 - Issue Preferred stock
 - Issue Bonds
 - Pay cash

Company X + Company Y = Company X

2. **Acquisition:** In acquisition, each entity remains a separate legal entity and maintains its separate financial records.

Company X + Company Y = (Company X + Company Y)

3. **Consolidation:** In consolidation, new entity is formed whereas the predecessor entities cease to exist.

Company X + Company Y = Company Z

4. **Special Purpose Entities:** Special purpose entity is created by a sponsoring company for a narrowly defined purpose.

5.1

Acquisition Method

Currently, under both IFRS and U.S.GAAP, companies are required to use acquisition method (with few exemptions) for business combinations. It replaces the purchase method.

Characteristics of Acquisition Method:

Under acquisition method:

- Assets and liabilities are reported at their Fair values.
- Direct costs of business combinations (e.g. professional & legal fees, valuation experts, consultants etc.) are expensed as incurred.
- At the date of acquisition, only the acquirer's retained earnings are carried to the combined entity.
- Earnings of the target are included on the consolidated income statement and retained earnings only in post-acquisition periods.

5.1.1) Recognition and Measurement of Identifiable Assets and Liabilities:

Under both IFRS and U.S.GAAP:

- Acquirer is required to report the identifiable assets & liabilities of the acquiree (target) at fair values as of date of acquisition.
- Acquirer is also required to recognize identifiable intangible assets (e.g. brand name, patent etc.) that are internally developed by acquiree.

5.1.2) Recognition and Measurement of Contingent Liabilities:

On the date of acquisition,

- The acquirer must recognize any contingent liability only if:
 - i. It represents a present obligation associated with past events.
 - ii. It can be measured reliably.
- The acquirer is not required to recognize the costs that it expects but is not obliged to incur as liabilities by the acquirer as of the acquisition date. Rather, these costs are recognized by the acquirer in future periods as they are incurred.

Difference between IFRS & U.S.GAAP:

- IFRS include contingent liabilities if their fair values can be reliably measured.
- U.S.GAAP includes only those contingent liabilities that are probable and can be reasonably estimated.

5.1.3) Recognition and Measurement of Indemnification Assets

On the acquisition date, an indemnification asset must be recognized by the acquirer, if the acquiree contractually indemnifies the acquirer for the outcome of a contingency or an uncertainty related to all or part of a specific asset or liability of the acquiree.

If the indemnification asset is previously recognized at its fair value, then at the acquisition date, the acquirer must recognize that asset at its fair value.

5.1.4) Recognition and Measurement of Financial Assets and Liabilities

The acquirer is allowed to reclassify the financial assets and liabilities of the acquiree depending on the contractual terms, economic conditions, and the acquirer's operating or accounting policies, existing at the acquisition date.

5.1.5) Recognition and Measurement of Goodwill

Under IFRS, goodwill can be measured using two methods:

1) Full Goodwill Method:

$$\text{Goodwill} = \text{Fair value of Acquisition} - \text{Fair value of identifiable net assets}$$

Or

$$\text{Goodwill} = \text{Total Fair value of the Subsidiary} - \text{Fair value of the subsidiary's identifiable net assets}$$

2) Partial Goodwill Method:

$$\text{Goodwill} = \text{Fair value of the acquisition} - \text{Acquirer's share of the fair value of all identifiable tangible and intangible assets, liabilities and contingent liabilities acquired}$$

Or

$$\text{Goodwill} = \text{Purchase price} - \text{parent's (acquirer's) proportionate share of the subsidiary's identifiable assets}$$

Under U.S.GAAP, companies are allowed to use Full Goodwill method only.

5.1.6) Recognition and Measurement when Acquisition Price is less than Fair value

In an acquisition method when purchase price is less than fair value of the target's net assets, the acquisition is referred to as **Bargain Acquisition**.

Currently, under both IFRS and U.S.GAAP, companies are required to recognize the difference between the fair value of the acquired net assets and the purchase price immediately as a gain in profit or loss.

- Any contingent consideration must be measured and recognized at fair value at the time of the business combination.
- Any subsequent changes in value of the contingent consideration are recognized in profit or loss.

