# Intercorporate Investments

by Susan Perry Williams, CPA, CMA, PhD

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## LEARNING OUTCOMES

<table>
<thead>
<tr>
<th>Mastery</th>
<th>The candidate should be able to:</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>a. describe the classification, measurement, and disclosure under International Financial Reporting Standards (IFRS) for 1) investments in financial assets, 2) investments in associates, 3) joint ventures, 4) business combinations, and 5) special purpose and variable interest entities;</td>
</tr>
<tr>
<td></td>
<td>b. distinguish between IFRS and US GAAP in the classification, measurement, and disclosure of investments in financial assets, investments in associates, joint ventures, business combinations, and special purpose and variable interest entities;</td>
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<tr>
<td></td>
<td>c. analyze how different methods used to account for intercorporate investments affect financial statements and ratios.</td>
</tr>
</tbody>
</table>

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**Note:** New rulings and/or pronouncements issued after the publication of the readings in financial reporting and analysis may cause some of the information in these readings to become dated. Candidates are expected to be familiar with the overall analytical framework contained in the study session readings, as well as the implications of alternative accounting methods for financial analysis and valuation, as provided in the assigned readings. Candidates are not responsible for changes that occur after the material was written.
INTRODUCTION

Intercorporate investments (investments in other companies) can have a significant impact on an investing company’s financial performance and position. Companies invest in the debt and equity securities of other companies to diversify their asset base, enter new markets, obtain competitive advantages, and achieve additional profitability. Debt securities include commercial paper, corporate and government bonds and notes, redeemable preferred stock, and asset-backed securities. Equity securities include common stock and non-redeemable preferred stock. The percentage of equity ownership a company acquires in an investee depends on the resources available, the ability to acquire the shares, and the desired level of influence or control.

The International Accounting Standards Board (IASB) and the US Financial Accounting Standards Board (FASB) worked to reduce differences in accounting standards that apply to the classification, measurement, and disclosure of intercorporate investments. The resulting standards have improved the relevance, transparency, and comparability of information provided in financial statements.

In December 2007, the FASB issued two new standards: SFAS 141(R), Business Combinations, and SFAS 160, Noncontrolling Interests in Consolidated Financial Statements. These statements introduced significant changes in the accounting for and reporting of business acquisitions and non-controlling interests in a subsidiary. In January 2008, the IASB revised IFRS 3, Business Combinations and amended IAS 27, Consolidated and Separate Financial Statements. In 2011, the IASB issued a revised IAS 27, Separate Financial Statements, and replaced portions of the earlier IAS 27 with IFRS 10, Consolidated Financial Statements. The new standards became effective for annual periods beginning on or after 1 January 2013.

Another convergence effort between the IASB and FASB was the project on classification and measurement of financial assets and financial liabilities. IFRS 9, Financial Instruments, replaced IAS 39, Financial Instruments: Recognition and Measurement. This pronouncement initially required adoption for annual periods beginning on or after 1 January 2013. However, the effective date was extended to annual periods beginning on or after 1 January 2018. The FASB issued a similar standard for classification and measurement.

Convergence between IFRS and US GAAP did not occur for accounting for financial instruments, and some differences still exist. The terminology used in this reading is IFRS oriented. US GAAP may not use identical terminology, but in most cases the terminology is similar.

This reading is organized as follows: Section 2 explains the basic categorization of corporate investments. Section 3 describes reporting for investments in debt and equity securities of other entities prior to IFRS 9 taking effect (hereafter referred to as current standards or reporting). Section 4 describes reporting under IFRS 9, the IASB standard for financial instruments that became effective in 2018 (hereafter referred to as new standard or reporting). Section 4 also illustrates the primary differences between the current and new standards. Section 5 describes equity method reporting for investments in associates where significant influence can exist including the reporting for joint ventures, a type of investment where control is shared. Section 6 describes reporting for business combinations, the parent/subsidiary relationship, and variable interest and special purpose entities. A summary and practice problems in the CFA Institute item set format complete the reading.

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1 FASB ASC Topic 805 [Business Combinations].
2 FASB ASC Topic 810 [Consolidations].
3 FASB ASC Topic 825 [Financial Instruments].
BASIC CORPORATE INVESTMENT CATEGORIES

In general, investments in marketable debt and equity securities can be categorized as 1) investments in financial assets in which the investor has no significant influence or control over the operations of the investee, 2) investments in associates in which the investor can exert significant influence (but not control) over the investee, 3) joint ventures where control is shared by two or more entities, and 4) business combinations, including investments in subsidiaries, in which the investor has control over the investee. The distinction between investments in financial assets, investments in associates, and business combinations is based on the degree of influence or control rather than purely on the percent holding. However, lack of influence is generally presumed when the investor holds less than a 20% equity interest, significant influence is generally presumed between 20% and 50%, and control is presumed when the percentage of ownership exceeds 50%.

The following excerpt from Note 2 to the Financial Statements in the 2011 Annual Report of GlaxoSmithKline, a British pharmaceutical and healthcare company, illustrates the categorization and disclosure in practice:

Entities over which the Group has the power to govern the financial and operating policies are accounted for as subsidiaries. Where the Group has the ability to exercise joint control, the entities are accounted for as joint ventures, and where the Group has the ability to exercise significant influence, they are accounted for as associates. The results and assets and liabilities of associates and joint ventures are incorporated into the consolidated financial statements using the equity method of accounting.

A summary of the financial reporting and relevant standards for various types of corporate investment is presented in Exhibit 1 (the headings in Exhibit 1 use the terminology of IFRS; US GAAP categorizes intercorporate investments similarly but not identically). The reader should be alert to the fact that value measurement and/or the treatment of changes in value can vary depending on the classification and whether IFRS or US GAAP is used. The alternative treatments are discussed in greater depth later in this reading.

Exhibit 1  Summary of Accounting Treatments for Investments

<table>
<thead>
<tr>
<th>Influence</th>
<th>In Financial Assets</th>
<th>In Associates</th>
<th>Business Combinations</th>
<th>In Joint Ventures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Typical percentage interest</td>
<td>Not significant</td>
<td>Significant</td>
<td>Controlling</td>
<td>Shared control</td>
</tr>
<tr>
<td>Usually &lt; 20%</td>
<td>Usually 20% to 50%</td>
<td></td>
<td>Usually &gt; 50% or other indications of control</td>
<td></td>
</tr>
<tr>
<td>Current Financial Reporting (prior to IFRS 9 taking effect)</td>
<td>Classified as:</td>
<td>Equity method</td>
<td>Consolidation</td>
<td>IFRS: Equity method or proportionate consolidation</td>
</tr>
<tr>
<td>■ Held to maturity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>■ Available for sale</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>■ Fair value through profit or loss (held for trading or designated as fair value)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>■ Loans and receivables</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Applicable IFRS a</td>
<td>IAS 39</td>
<td>IAS 28</td>
<td>IAS 27</td>
<td>IAS 31 (replaced by IFRS 11)</td>
</tr>
</tbody>
</table>

(continued)
INVESTMENTS IN FINANCIAL ASSETS: STANDARD IAS 39 (PRIOR TO ISSUANCE OF IFRS 9)

This standard applied until IFRS 9 became effective. When the investor cannot exert significant influence or control over the operations of the investee, investments in financial assets (debt and equity) are considered passive. IFRS and US GAAP are similar regarding the accounting for investments in financial assets. IFRS has four basic classifications of investments in financial assets: 1) held-to-maturity, 2) fair value through profit or loss, 3) available-for-sale, and 4) loans and receivables. Under IFRS, financial assets classified as fair value through profit or loss includes both financial assets held for trading and financial assets specifically designated as through profit or loss by management. These classifications determine the reporting for the investments.

Passive investments in financial assets are initially recognized at fair value. Dividend and interest income from investments in financial assets, regardless of categorization, are reported in the income statement. The reporting of subsequent changes in fair value, however, depends on the classification of the financial asset.

3.1 Held-to-Maturity

**Held-to-maturity investments** are investments in financial assets with fixed or determinable payments and fixed maturities (debt securities) that the investor has the positive intent and ability to hold to maturity. Held-to-maturity investments are exceptions from the general requirement (under both IFRS and US GAAP) that investments in financial assets are subsequently recognized at fair value. Therefore, strict criteria apply before this designation can be used. Under both IFRS and US GAAP, the investor must have a positive intent and ability to hold the security to maturity.
Reclassifications and sales prior to maturity may call into question the company's intent and ability. Under IFRS, a company is not permitted to classify any financial assets as held-to-maturity if it has, during the current or two preceding financial reporting years, sold or reclassified more than an insignificant amount of held-to-maturity investments before maturity unless the sale or reclassification meets certain criteria. Similarly, under US GAAP, a sale (and by inference a reclassification) is taken as an indication that intent was not truly present and use of the held-to-maturity category may be precluded for the company in the future.