5.2 Impact of the Acquisition Method on Financial Statements, Post-Acquisition

Under the acquisition method, the allocation of purchase price would be as follows:

Fair value of the stock issued	xxx
Less: Book value of Investee's net assets	xxx
= Excess purchase price	xxx
Fair value of the stock issued	xxx
Less: Fair value allocated to identifiable net assets	(xxx)
= Goodwill	xxx

Allocation of excess purchase price:

Excess Purchase Price = Sum of differences between fair values and book values of identifiable assets + Goodwill

$$\text{Combined Assets and liabilities reported on Consolidated balance sheet under acquisition method} = \text{Book values for the asset and liabilities of Investor} + \text{Fair values for the assets and liabilities acquired from Acquiree}$$

Combined Entity reflects the investor's capital stock outstanding plus additional shares issued to effect the transaction.

$$\text{Combined Paid-in Capital} = (\text{Fair value of the stock issued to effect the transaction} - \text{Par value of the stock issued}) + \text{Additional paid-in capital of investor}$$

Practice: Example 6, Volume 2, Reading 13.



Practice: Example 7, Volume 2, Reading 13.



5.3 The Consolidation Process

5.3.1) Business Combination with less than 100% Acquisition

In acquisition, an acquirer is not required to acquire 100% of the target and the acquirer and target are tied together in a **parent-subiliary** relationship. In case of acquisition,

- Both parent and subsidiary prepare their own financial records.
- The Parent (acquirer) is required to provide consolidated financial statements in each reporting period (under both IFRS and U.S.GAAP).

In consolidated financial statements, the assets, liabilities, revenues and expenses of subsidiaries are combined with the parent company. The intercompany transactions (i.e. transactions between the parent and subsidiary) are not included to avoid double counting and premature recognition of income.

5.3.2) Non-controlling (Minority) Interests: Balance Sheet

When acquirer holds less than 100% stake in the target, then the portion of the subsidiary's equity that is not owned by the parent is referred to as non-controlling (minority) interest.

Minority Interest = Percentage of subsidiary not owned by the Parent × Subsidiary's Equity

Under both IFRS and U.S.GAAP, a non-controlling (minority) shareholders' interests are reported on the consolidated balance sheet as a separate component of stockholders' equity.

Under IFRS, the parent can report the non-controlling interest at either its fair value (full goodwill method) or at the non-controlling interest's proportionate share of the acquiree's identifiable net assets (partial goodwill method).

Under U.S.GAAP, the parent is required to report the non-controlling interest at fair value (i.e. full goodwill method only).

Value of non-controlling interest under the full goodwill method:

Value of non-controlling interest = Non-controlling interest's proportionate share of the subsidiary × Fair value of the subsidiary on the acquisition date

Value of non-controlling interest under the partial goodwill method:

Value of non-controlling interest = Non-controlling interests' proportionate share of the subsidiary × Fair value of the subsidiary's identifiable net assets on the acquisition date

Practice: Example 8, Volume 2, Reading 13.



5.3.3) Non-Controlling (Minority) Interests: Income Statement

Non-controlling (minority) interests are presented as a line item on the income statement.

Financial Statement Impact of Full and Partial Goodwill Methods:

- Depreciation expense is same under both methods.
- Net Income is identical under both methods.
- Total liabilities, retained earnings and capital stock are identical under both methods.
- ROA and ROE are higher under Partial Goodwill Method because total assets & shareholders' equity are lower under Partial Goodwill Method.
- Goodwill and Non-controlling interests are higher under Full Goodwill Method.
- Debt-to-Equity ratio is higher under Partial Goodwill method.

NOTE: Over time, as the value of the subsidiary changes as a result of changes in net income and changes in equity, the value of the non-controlling interest on the parent's consolidated balance sheet also change.

5.3.4) Goodwill Impairment

Goodwill has indefinite life. It is not amortized; rather it is tested for impairment at least annually. Once goodwill is written down, it cannot be reversed upward.

Goodwill Impairment Test under IFRS: Under IFRS, goodwill impairment is tested using a one-step approach. That is, *goodwill is impaired when the carrying value of the Cash-generating Unit > Recoverable amount of the Cash-generating Unit*.
Impairment loss = Carrying value of the Cash-generating Unit - Recoverable amount of the Cash-generating Unit
Where,

Recoverable Amount = Higher of Net selling price or its value in use

Net selling price = Fair value – costs to sell

Value in use = PV of expected future cash flows of cash-generating unit

Cash Generating Unit: It is the smallest identifiable group of assets that generates cash inflows that are independent of cash inflows of other assets or group of assets.