IFRS require that held-to-maturity securities be initially recognized at fair value, whereas US GAAP require held-to-maturity securities be initially recognized at initial price paid. In most cases, however, initial fair value is equal to initial price paid so the treatment is identical. At each reporting date (subsequent to initial recognition), IFRS and US GAAP require that held-to-maturity securities are reported at amortized cost using the effective interest rate method, unless objective evidence of impairment exists. Any difference—discount or premium—between maturity (par) value and fair value existing at the time of purchase is amortized over the life of the security. A discount (par value exceeds fair value) occurs when the stated interest rate is less than the effective rate, and a premium (fair value exceeds par value) occurs when the stated interest rate is greater than the effective rate. Amortization impacts the carrying value of the security. Any interest payments received are adjusted for amortization and are reported as interest income. If the security is sold before maturity (with the potential consequences described above), any realized gains or losses arising from the sale are recognized in profit or loss of the period. Transaction costs are included in initial fair value for investments that are not classified as fair value through profit or loss.

3.2 Fair Value through Profit or Loss

Under IFRS, securities classified as fair value through profit or loss include securities held for trading and those designated by management as carried at fair value. US GAAP is similar; however, the classification is based on legal form and special guidance exists for some financial assets.

3.2.1 Held for Trading

**Held for trading investments** are debt or equity securities acquired with the intent to sell them in the near term. Held for trading securities are reported at fair value. At each reporting date, the held for trading investments are remeasured and recognized at fair value with any unrealized gains and losses arising from changes in fair value reported in profit or loss. Also included in profit or loss are interest received on debt securities and dividends received on equity securities.

3.2.2 Designated at Fair Value

Both IFRS and US GAAP allow entities to initially designate investments at fair value that might otherwise be classified as available-for-sale or held-to-maturity. The accounting treatment for investments designated at fair value is similar to that of held for trading investments. Initially, the investment is recognized at fair value. At each

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4 The effective interest method is a method of calculating the carrying value of a debt security and allocating the interest income to the period in which it is earned. It is based on the effective interest rate calculated at the time of purchase. Under US GAAP, the calculation of the effective interest rate is generally based on contractual cash flows over the asset’s contractual life. Under IFRS, the effective rate is based on the estimated cash flows over the expected life of the asset. Contractual cash flows over the full contractual term of the security are only used if the expected cash flows over the expected life of the security cannot be reliably estimated.
subsequent reporting date, the investments are remeasured at fair value with any unrealized gains and losses arising from changes in fair value as well as any interest and dividends received included in profit or loss.

3.3 Available-for-Sale

Available-for-sale investments are debt and equity securities not classified as held-to-maturity or fair value through profit or loss. Under both IFRS and US GAAP, investments classified as available-for-sale are initially measured at fair value. At each subsequent reporting date, the investments are remeasured and recognized at fair value. Unrealized gain or loss at the end of the reporting period is the difference between fair value and the carrying amount at that date. Other comprehensive income (in shareholder’s equity) is adjusted to reflect the cumulative unrealized gain or loss. The amount reported in other comprehensive income is net of taxes. When these investments are sold, the cumulative gain or loss previously recognized in other comprehensive income is reclassified (i.e., reversed out of other comprehensive income) and reported as a reclassification adjustment on the statement of profit or loss. Interest (calculated using the effective interest method) from debt securities and dividends from equity securities are included in profit or loss.

IFRS and US GAAP differ on the treatment of foreign exchange gains and losses on available-for-sale debt securities. Under IFRS, for the purpose of recognizing foreign exchange gains and losses, a debt security is treated as if it were carried at amortized cost in the foreign currency. Exchange rate differences arising from changes in amortized cost are recognized in profit or loss, and other changes in the carrying amount are recognized in other comprehensive income. In other words, the total exchange gain or loss in fair value of an available-for-sale debt security is divided into two components. The portion attributable to foreign exchange gains and losses is recognized on the income statement (in profit or loss), and the remaining portion is recognized in other comprehensive income. Under US GAAP, the total change in fair value of available-for-sale debt securities (including foreign exchange rate gains or losses) is included in other comprehensive income. For equity securities, under IFRS and US GAAP, the gain or loss that is recognized in other comprehensive income arising from changes in fair value includes any related foreign exchange component. There is no separate recognition of foreign exchange gains or losses.

3.4 Loans and Receivables

Loans and receivables are broadly defined as non-derivative financial assets with fixed or determinable payments. Loans and receivables that meet the more specific IFRS definition in the current standard are carried at amortized cost unless designated as either fair value through profit or loss or available for sale. IFRS does not rely on a legal form, whereas US GAAP relies on the legal form for the classification of debt securities. Loans and receivables that meet the definition of a debt security under US GAAP are typically classified as held for trading, available-for-sale, or held-to-maturity. Held for trading and available-for-sale securities are measured at fair value.

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5 Under IAS 21, a debt security is defined as a monetary item, because the holder (investor) has the right to receive a fixed or determinable number of units of currency in the form of contractual interest payments. An equity instrument is not considered a monetary item.
The accounting treatment for investments in financial assets under IFRS is illustrated in Exhibit 2. This excerpt from the 2011 Annual Report of Volvo Group, a manufacturer of trucks, buses and construction equipment, discloses how its investments are classified, measured, and reported on its financial statements.

**Exhibit 2  Volvo 2011 Annual Report**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

**RECOGNITION OF FINANCIAL ASSETS …**

The fair value of assets is determined based on valid market prices, when available. If market prices are unavailable, the fair value is determined for each asset using various measurement techniques. Transaction expenses are included in the asset’s fair value, except in cases in which the change in value is recognized in profit and loss. The transaction costs that arise in conjunction with the assumption of financial liabilities are amortized over the term of the loan as a financial cost.

Embedded derivatives are detached from the related main contract, if applicable. Contracts containing embedded derivatives are valued at fair value in profit and loss if the contracts’ inherent risk and other characteristics indicate a close relation to the embedded derivative.

**FINANCIAL ASSETS AT FAIR VALUE THROUGH PROFIT OR LOSS**

All of Volvo’s financial assets that are recognized at fair value in profit and loss are classified as held for trading. This includes derivatives to which Volvo has decided not to apply hedge accounting as well as derivatives that are not part of an evidently effective hedge accounting policy pursuant to IAS 39. Gains and losses on these assets are recognized in profit and loss.

**FINANCIAL ASSETS CLASSIFIED AS AVAILABLE FOR SALE**

This category includes assets available for sale and assets that have not been classified in any of the other categories. These assets are initially measured at fair value including transaction costs. Any change in value is recognized directly in other comprehensive income. The cumulative gain or loss recognized in other comprehensive income is reversed in profit and loss on the sale of the asset. Unrealized declines in value are recognized in other comprehensive income, unless the decline is significant or prolonged. Then the impairment is recognized in profit and loss. If the event that caused the impairment no longer exists, impairment can be reversed in profit and loss if it does not involve an equity instrument.

Earned or paid interest attributable to these assets is recognized in profit and loss as part of net financial items in accordance with the effective interest method. Dividends received attributable to these assets are recognized in profit and loss as Income from other investments.

If assets available for sale are impaired, the impaired amount is the difference between the asset’s cost (adjusted for any accrued interest if applicable) and its fair value. However, if equity instruments, such as shares, are involved, a completed impairment is not reversed in profit and loss. On the other hand, impairments performed on debt instruments (interest-bearing instruments) are

(continued)
wholly or partly reversible in profit and loss, in those instances where an event, proven to have occurred after the impairment was performed, is identified and impacts the valuation of that asset.

3.5 Reclassification of Investments

Under the current standard, both IFRS and US GAAP permit entities to reclassify their intercorporate investments. However, there are certain restrictions and criteria that must be met. Reclassification may result in changes in how the asset value is measured and how unrealized gains or losses are recognized.

IFRS generally prohibits the reclassification of securities into or out of the designated at fair value category, and reclassification out of the held for trading category is severely restricted. Held-to-maturity (debt) securities can be reclassified as available-for-sale if a change in intention or a change in ability to hold the security until maturity occurs. At the time of reclassification to available-for-sale, the security is remeasured at fair value with the difference between its carrying amount (amortized cost) and fair value recognized in other comprehensive income. Recall that the reclassification has implications for the use of the held-to-maturity category for existing debt securities and new purchases. A mandatory reclassification and a prohibition from future use may result from the reclassification.

Debt securities initially designated as available-for-sale may be reclassified to held-to-maturity if a change in intention or ability has occurred. The fair value carrying amount of the security at the time of reclassification becomes its new (amortized) cost. Any previous gain or loss that had been recognized in other comprehensive income is amortized to profit or loss over the remaining life of the security using the effective interest method. Any difference between the new amortized cost of the security and its maturity value is amortized over the remaining life of the security using the effective interest method. If the definition is met, debt instruments may be reclassified from held for trading or available-for-sale to loans and receivables if the company expects to hold them for the foreseeable future.

Financial assets classified as available-for-sale may be measured at cost, where there is no longer a reliable measure of fair value and no evidence of impairment. However, if a reliable fair value measure becomes available, the financial asset must be remeasured at fair value with changes in value recognized in other comprehensive income.

US GAAP allows reclassifications (transfers) of securities between all categories when justified. Fair value of the security is determined at the date of transfer. However, recall that the reclassification of securities from the held-to-maturity category has implications for the use of this category for other securities. The treatment of unrealized holding gains and losses on the transfer date depends on the initial classification of the security.

1 If a security initially classified as held for trading is reclassified as available-for-sale, any unrealized gains and losses (arising from the difference between its carrying value and current fair value) are recognized in profit and loss.

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7 In rare circumstances, IFRS permits reclassification of a financial asset if it is no longer held for the purpose of selling it in the near term. The financial asset is reclassified at its fair value with any gain or loss recognized in profit or loss, and the fair value on the date of its reclassification becomes its new cost or amortized cost.
2 If a security is reclassified as held for trading, the unrealized gains or losses are recognized immediately in profit and loss. In the case of reclassification from available-for-sale, the cumulative amount of gains and losses previously recognized in other comprehensive income is recognized in profit and loss on the date of transfer.

3 If a debt security is reclassified as available-for-sale from held-to-maturity, the unrealized holding gain or loss at the date of the reclassification (i.e., the difference between the fair value and amortized cost) is reported in other comprehensive income.

4 If a debt security is reclassified as held-to-maturity from available-for-sale, the cumulative amount of gains or losses previously reported in other comprehensive income will be amortized over the remaining life of the security as an adjustment of yield (interest income) in the same manner as a premium or discount.

3.6 Impairments

A financial asset (in this case, debt or equity securities) becomes impaired whenever its carrying amount is expected to permanently exceed its recoverable amount. There are key differences in the approaches taken by the IFRS and US GAAP to determine if a financial asset is impaired and how the impairment loss is measured and reported.

Under IFRS, at the end of each reporting period, financial assets not carried at fair value (individually or as a group) need to be reviewed for any objective evidence that the assets are impaired. Any current impairment will be recognized in profit or loss immediately. For investments measured and reported at fair value through profit or loss (designated as fair value through profit or loss, and held-for-trading), any prior impairment loss will have already been recognized in profit or loss.

A debt security is impaired if one or more events (loss events) occur that have a reliably estimated impact on its future cash flows. Although it may not be possible to identify a single specific event that caused the impairment, the combined effect of several events may cause the impairment. Losses expected as a result of future (anticipated) events, no matter how likely, are not recognized. Examples of loss events causing impairment are:

- The issuer experiences significant financial difficulty;
- Default or delinquency in interest or principal payments;
- The borrower encounters financial difficulty and receives a concession from the lender as a result; and
- It becomes probable that the borrower will enter bankruptcy or other financial reorganization.

The disappearance of an active market because an entity’s financial instruments are no longer publicly traded is not evidence of impairment. A downgrade of an entity’s credit rating or a decline in fair value of a security below its cost or amortized cost is also not by itself evidence of impairment. However, it may be evidence of impairment when considered with other available information.

For equity securities, objective evidence of a loss event includes:

- Significant changes in the technological, market, economic, and/or legal environments that adversely affect the investee and indicate that the initial cost of the equity investment may not be recovered.
- A significant or prolonged decline in the fair value of an equity investment below its cost.
For held-to-maturity (debt) investments and loans and receivables that have become impaired, the amount of the loss is measured as the difference between the security’s carrying value and the present value of its estimated future cash flows discounted at the security’s original effective interest rate (the effective interest rate computed at initial recognition). The carrying amount of the investment is reduced either directly or through the use of an allowance account, and the amount of the loss is recognized in profit or loss. If, in a subsequent period, the amount of the impairment loss decreases and the decrease can be objectively related to an event occurring after the impairment was recognized (for example, the debtor’s credit rating improves), the previously recognized impairment loss can be reversed either directly (by increasing the carrying value of the security) or by adjusting the allowance account. The amount of this reversal is then recognized in profit or loss.

For available-for-sale securities that have become impaired, the cumulative loss that had been recognized in other comprehensive income is reclassified from equity to profit or loss as a reclassification adjustment. The amount of the cumulative loss to be reclassified is the difference between acquisition cost (net of any principal repayment and amortization) and current fair value, less any impairment loss that has previously been recognized in profit or loss. Impairment losses on available-for-sale equity securities cannot be reversed through profit or loss. However, impairment losses on available-for-sale debt securities can be reversed if a subsequent increase in fair value can be objectively related to an event occurring after the impairment loss was recognized in profit or loss. In this case, the impairment loss is reversed with the amount of the reversal recognized in profit or loss.

Exhibit 3 contains an excerpt from the 2011 Annual Report of Deutsche Bank that describes how impairment losses for its financial assets are determined, measured, and recognized on its financial statements.
for sale. This amount is determined as the difference between the acquisition
cost (net of any principal repayments and amortization) and current fair value
of the asset less any impairment loss on that investment previously recognized
in the consolidated statement of income.

When an AFS debt security is impaired, any subsequent decreases in fair
value are recognized in the consolidated statement of income as it is considered
further impairment. Any subsequent increases are also recognized in the con-
solidated statement of income until the asset is no longer considered impaired.
When the fair value of the AFS debt security recovers to at least amortized cost
it is no longer considered impaired and subsequent changes in fair value are
reported in other comprehensive income.

Reversals of impairment losses on equity investments classified as AFS are
not reversed through the consolidated statement of income; increases in their
fair value after impairment are recognized in other comprehensive income.

Under US GAAP , the determination of impairment and the calculation of the
impairment loss are different than under IFRS. For securities classified as available-
for-sale or held-to-maturity, the investor is required to determine at each balance sheet
date whether the decline in value is other than temporary. For debt securities classified
as held-to-maturity, this means that the investor will be unable to collect all amounts
due according to the contractual terms existing at acquisition. If the decline in fair value
is deemed to be other than temporary, the cost basis of the security is written down
to its fair value, which then becomes the new cost basis of the security. The amount
of the write-down is treated as a realized loss and reported on the income statement.

For available-for-sale securities (both debt and equity), if the decline in fair value
is other than temporary, the cost basis of the security is written down to its fair value.
This value becomes the new cost basis, and the amount of the write-down is treated
as a realized loss. However, the new cost basis cannot be increased for subsequent
increases in fair value. Instead, subsequent increases in fair value (and decreases, if
other than temporary) are treated as unrealized gains or losses and included in other
comprehensive income.

**EXAMPLE 1**

**Accounting for Investments in Debt Securities**

In this example, two fictitious companies are used. On 1 January 2011, Baxter
Inc. invested £300,000 in Cartel Co. debt securities (with a 6% stated rate on par
value, payable each 31 December). The par value of the securities was £275,000.
On 31 December 2011, the fair value of Baxter’s investment in Cartel is £350,000.

Assume that the market interest rate in effect when the bonds were purchased
was 4.5%. If the investment is designated as held-to-maturity, the investment
is reported at amortized cost using the effective interest method. A portion of
the amortization table is as follows:

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8 The effective interest rate method applies the market rate in effect when the bonds were purchased to
the current amortized cost (book value) of the bonds to obtain interest income for the period. Assume
that the debt securities’ contractual cash flows are equal to estimated cash flows and that its contractual
life is equal to its expected life.
End of Year | Interest Payment (£) | Interest Income (£) | Amortization (£) | Amortized Cost (£)
---|---|---|---|---
0 | 0 | 0 | 0 | 0
1* | 16,500 | 13,500 | 3,000 | 297,000
2 | 16,500 | 13,365 | 3,135 | 293,865
3 | 16,500 | 13,224 | 3,276 | 290,589

* (6% × par value of £275,000 = £16,500) and (4.5% × carrying value of £300,000 = £13,500)

1 How would this investment be reported on the balance sheet, income statement, and statement of shareholders’ equity at 31 December 2011, under either IFRS or US GAAP (accounting is essentially the same in this case), if Baxter designated the investment as 1) held-to-maturity, 2) held for trading, 3) available-for-sale, or 4) designated at fair value?

2 How would the gain be recognized if the debt securities were sold on 1 January 2012 for £352,000?

3 How would this investment appear on the balance sheet at 31 December 2012?

4 How would the classification and reporting differ if Baxter had invested in Cartel’s equity securities instead of its debt securities?

Solution to 1:

The amount received each period (£16,500) is based on the par value (£275,000) and the stated 6% rate. The interest income is calculated using the effective interest method (4.5% market rate times the beginning amortized cost each period). The difference between the amount received and the interest income is the amortization.

The initial fair value (£300,000) is reduced by amortization resulting in a £297,000 amortized cost. This represents the carrying value reported on the balance sheet if the security is classified as held-to-maturity. If the security is reported at fair value, remeasurement to fair value (£350,000 at the end of Year 1) results in an unrealized gain of £53,000 (£350,000 – £297,000).