Accounting Treatment of Impairment Loss under IFRS:

- i. First of all, the goodwill that has been allocated to the cash-generating unit is reduced by the amount of impairment loss.
- ii. Once the goodwill of the cash-generating unit has been reduced to zero, the remaining amount of loss is then allocated to all of the other assets in the cash-generating unit on a pro rata basis.
- iii. Impairment loss is recorded as a separate line item in the consolidated income statement.

Goodwill Impairment Test under U.S.GAAP: Under U.S.GAAP, goodwill impairment is tested using the following two-steps approach.

a) Goodwill Impairment Test: Goodwill is impaired when the carrying value of the Reporting Unit (including Goodwill) > Fair value of the Reporting Unit (including Goodwill).

b) Measurement of Impairment loss:

$$\text{Impairment loss} = \text{Carrying value of Reporting unit's Goodwill} - \text{Implied Fair value of the Reporting unit's Goodwill}$$

Where,

Implied Fair value of the Reporting unit's Goodwill = Fair value of the Reporting Unit – Fair value of the Reporting unit's asset and liabilities.

Accounting Treatment of Impairment Loss under U.S.GAAP:

- i. First of all, the goodwill that has been allocated to the reporting unit is reduced by the amount of impairment loss.
- ii. Once the goodwill of the reporting unit has been decreased to zero, no other adjustments are made to the carrying values of any of the reporting unit's other assets or liabilities.
- iii. Impairment loss is recorded as a separate line item in the consolidated Income Statement.

Practice: Example 9-10, Volume 2, Reading 13.



5.4 Financial Statement Presentation Subsequent to the Business Combination

The presentation of consolidated financial statements and format of consolidated Income statement are

similar under both IFRS and U.S.GAAP. Net Income is also identical under IFRS and U.S.GAAP but specific line-items may differ.

5.5 Variable Interest and Special Purpose Entities

Special purpose entities (SPEs) (under IFRS whereas, variable interest entity or special purpose entity under U.S.GAAP) are non-operating entities, which are created to meet specific needs of the sponsoring entity.

Forms of SPEs:

- a) Corporation
- b) Trust
- c) Partnership
- d) Unincorporated Entity

Benefits of Non-consolidated SPEs to the Sponsoring Company:

- i. It helps the sponsoring company to avoid reporting assets and liabilities of the SPE.
- ii. It helps the sponsoring company to reduce risk.
- iii. It facilitates the sponsoring company to report large amounts of revenues and gains because these transactions are treated as sales.
- iv. Non-consolidation of SPEs helps to improve sponsoring company's asset turnover.
- v. Non-consolidation of SPEs helps to reduce sponsoring company's operating and financial leverage.
- vi. Non-consolidation of SPEs facilitates to improve sponsoring company's profitability.
- vii. Non-consolidation of SPEs facilitates the SPE to obtain lower cost financing.

It must be stressed that the financial performance measured by unconsolidated financial statements does not represent true performance. Therefore analyst should always consolidate SPEs when analyzing financial performance.

Forms of Beneficial Interest in SPE:

- Debt instrument
- Equity instrument
- Participation right
- Residual interest in a lease

IFRS requires consolidation if the substance of the relationship indicates control by the sponsor. Control is present when:

- a) The investor has the ability to influence the financial and operating policy of the entity.

- b) The investor is exposed or has rights to variable returns from its involvement with the investee.

Under U.S.GAAP, special purpose entities are classified as variable interest entities if:

- 1) Total equity at risk is not sufficient to finance activities without financial support from other parties, or
- 2) Equity investors lack any one of the following:
 - a) The ability to make decisions;
 - b) The obligation to absorb losses; or
 - c) The right to receive returns;

Under U.S.GAAP, two-component consolidation model is used that includes both a variable interest component and a voting interest (control) component. Under the variable interest component, the primary beneficiary of a variable interest entity (VIE) is required to consolidate the VIE irrespective of its voting interests (if any) in the VIE or its decision making authority. The **primary beneficiary** is the party that will absorb the majority of the VIE's expected losses, receive the majority of the VIE's expected residual returns, or both. The primary beneficiary is also required to report the minority interest (if any) in its consolidated balance sheet and income statement.

Advantages:

- Risk reduces because the asset is pledged as collateral. Due to lower risk, the SPE is able to obtain low cost financing.
- Equity investors are not exposed to all the business risks of the sponsoring company; rather, they are only exposed to the business risks of restricted SPE.