<table>
<thead>
<tr>
<th>Held-to-maturity</th>
<th>Income Statement</th>
<th>Balance Sheet</th>
<th>Statement of Shareholders’ Equity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest income</td>
<td>£13,500 (£16,500</td>
<td>Reported at amortized cost</td>
<td>Reported at fair value £350,000</td>
</tr>
<tr>
<td>– £3,000 or £300,000 × 4.5%</td>
<td>)</td>
<td>of £297,000</td>
<td></td>
</tr>
<tr>
<td>Held for trading security</td>
<td>Interest income £13,500. £53,000 unrealized gain is recognized through profit</td>
<td>Reported at fair value £350,000</td>
<td></td>
</tr>
</tbody>
</table>
Investments in Financial Assets: Standard IAS 39 (prior to issuance of IFRS 9)

<table>
<thead>
<tr>
<th>Income Statement</th>
<th>Balance Sheet</th>
<th>Statement of Shareholders’ Equity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Designated at fair value</td>
<td>Interest income</td>
<td>Reported at fair value £350,000</td>
</tr>
<tr>
<td>Available-for-sale</td>
<td>Interest income of £13,500</td>
<td>Reported at fair value £350,000</td>
</tr>
</tbody>
</table>

Solution to 2:
If the debt securities were sold on 1 January 2012 for £352,000, the amount of the realized gain would be as follows:

- **Held-to-maturity**: The selling price less the carrying value results in a gain on income statement of £55,000 (£352,000 – £297,000).
- **Assets held for trading and designated fair value through profit or loss**: The security is fair valued on the balance sheet at 31 December 2011 at £350,000. The appreciation was previously recognized in profit and loss. The gain on income statement (profit and loss) of £2,000 (£352,000 – £350,000) reflects the difference between the selling price and the recorded fair value.
- **Available-for-sale**: The security is fair valued on the balance sheet at 31 December 2011 at £350,000. Because it is designated as available-for-sale, the appreciation was reflected in other comprehensive income in the equity section of the balance sheet. Upon sale in 2012, the cumulative unrealized gain or loss is removed from other comprehensive income and the entire gain is recognized in the profit and loss statement £55,000 = (£352,000 – £350,000) + £53,000 (removed from other comprehensive income).

Solution to 3:
If the investment was classified as held-to-maturity, the reported amount at amortized cost at the end of Year 2 on the balance sheet would be £293,865. If the investment was classified as either held for trading, available-for-sale, or designated at fair value, it would be measured at its fair value at the end of Year 2.

Solution to 4:
If the investment had been in Cartel Co. equity securities rather than debt securities, the analysis would change in the following ways:

- There would not be a held-to-maturity option.
- Dividend income (if any) would replace interest income and there would be no amortization.
Both IASB and FASB developed new standards for financial investments. The IASB issued the first phase of their project dealing with classification and measurement of financial instruments by including relevant chapters in IFRS 9, *Financial Instruments*. IFRS 9, which replaces IAS 39, became effective on 1 January 2018. The FASB issued ASC 825 in January 2016, with the standard being effective for periods after 15 December 2017. The new ASC has resulted in significant (but not total) convergence with IFRS with respect to financial instruments. In this section, differences between the current standard (IAS 39) and the new standard (IFRS 9) are discussed. The new standard is based on an approach that considers the contractual characteristic of cash flows as well as the management of the financial assets. The portfolio approach of the current standard (i.e., designation of held for trading, available-for-sale, and held-to-maturity) is no longer appropriate and the terms *available-for-sale* and *held-to-maturity* no longer appear in IFRS 9. Another key change in IFRS 9, compared with the old standard IAS 39, relates to the approach to loan impairment. In particular, companies are required to migrate from an incurred loss model to an expected credit loss model. This results in companies evaluating not only historical and current information about loan performance, but also forward-looking information.

The criteria to use amortized cost are similar to those of the current “management intent to hold-to-maturity” classification. To be measured at amortized cost, financial assets must meet two criteria:  

1. A business model test: The financial assets are being held to collect contractual cash flows; and  
2. A cash flow characteristic test: The contractual cash flows are solely payments of principal and interest on principal.

### 4.1 Classification and Measurement

IFRS 9 divides all financial assets into two classifications—those measured at amortized cost and those measured at fair value. All financial assets are measured at fair value when initially acquired. Subsequently, financial assets are measured at either fair value or amortized cost. Financial assets that meet the two criteria above are generally measured at amortized cost. If the financial asset meets the criteria above but may be sold, a “hold-to-collect and sell” business model, it may be measured at fair value through other comprehensive income (FVOCI). However, management may choose the “fair value through profit or loss” (FVPL) option to avoid an accounting mismatch. An “accounting mismatch” refers to an inconsistency resulting from different measurement bases for assets and liabilities. Debt instruments are measured at amortized cost, fair value through other comprehensive income (FVOCI), or fair value through profit or loss (FVPL) depending upon the business model. Equity instruments are measured at FVPL or at FVOCI. Equity investments held-for-trading must be measured at FVPL. Other equity investments can be measured at FVPL or FVOCI; however, the choice is irrevocable. If the entity uses the FVOCI option, only the dividend income is recognized in profit or loss. Furthermore, the requirements for reclassifying gains or losses recognized in other comprehensive income are different for debt and equity instruments.

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9 IFRS 9, paragraph 4.1.2.  
10 IFRS 9, paragraph 4.1.5.
Financial assets that are derivatives are measured at fair value through profit or loss (except for hedging instruments). Embedded derivatives are not separated from the hybrid contract if the asset falls within the scope of this standard and the asset as a whole is measured at FVPL.

Exhibit 5 contains an excerpt from a report by Nortel Inversora S.A. that describes how financial assets and financial liabilities are determined, measured, and recognized on its financial statements.

**FINANCIAL ASSETS**

Upon acquisition, in accordance with IFRS 9, financial assets are subsequently measured at either amortized cost, or fair value, on the basis of both:

- the Company’s business model for managing the financial assets; and
- the contractual cash flow characteristics of the financial asset.

A financial asset shall be measured at amortized cost if both of the following conditions are met:

- the asset is held within a business model whose objective is to hold assets in order to collect contractual cash flows, and
- the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Additionally, for assets that meet the abovementioned conditions, IFRS provides for an option to designate, at inception, those assets as measured at fair value if doing so eliminates or significantly reduces a measurement or recognition (continued)
inconsistency (sometimes referred to as an ‘accounting mismatch’) that would otherwise arise from measuring assets or liabilities or recognizing the gains and losses on them on different bases. A financial asset that is not measured at amortized cost according to the paragraphs above is measured at fair value. Financial liabilities other than derivatives are initially recognized at fair value and subsequently measured at amortized cost. Amortized cost represents the initial amount net of principal repayments made, adjusted by the amortization of any difference between the initial amount and the maturing amount using the effective interest method.

4.2 Reclassification of Investments

Under the new standard, the reclassification of equity instruments is not permitted because the initial classification of FVPL and FVOCI is irrevocable. Reclassification of debt instruments is only permitted if the business model for the financial assets (objective for holding the financial assets) has changed in a way that significantly affects operations. Changes to the business model will require judgment and are expected to be very infrequent.

When reclassification is deemed appropriate, there is no restatement of prior periods at the reclassification date. For example, 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.

In summary, the major changes made by phase one of IFRS 9 are:

■ A business model approach to classification of debt instruments.
■ Three classifications for financial assets: Fair value through profit or loss (FVPL), fair value through other comprehensive income (FVOCI), and amortized cost.
■ Reclassifications of debt instruments are permitted only when the business model changes. The choice to measure equity investments at FVOCI or FVPL is irrevocable.
■ A redesign of the provisioning models for financial assets, financial guarantees, loan commitments, and lease receivables. The new standard moves the recognition criteria from an “incurred loss” model to an “expected loss” model. Under the new criteria, there is an earlier recognition of impairment—12 month expected losses for performing assets and lifetime expected losses for non-performing assets, to be captured upfront.11

Analysts typically evaluate performance separately for operating and investing activities. Analysis of operating performance should exclude items related to investing activities such as interest income, dividends, and realized and unrealized gains and losses. For comparative purposes, analysts should exclude non-operating assets in the determination of return on net operating assets. IFRS and US GAAP12 require disclosure of fair value of each class of investment in financial assets. Using market values and adjusting pro forma financial statements for consistency improves assessments of performance ratios across companies.

11 IFRS 9, paragraphs 5.5.4, 5.5.5, 5.5.15, 5.5.16.
12 IFRS 7 Financial Instruments: Disclosures and FASB ASC Section 320-10-50 [Investments–Debt and Equity Securities–Overall–Disclosure].
INVESTMENTS IN ASSOCIATES AND JOINT VENTURES

In 2011, the IASB amended IAS 28 to include investments in associates and joint ventures. This revised standard became effective for annual periods beginning on or after 1 January 2013.

Under both IFRS and US GAAP, when a company (investor) holds 20 to 50% of the voting rights of an associate (investee), either directly or indirectly (i.e., through subsidiaries), it is presumed (unless circumstances demonstrate otherwise) that the company has (or can exercise) significant influence, but not control, over the investee's business activities. Conversely, if the investor holds, directly or indirectly, less than 20% of the voting power of the associate (investee), it is presumed that the investor does not have (or cannot exercise) significant influence, unless such influence can be demonstrated. IAS 28 (IFRS) and FASB ASC Topic 323 (US GAAP) apply to most investments in which an investor has significant influence; they also provide guidance on accounting for investments in associates using the equity method. These standards note that significant influence may be evidenced by

- 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.

The ability to exert significant influence means that the financial and operating performance of the investee is partly influenced by management decisions and operational skills of the investor. The equity method of accounting for the investment reflects the economic reality of this relationship and provides a more objective basis for reporting investment income.

Joint ventures—ventures undertaken and controlled by two or more parties—can be a convenient way to enter foreign markets, conduct specialized activities, and engage in risky projects. They can be organized in a variety of different forms and structures. Some joint ventures are primarily contractual relationships, whereas others have common ownership of assets. They can be partnerships, limited liability companies (corporations), or other legal forms (unincorporated associations, for example). IFRS identify the following common characteristics of joint ventures: 1) A contractual arrangement exists between two or more venturers, and 2) the contractual arrangement establishes joint control. Both IFRS and US GAAP require the equity method of accounting for joint ventures.

Only under rare circumstances will joint ventures be allowed to use proportionate consolidation under IFRS and US GAAP. On the venturer’s financial statements, proportionate consolidation requires the venturer’s share of the assets, liabilities, income, and expenses of the joint venture to be combined or shown on a line-by-line basis

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13 The determination of significant influence under IFRS also includes currently exercisable or convertible warrants, call options, or convertible securities that the investor owns, which give it additional voting power or reduce another party’s voting power over the financial and operating policies of the investee. Under US GAAP, the determination of an investor’s voting stock interest is based on the voting shares outstanding at the time of the purchase. The existence and effect of securities with potential voting rights are not considered.

14 IAS 28 Investments in Associates and Joint Ventures and FASB ASC Topic 323 [Investments–Equity Method and Joint Ventures].

15 IFRS 11, Joint Arrangements classifies joint arrangements as either a joint operation or a joint venture. Joint ventures are arrangements wherein parties with joint control have rights to the net assets of the arrangement. Joint ventures are required to use equity method under IAS 28.
with similar items under its sole control. In contrast, the equity method results in a single line item (equity in income of the joint venture) on the income statement and a single line item (investment in joint venture) on the balance sheet.

Because the single line item on the income statement under the equity method reflects the net effect of the sales and expenses of the joint venture, the total income recognized is identical under the two methods. In addition, because the single line item on the balance sheet item (investment in joint venture) under the equity method reflects the investors’ share of the net assets of the joint venture, the total net assets of the investor is identical under both methods. There can be significant differences, however, in ratio analysis between the two methods because of the differential effects on values for total assets, liabilities, sales, expenses, etc.

5.1 Equity Method of Accounting: Basic Principles

Under the equity method of accounting, the equity investment is initially recorded on the investor’s balance sheet at cost. In subsequent periods, the carrying amount of the investment is adjusted to recognize the investor’s proportionate share of the investee’s earnings or losses, and these earnings or losses are reported in income. Dividends or other distributions received from the investee are treated as a return of capital and reduce the carrying amount of the investment and are not reported in the investor’s profit or loss. The equity method is often referred to as “one-line consolidation” because the investor’s proportionate ownership interest in the assets and liabilities of the investee is disclosed as a single line item (net assets) on its balance sheet, and the investor’s share of the revenues and expenses of the investee is disclosed as a single line item on its income statement. (Contrast these disclosures with the disclosures on consolidated statements in Section 6.) Equity method investments are classified as non-current assets on the balance sheet. The investor’s share of the profit or loss of equity method investments, and the carrying amount of those investments, must be separately disclosed on the income statement and balance sheet.

**EXAMPLE 2**

**Equity Method: Balance in Investment Account**

Branch (a fictitious company) purchases a 20% interest in Williams (a fictitious company) for €200,000 on 1 January 2010. Williams reports income and dividends as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Income</th>
<th>Dividends</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>€200,000</td>
<td>€50,000</td>
</tr>
<tr>
<td>2011</td>
<td>300,000</td>
<td>100,000</td>
</tr>
<tr>
<td>2012</td>
<td>400,000</td>
<td>200,000</td>
</tr>
<tr>
<td></td>
<td>€900,000</td>
<td>€350,000</td>
</tr>
</tbody>
</table>

Calculate the investment in Williams that appears on Branch’s balance sheet as of the end of 2012.

**Solution:**

Investment in Williams at 31 December 2012:

- Initial cost: €200,000
- Equity income 2010: €40,000 = (20% of €200,000 Income)
- Dividends received 2010: (€10,000) = (20% of €50,000 Dividends)
Equity income 2011  €60,000  = (20% of €300,000 Income)
Dividends received 2011  (€20,000)  = (20% of €100,000 Dividends)
Equity income 2012  €80,000  = (20% of €400,000 Income)
Dividends received 2012  (€40,000)  = (20% of €200,000 Dividends)
Balance-Equity Investment  €310,000  = [€200,000 + 20% × (€900,000 − €350,000)]

This simple example implicitly assumes that the purchase price equals the purchased equity (20%) in the book value of Williams’ net assets. Sections 5.2 and 5.3 will cover the more common case in which the purchase price does not equal the proportionate share of the book value of the investee’s net assets.

Using the equity method, the investor includes its share of the investee’s profit and losses on the income statement. The equity investment is carried at cost, plus its share of post-acquisition income, less dividends received. The recorded investment value can decline as a result of investee losses or a permanent decline in the investee’s market value (see Section 5.5 for treatment of impairments). If the investment value is reduced to zero, the investor usually discontinues the equity method and does not record further losses. If the investee subsequently reports profits, the equity method is resumed after the investor’s share of the profits equals the share of losses not recognized during the suspension of the equity method. Exhibit 6 contains excerpts from Deutsche Bank’s 2011 annual report that describes its accounting treatment for investments in associates.

Exhibit 6  Excerpt from Deutsche Bank 2011 Annual Report

[From Note 01] ASSOCIATES AND JOINTLY CONTROLLED ENTITIES

An associate is an entity in which the Group has significant influence, but not a controlling interest, over the operating and financial management policy decisions of the entity. Significant influence is generally presumed when the Group holds between 20% and 50% of the voting rights. The existence and effect of potential voting rights that are currently exercisable or convertible are considered in assessing whether the Group has significant influence. Among the other factors that are considered in determining whether the Group has significant influence are representation on the board of directors (supervisory board in the case of German stock corporations) and material intercompany transactions. The existence of these factors could require the application of the equity method of accounting for a particular investment even though the Group’s investment is for less than 20% of the voting stock.

A jointly controlled entity exists when the Group has a contractual arrangement with one or more parties to undertake activities through entities which are subject to joint control.

[From Note 17] EQUITY METHOD INVESTMENTS

Investments in associates and jointly controlled entities are accounted for using the equity method of accounting. As of December 31, 2011, the following investees were significant, representing 75% of the carrying value of equity method investments.

(continued)
Exhibit 6  (Continued)

<table>
<thead>
<tr>
<th>Investment</th>
<th>Ownership Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actavis Equity S.a r.l., Munsbach</td>
<td>0.00</td>
</tr>
<tr>
<td>BrisConnections Investment Trust, Kedron</td>
<td>35.59</td>
</tr>
<tr>
<td>Huamao Property Holdings, Ltd. George Town</td>
<td>0.00</td>
</tr>
<tr>
<td>Hua Xia Bank Company Limited, Beijing</td>
<td>19.99</td>
</tr>
<tr>
<td>Rongde Asset Management Company Limited, Beijing</td>
<td>40.70</td>
</tr>
<tr>
<td>Station Holdco LLC, Wilmington</td>
<td>25.00</td>
</tr>
</tbody>
</table>

1 All significant equity method investments are investments in associates.
2 Equity method accounting based on subordinated financial arrangement.
3 The Group has significant influence over the investee through board seats or other measures.

Summarized aggregated financial information of significant equity method investees follows:

<table>
<thead>
<tr>
<th>In € m</th>
<th>Dec 31, 2011</th>
<th>Dec 31, 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total assets</td>
<td>147,793</td>
</tr>
<tr>
<td></td>
<td>Total liabilities</td>
<td>137,862</td>
</tr>
<tr>
<td></td>
<td>Revenues</td>
<td>5,478</td>
</tr>
<tr>
<td></td>
<td>Net income/loss</td>
<td>696</td>
</tr>
</tbody>
</table>

The following are the components of the net income (loss) from all equity method investments:

<table>
<thead>
<tr>
<th>In € m</th>
<th>2011</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net income (loss) from equity method investments:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pro rata share of investees’ net income (loss)</td>
<td>222</td>
<td>457</td>
</tr>
<tr>
<td>Net gains (losses) on disposal of equity method investments</td>
<td>29</td>
<td>14</td>
</tr>
<tr>
<td>Impairments</td>
<td>(515)</td>
<td>(2,475)</td>
</tr>
<tr>
<td>Total net income (loss) from equity method investments</td>
<td>(264)</td>
<td>(2,004)</td>
</tr>
</tbody>
</table>

2011 included an impairment of €457 million related to Actavis Group, a generic pharmaceutical group.