5.5.1) Securitization of Assets

When receivables are securitized:

- Accounts receivable are decreased and cash is increased by the amount of those accounts receivable in the Balance sheet of Sponsor/seller.
- Cash inflow is reported as operating cash inflow by the sponsoring company.
- SPE issues debt to acquire all or a portion of the sponsoring company receivables.
- Repayment of debt and interest are made with the cash flows generated by the receivables.
- If receivables are sold to SPE at a price greater than their carrying value, the sponsoring company will report a gain on sale in its income statement.

Financial Ratios Impact of Securitization of Receivables:

- Sponsoring entity's account receivable turnover ratio is improved.

- Sponsoring entity's profitability ratios i.e. net profit margin, ROA, ROE and return on total capital are higher.
- Sponsoring entity's Debt/Equity and Equity/Total Assets ratios remain unaffected by the sale.

When SPE is consolidated by a sponsoring company, then its financial impact on the sponsoring entity's consolidated balance sheet will be the same as the impact of borrowing directly against the receivables i.e.

- Equity/Total Assets ratio will be lower.
- Debt/Equity ratio will be higher.
- Current ratios will be higher.
- Profitability ratios i.e. net profit margin, ROA, ROE and return on total capital will be lower.

Practice: Example 11, Volume 2, Reading 13.



5.6 Additional Issues in Business Combinations that Impair Comparability

5.6.1) Contingent Assets and Liabilities

Under IFRS:

- Contingent assets and liabilities are recognized at fair value at the time of acquisition.
- Contingent liabilities are recorded separately as part of the cost allocation process only when their fair values can be measured reliably.
- In subsequent periods, contingent liability is measured at higher of the amount initially recognized or the best estimate of the future settlement amount.
- **Contingent assets are not recognized under IFRS.**

Under U.S.GAAP:

- Contractual Contingent assets and liabilities are recognized and recorded at fair value at the time of acquisition.
- Non-contractual Contingent assets and liabilities are recognized only when they "more likely than not" meet the definition of an asset or a liability.
- In subsequent periods, contingent liability is measured at higher of the amount initially recognized or the best estimate of the amount of the loss.
- Contingent assets are measured at the lower of the acquisition date fair value or the best estimate of the future settlement amount.

5.6.2) Contingent Consideration

- Under both IFRS and U.S.GAAP, contingent consideration is initially measured at fair value.
- Under IFRS, the contingent consideration is classified as either a financial liability or equity.
- Under U.S.GAAP, the contingent consideration is classified as a financial liability, equity or asset.
- In subsequent periods, changes in fair value of liabilities (and assets in case of U.S.GAAP) are recognized in consolidated income statement.
- Under both IFRS and U.S.GAAP, when contingent consideration is classified as equity, it is not re-measured for changes in its fair value.
- Under both IFRS and U.S.GAAP, in-process R&D when acquired in a business combination is recognized as a separate intangible asset.

- Initially, it is measured at fair value, if can be measured reliably.
- In subsequent periods, it is amortized if successfully completed or is subject to impairment if it fails to produce any technically and/or financially viable results.

5.6.4) Restructuring Costs

Under both IFRS and U.S.GAAP, restructuring costs related to business combination are not recognized as part of acquisition. These costs are treated as expense in the periods when these costs are incurred.

Differences in Financial Results under different Accounting Methods

	Equity Method	Proportionate Consolidation Method	Acquisition Method
Total Assets	Lower	In-between	Higher
Total Liabilities	Lower	In-between	Higher
Shareholders' Equity	Same	Same	Higher by the amount of Minority Interest
Sales or Revenues	Lower	In-between	Higher
Expenses	Lower	In-between	Higher
Operating income	Lower	In-between	Higher (because minority interest is reported below the operating line in most cases on a consolidated income statement).
Leverage	Lower (liabilities are lower and equity is the same)	In- between	Higher
Net Profit Margin	Higher (sales are lower and NI is the same)	In-between	Lower
ROE	Higher (equity is lower and NI is the same)	Same	Lower
ROA	Higher (NI is the same and Assets are lower)	In-between	Lower
Interest coverage ratio	Higher	In-between	Lower (because of higher interest expense)

Practice: Curriculum end of Chapter Questions + FinQuiz Questions & Itemsets.