In 2010 a charge of approximately €2.3 billion attributable to the equity method investment in Deutsche Postbank AG prior to consolidation was included. On December 3, 2010, Deutsche gained a controlling majority in Postbank shares and commenced consolidation of the Postbank Group as of that date. As a consequence the Group ceased equity method accounting for its investment in Postbank. Further detail is included in Note 4 “Acquisitions and Dispositions”.

There was no unrecognized share of losses of an investee, neither for the period, or cumulatively.

Equity method investments for which there were published price quotations had a carrying value of €2.2 billion and a fair value of €2.1 billion as of December 31, 2011 and a carrying value of €280 million and a fair value of €561 million as of December 31, 2010. In 2011 Hua Xia Bank is included for the first time.
It is interesting to note the explanations for the treatment as associates when the ownership percentage is less than 20% or is greater than 50%. The equity method reflects the strength of the relationship between the investor and its associates. In the instances where the percentage ownership is less than 20%, Deutsche Bank uses the equity method because it has significant influence over these associates’ operating and financial policies either through its representation on their boards of directors and/or other measures. The equity method provides a more objective basis for reporting investment income than the accounting treatment for investments in financial assets, because the investor can potentially influence the timing of dividend distributions.

5.2 Investment Costs That Exceed the Book Value of the Investee

The cost (purchase price) to acquire shares of an investee is often greater than the book value of those shares. This is because, among other things, many of the investee’s assets and liabilities reflect historical cost rather than fair values. IFRS allow a company to measure its property, plant, and equipment using either historical cost or fair value (less accumulated depreciation). US GAAP, however, require the use of historical cost (less accumulated depreciation) to measure property, plant, and equipment. When the cost of the investment exceeds the investor’s proportionate share of the book value of the investee’s (associate’s) net identifiable tangible and intangible assets (e.g., inventory, property, plant and equipment, trademarks, patents), the difference is first allocated to specific assets (or categories of 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 exceeded book values. It should be noted that the allocation is not recorded formally; what appears initially in the investment account on the balance sheet of the investor is the cost. Over time, as the differences are amortized, the balance in the investment account will come closer to representing the ownership percentage of the book value of the net assets of the associate.

IFRS and US GAAP both treat the difference between the cost of the acquisition and investor’s share of the fair value of the net identifiable assets as goodwill. Therefore, any remaining difference between the acquisition cost and the fair value of net identifiable assets that cannot be allocated to specific assets is treated as goodwill and is not amortized. Instead, it is reviewed for impairment on a regular basis, and written down for any identified impairment. Goodwill, however, is included in the carrying amount of the investment, because investment is reported as a single line item on the investor’s balance sheet.

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16 After initial recognition, an entity can choose to use either a cost model or a revaluation model to measure its property, plant, and equipment. Under the revaluation model, property, plant, and equipment whose fair value can be measured reliably can be carried at a revalued amount. This revalued amount is its fair value at the date of the revaluation less any subsequent accumulated depreciation.

17 Successful companies should be able to generate, through the productive use of assets, economic value in excess of the resale value of the assets themselves. Therefore, investors may be willing to pay a premium in anticipation of future benefits. These benefits could be a result of general market conditions, the investor’s ability to exert significant influence on the investee, or other synergies.

18 If the investor’s share of the fair value of the associate’s net assets (identifiable assets, liabilities, and contingent liabilities) is greater than the cost of the investment, the difference is excluded from the carrying amount of the investment and instead 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.
### EXAMPLE 3

**Equity Method Investment in Excess of Book Value**

Assume that the hypothetical Blake Co. acquires 30% of the outstanding shares of the hypothetical Brown Co. At the acquisition date, book values and fair values of Brown’s recorded assets and liabilities are as follows:

<table>
<thead>
<tr>
<th></th>
<th>Book Value</th>
<th>Fair Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current assets</td>
<td>€10,000</td>
<td>€10,000</td>
</tr>
<tr>
<td>Plant and equipment</td>
<td>190,000</td>
<td>220,000</td>
</tr>
<tr>
<td>Land</td>
<td>120,000</td>
<td>140,000</td>
</tr>
<tr>
<td></td>
<td>€320,000</td>
<td>€370,000</td>
</tr>
<tr>
<td>Liabilities</td>
<td>100,000</td>
<td>100,000</td>
</tr>
<tr>
<td>Net assets</td>
<td>€220,000</td>
<td>€270,000</td>
</tr>
</tbody>
</table>

Blake Co. believes the value of Brown Co. is higher than the fair value of its identifiable net assets. They offer €100,000 for a 30% interest in Brown, which represents a 34,000 excess purchase price. The difference between the fair value and book value of the net identifiable assets is €50,000 (€270,000 – 220,000). Based on Blake Co.’s 30% ownership, €15,000 of the excess purchase price is attributable to the net identifiable assets, and the residual is attributable to goodwill. Calculate goodwill.

**Solution:**

- Purchase price: €100,000
- 30% of book value of Brown (30% × €220,000): 66,000
- Excess purchase price: €34,000
  - Attributable to net assets
    - Plant and equipment (30% × €30,000): €9,000
    - Land (30% × €20,000): €6,000
    - Goodwill (residual): €19,000

As illustrated above, goodwill is the residual excess not allocated to identifiable assets or liabilities. The investment is carried as a non-current asset on the Blake’s book as a single line item (Investment in Brown, €100,000) on the acquisition date.

### 5.3 Amortization of Excess Purchase Price

The excess purchase price allocated to the assets and liabilities is accounted for in a manner that is consistent with the accounting treatment for the specific asset or liability to which it is assigned. Amounts allocated to assets and liabilities that are expensed (such as inventory) or periodically depreciated or amortized (plant, property, and intangible assets) must be treated in a similar manner. These allocated amounts are not reflected on the financial statements of the investee (associate), and the investee’s income statement will not reflect the necessary periodic adjustments. Therefore, the investor must directly record these adjustment effects by reducing the carrying amount of the investment on its balance sheet and by reducing the investee’s profit recognized on its income statement. Amounts allocated to assets or liabilities that are not systematically amortized (e.g., land) will continue to be reported at their fair
value as of the date the investment was acquired. As stated above, goodwill is included in the carrying amount of the investment instead of being separately recognized. It is not amortized because it is considered to have an indefinite life.

Using the example above and assuming a 10-year useful life for plant, property, and equipment and using straight-line depreciation, the annual amortization is as follows:

<table>
<thead>
<tr>
<th>Account</th>
<th>Excess Price (€)</th>
<th>Useful Life</th>
<th>Amortization/Year (€)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plant and equipment</td>
<td>9,000</td>
<td>10 years</td>
<td>900</td>
</tr>
<tr>
<td>Land</td>
<td>6,000</td>
<td>Indefinite</td>
<td>0</td>
</tr>
<tr>
<td>Goodwill</td>
<td>19,000</td>
<td>Indefinite</td>
<td>0</td>
</tr>
</tbody>
</table>

Annual amortization would reduce the investor’s share of the investee’s reported income (equity income) and the balance in the investment account by €900 for each year over the 10-year period.

**EXAMPLE 4**

**Equity Method Investments with Goodwill**

On 1 January 2011, Parker Company acquired 30% of Prince Inc. common shares for the cash price of €500,000 (both companies are fictitious). It is determined that Parker has the ability to exert significant influence on Prince’s financial and operating decisions. The following information concerning Prince’s assets and liabilities on 1 January 2011 is provided:

<table>
<thead>
<tr>
<th>Prince, Inc.</th>
<th>Book Value</th>
<th>Fair Value</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current assets</td>
<td>€100,000</td>
<td>€100,000</td>
<td>€0</td>
</tr>
<tr>
<td>Plant and equipment</td>
<td>1,900,000</td>
<td>2,200,000</td>
<td>300,000</td>
</tr>
<tr>
<td>Liabilities</td>
<td>800,000</td>
<td>800,000</td>
<td>0</td>
</tr>
<tr>
<td>Net assets</td>
<td>€1,200,000</td>
<td>€1,500,000</td>
<td>€300,000</td>
</tr>
</tbody>
</table>

The plant and equipment are depreciated on a straight-line basis and have 10 years of remaining life. Prince reports net income for 2011 of €100,000 and pays dividends of €50,000. Calculate the following:

1. Goodwill included in the purchase price.
2. Investment in associate (Prince) at the end of 2011.

**Solution to 1:**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase price</td>
<td>€500,000</td>
</tr>
<tr>
<td>Acquired equity in book value of Prince’s net assets (30% × €1,200,000)</td>
<td>360,000</td>
</tr>
<tr>
<td>Excess purchase price</td>
<td>€140,000</td>
</tr>
<tr>
<td>Attributable to plant and equipment (30% × €300,000)</td>
<td>(90,000)</td>
</tr>
<tr>
<td>Goodwill (residual)</td>
<td>€50,000</td>
</tr>
</tbody>
</table>
Solution to 2:
Investment in associate

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase price</td>
<td>€500,000</td>
</tr>
<tr>
<td>Parker’s share of Prince’s net income (30% × €100,000)</td>
<td>30,000</td>
</tr>
<tr>
<td>Dividends received (30% of €50,000)</td>
<td>(15,000)</td>
</tr>
<tr>
<td>Amortization of excess purchase price attributable to plant and equipment</td>
<td>(9,000)</td>
</tr>
<tr>
<td>31 December 2011 balance in investment in Prince</td>
<td>€506,000</td>
</tr>
</tbody>
</table>

An alternate way to look at the balance in the investment account is that it reflects the basic valuation principle of the equity method. At any point in time, the investment account balance equals the investor’s (Parker) proportionate share of the net equity (net assets at book value) of the investee (Prince) plus the unamortized balance of the original excess purchase price. Applying this principle to this example:

2011 Beginning net assets = €1,200,000
Plus: Net income 100,000
Less: Dividends (50,000)
2011 Ending net assets €1,250,000
Parker’s proportionate share of Prince’s recorded net assets (30% × €1,250,000) €375,000
Unamortized excess purchase price (€140,000 – 9,000) 131,000
Investment in Prince €506,000

Note that the unamortized excess purchase price is a cost incurred by Parker, not Prince. Therefore, the total amount is included in the investment account balance.

5.4 Fair Value Option

Both IFRS and US GAAP give the investor the option to account for their equity method investment at fair value. Under US GAAP, this option is available to all entities; however, under IFRS, its use is restricted to venture capital organizations, mutual funds, unit trusts, and similar entities, including investment-linked insurance funds.

Both standards require that the election to use the fair value option occur at the time of initial recognition and is irrevocable. Subsequent to initial recognition, the investment is reported at fair value with unrealized gains and losses arising from changes in fair value as well as any interest and dividends received included in the investor’s profit or loss (income). Under the fair value method, the investment account on the investor’s balance sheet does not reflect the investor’s proportionate share of the investee’s profit or loss, dividends, or other distributions. In addition, the excess of cost over the fair value of the investee’s identifiable net assets is not amortized, nor is goodwill created.

19 IFRS 9 Financial Instruments. FASB ASC Section 825-10-25 [Financial Instruments—Overall—Recognition].
5.5 Impairment

Both IFRS and US GAAP require periodic reviews of equity method investments for impairment. If the fair value of the investment is below its carrying value and this decline is deemed to be other than temporary, an impairment loss must be recognized.

Under IFRS, there must be objective evidence of impairment as a result of one or more (loss) events that occurred after the initial recognition of the investment, and that loss event has an impact on the investment’s future cash flows, which can be reliably estimated. Because goodwill is included in the carrying amount of the investment and is not separately recognized, it is not separately tested for impairment. Instead, the entire carrying amount of the investment is tested for impairment by comparing its recoverable amount with its carrying amount. The impairment loss is recognized on the income statement, and the carrying amount of the investment on the balance sheet is either reduced directly or through the use of an allowance account.

US GAAP takes a different approach. If the fair value of the investment declines below its carrying value and the decline is determined to be permanent, US GAAP requires an impairment loss to be recognized on the income statement and the carrying value of the investment on the balance sheet is reduced to its fair value.

Both IFRS and US GAAP prohibit the reversal of impairment losses even if the fair value later increases.

Section 6.4.4 of this reading discusses impairment tests for the goodwill attributed to a controlling investment (consolidated subsidiary). Note the distinction between the disaggregated goodwill impairment test for consolidated statements and the impairment test of the total fair value of equity method investments.

5.6 Transactions with Associates

Because an investor company can influence the terms and timing of transactions with its associates, profits from such transactions cannot be realized until confirmed through use or sale to third parties. Accordingly, the investor company’s share of any unrealized profit must be deferred by reducing the amount recorded under the equity method. In the subsequent period(s) when this deferred profit is considered confirmed, it is added to the equity income. At that time, the equity income is again based on the recorded values in the associate’s accounts.

Transactions between the two affiliates may be upstream (associate to investor) or downstream (investor to associate). In an upstream sale, the profit on the intercompany transaction is recorded on the associate’s income (profit or loss) statement. The investor’s share of the unrealized profit is thus included in equity income on the investor’s income statement. In a downstream sale, the profit is recorded on the investor’s income statement. Both IFRS and US GAAP require that the unearned profits be eliminated to the extent of the investor’s interest in the associate. The result is an adjustment to equity income on the investor’s income statement.

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20 Recoverable amount is the higher of “value in use” or net selling price. Value in use is equal to the present value of estimated future cash flows expected to arise from the continuing use of an asset and from its disposal at the end of its useful life. Net selling price is equal to fair value less cost to sell.

21 FASB ASC Section 323-10-35 [Investments–Equity Method and Joint Ventures–Overall–Subsequent Measurement].

22 IAS 28 Investments in Associates and Joint Ventures; FASB ASC Topic 323 [Investments–Equity Method and Joint Ventures].
EXAMPLE 5

Equity Method with Sale of Inventory: Upstream Sale

On 1 January 2011, Wicker Company acquired a 25% interest in Foxworth Company (both companies are fictitious) for €1,000,000 and used the equity method to account for its investment. The book value of Foxworth’s net assets on that date was €3,800,000. An analysis of fair values revealed that all fair values of assets and liabilities were equal to book values except for a building. The building was undervalued by €40,000 and has a 20-year remaining life. The company used straight-line depreciation for the building. Foxworth paid €3,200 in dividends in 2011. During 2011, Foxworth reported net income of €20,000. During the year, Foxworth sold inventory to Wicker. At the end of the year, there was €8,000 profit from the upstream sale in Foxworth’s net income. The inventory sold to Wicker by Foxworth had not been sold to an outside party.

1 Calculate the equity income to be reported as a line item on Wicker’s 2011 income statement.

2 Calculate the balance in the investment in Foxworth to be reported on the 31 December 2011 balance sheet.

| Purchase price | €1,000,000 |
| Acquired equity in book value of Foxworth’s net assets (25% × €3,800,000) | 950,000 |
| Excess purchase price | €50,000 |
| Attributable to: | |
| Building (25% × €40,000) | €10,000 |
| Goodwill (residual) | 40,000 |
| **Total** | €50,000 |

Solution to 1:

Equity Income

Wicker’s share of Foxworth’s reported income
(25% × €20,000) €5,000
Amortization of excess purchase price attributable to building, (€10,000 ÷ 20) (500)
Unrealized profit (25% × €8,000) (2,000)
Equity income 2011 €2,500

Solution to 2:

Investment in Foxworth:

| Purchase price | €1,000,000 |
| Equity income 2011 | 2,500 |
| Dividends received (25% × €3,200) | (800) |
| **Investment in Foxworth, 31 Dec 2011** | €1,001,700 |

Composition of investment account:

Wicker’s proportionate share of Foxworth’s net equity (net assets at book value) [25% × (€3,800,000 + (20,000 – 8,000) – 3,200)] €952,200
EXAMPLE 6

Equity Method with Sale of Inventory: Downstream Sale

Jones Company owns 25% of Jason Company (both fictitious companies) and appropriately applies the equity method of accounting. Amortization of excess purchase price, related to undervalued assets at the time of the investment, is €8,000 per year. During 2011 Jones sold €96,000 of inventory to Jason for €160,000. Jason resold €120,000 of this inventory during 2011. The remainder was sold in 2012. Jason reports income from its operations of €800,000 in 2011 and €820,000 in 2012.

1. Calculate the equity income to be reported as a line item on Jones’s 2011 income statement.

2. Calculate the equity income to be reported as a line item on Jones’s 2012 income statement.

Solution to 1:

Equity Income 2011

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jones’s share of Jason’s reported income (25% ×</td>
<td>€200,000</td>
</tr>
<tr>
<td>€800,000)</td>
<td></td>
</tr>
<tr>
<td>Amortization of excess purchase price</td>
<td>(8,000)</td>
</tr>
<tr>
<td>Unrealized profit (25% × €16,000)</td>
<td>(4,000)</td>
</tr>
<tr>
<td>Equity income 2011</td>
<td>€188,000</td>
</tr>
</tbody>
</table>

Jones’s profit on the sale to Jason = €160,000 − 96,000 = €64,000

Jason sells 75% (€120,000/160,000) of the goods purchased from Jones; 25% is unsold.

Total unrealized profit = €64,000 × 25% = €16,000

Jones’s share of the unrealized profit = €16,000 × 25% = €4,000

Alternative approach:

Jones’s profit margin on sale to Jason: 40% (€64,000/€160,000)

Jason’s inventory of Jones’s goods at 31 Dec 2011: €40,000

Jones’s profit margin on this was 40% × 40,000 = €16,000

Jones’s share of profit on unsold goods = €16,000 × 25% = €4,000

Solution to 2:

Equity Income 2012
Jones’s share of Jason’s reported income (25% × €820,000)  €205,000
Amortization of excess purchase price (8,000)
Realized profit (25% × €16,000)  4,000
Equity income 2012  €201,000

Jason sells the remaining 25% of the goods purchased from Jones.

5.7 Disclosure

The notes to the financial statements are an integral part of the information necessary for investors. Both IFRS and US GAAP require disclosure about the assets, liabilities, and results of equity method investments. For example, in their 2011 annual report, Deutsche Bank reports that:

Investments in associates and jointly controlled entities are accounted for under the equity method of accounting. The Group’s share of the results of associates and jointly controlled entities is adjusted to conform to the accounting policies of the Group and are reported in the consolidated statement of income as net income (loss) from equity method investments. The Group’s share in the associate’s profit and losses resulting from intercompany sales is eliminated on consolidation.

Under the equity method of accounting, the Group’s investments in associates and jointly controlled entities are initially recorded at cost including any directly related transaction costs incurred in acquiring the associate, and subsequently increased (or decreased) to reflect both the Group’s pro-rata share of the post-acquisition net income (or loss) of the associate or jointly controlled entity and other movements included directly in the equity of the associate or jointly controlled entity. Goodwill arising on the acquisition of an associate or a jointly controlled entity is included in the carrying value of the investment (net of any accumulated impairment loss). As goodwill is not reported separately it is not specifically tested for impairment. Rather, the entire equity method investment is tested for impairment.

For practical reasons, associated companies’ results are sometimes included in the investor’s accounts with a certain time lag, normally not more than one quarter. Dividends from associated companies are not included in investor income because it would be a double counting. Applying the equity method recognizes the investor’s full share of the associate’s income. Dividends received involve exchanging a portion of equity interest for cash. In the consolidated balance sheet, the book value of shareholdings in associated companies is increased by the investor’s share of the company’s net income and reduced by amortization of surplus values and the amount of dividends received.

5.8 Issues for Analysts

Equity method accounting presents several challenges for analysis. First, analysts should question whether the equity method is appropriate. For example, an investor holding 19% of an associate may in fact exert significant influence but may attempt to avoid using the equity method to avoid reporting associate losses. On the other hand, an investor holding 25% of an associate may be unable to exert significant influence and may be unable to access cash flows, and yet may prefer the equity method to capture associate income.
Second, the investment account represents the investor’s percentage ownership in the net assets of the investee company through “one-line consolidation.” There can be significant assets and liabilities of the investee that are not reflected on the investor’s balance sheet, which will significantly affect debt ratios. Net margin ratios could be overstated because income for the associate is included in investor net income but is not specifically included in sales. An investor may actually control the investee with less than 50% ownership but prefer the financial results using the equity method. Careful analysis can reveal financial performance driven by accounting structure.

Finally, the analyst must consider the quality of the equity method earnings. The equity method assumes that a percentage of each dollar earned by the investee company is earned by the investor (i.e., a fraction of the dollar equal to the fraction of the company owned), even if cash is not received. Analysts should, therefore, consider potential restrictions on dividend cash flows (the statement of cash flows).

**BUSINESS COMBINATIONS**

Business combinations (controlling interest investments) involve the combination of two or more entities into a larger economic entity. Business combinations are typically motivated by expectations of added value through synergies, including potential for increased revenues, elimination of duplicate costs, tax advantages, coordination of the production process, and efficiency gains in the management of assets.23

Under IFRS, there is no distinction among business combinations based on the resulting structure of the larger economic entity. For all business combinations, one of the parties to the business combination is identified as the acquirer. Under US GAAP, an acquirer is identified, but the business combinations are categorized as merger, acquisition, or consolidation based on the legal structure after the combination. Each of these types of business combinations has distinctive characteristics that are described in Exhibit 7. Features of variable interest and special purpose entities are also described in Exhibit 7 because these are additional instances where control is exerted by another entity. Under both IFRS and US GAAP, business combinations are accounted for using the **acquisition method**.

**Exhibit 7  Types of Business Combinations**

**Merger**

The distinctive feature of a merger is that only one of the entities remains in existence. One hundred percent of the target is absorbed into the acquiring company. Company A may issue common stock, preferred stock, bonds, or pay cash to acquire the net assets. The net assets of Company B are transferred to Company A. Company B ceases to exist and Company A is the only entity that remains.

Company A + Company B = Company A

(continued)

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Acquisition
The distinctive feature of an acquisition is the legal continuity of the entities. Each entity continues operations but is connected through a parent–subsidiary relationship. Each entity is an individual that maintains separate financial records, but the parent (the acquirer) provides consolidated financial statements in each reporting period. Unlike a merger or consolidation, the acquiring company does not need to acquire 100% of the target. In fact, in some cases, it may acquire less than 50% and still exert control. If the acquiring company acquires less than 100%, non-controlling (minority) shareholders’ interests are reported on the consolidated financial statements.

\[
\text{Company A} + \text{Company B} = (\text{Company A} + \text{Company B})
\]

Consolidation
The distinctive feature of a consolidation is that a new legal entity is formed and none of the predecessor entities remain in existence. A new entity is created to take over the net assets of Company A and Company B. Company A and Company B cease to exist and Company C is the only entity that remains.

\[
\text{Company A} + \text{Company B} = \text{Company C}
\]

Special Purpose or Variable Interest Entities
The distinctive feature of a special purpose (variable interest) entity is that control is not usually based on voting control, because equity investors do not have a sufficient amount at risk for the entity to finance its activities without additional subordinated financial support. Furthermore, the equity investors may lack a controlling financial interest. The sponsoring company usually creates a special purpose entity (SPE) for a narrowly defined purpose. IFRS require consolidation if the substance of the relationship indicates control by the sponsor.

In May 2011, the IASB issued IFRS 10, Consolidated Financial Statements, which replaces IAS 27, Consolidated and Separate Financial Statements and SIC-12, Consolidation-Special Purpose Entities. The standard applies to annual periods beginning on or after 1 January 2013. The underlying framework is based on a new definition of control and achieves consistency in the consolidation criteria for all entities. The definition of control extends to a broad range of activities. The control concept requires judgment and evaluation of relevant factors to determine whether control exists. Control is present when 1) the investor has the ability to exert influence on the financial and operating policy of the entity; and 2) is exposed, or has rights, to variable returns from its involvement with the investee. Consolidation criteria apply to all entities that meet the definition of control.

US GAAP uses a two-component consolidation model that includes both a variable interest component and a voting interest (control) component. Under the variable interest component, US GAAP requires the primary beneficiary of a variable interest entity (VIE) to consolidate the VIE regardless of its voting interests (if any) in the VIE or its decision-making authority. The primary beneficiary is defined as 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.

24 FASB ASC Topic 810 [Consolidation].
In the past, business combinations could be accounted for either as a purchase transaction or as a uniting (or pooling) of interests. The accounting standards that currently govern business combinations are reflective of the joint project between IASB and FASB to converge on a single set of high-quality accounting standards. The first phase of the project prohibited the use of the pooling of interests (uniting of interests) method, required the use of the purchase method, and prohibited the amortization of goodwill.

Since that time, the FASB and IASB have further reduced differences between IFRS and US GAAP and ensured that the standards would be applied consistently. IFRS and US GAAP now require that all business combinations be accounted for in a similar manner. The acquisition method developed by the IASB and the FASB replaces the purchase method, and substantially reduces any differences between IFRS and US GAAP for business combinations.

These standards are expected to improve the relevance, representational faithfulness, transparency, and comparability of information provided in financial statements about business combinations and their effects on the reporting entity. This reporting consistency should make it easier for analysts to evaluate how the operations of the acquirer and the target business (the acquiree) will combine and the effect of this transaction on the combined entity’s subsequent financial performance.

6.1 Pooling of Interests and Purchase Methods

Prior to June 2001, under US GAAP, combining companies that met twelve strict criteria could use the pooling of interests method for the business combination. Companies not meeting these criteria used the purchase method. In a pooling of interests, the combined companies were portrayed as if they had always operated as a single economic entity. Consequently, assets and liabilities were recorded at book values, and the pre-combination retained earnings were included in the balance sheet of the combined entity. This treatment was consistent with the view that there was a continuity of ownership and no new basis of accounting existed. Similar rules applied under IFRS, which used the term uniting of interests in reference to the same concept. IFRS permitted use of the uniting of interests method until March 2004. Currently, neither IFRS nor US GAAP allows use of the pooling/uniting of interests method.

In contrast, a combination accounted for as a purchase was viewed as a purchase of net assets (tangible and intangible assets minus liabilities), and those net assets were recorded at fair values. An increase in the value of depreciable assets resulted in additional depreciation expense. As a result, for the same level of revenue, the purchase method resulted in lower reported income than the pooling of interests method. For this reason, managers had a tendency to favor the pooling of interests method.

Although the pooling of interests method is no longer allowed, companies may continue to use pooling of interests accounting for business combinations that occurred prior to its disallowance as a method. We describe the method because pooling of interests accounting was commonly used and will have an impact on financial statements for the foreseeable future. Because of the ongoing effect, an understanding of pooling of interests will facilitate the analyst’s assessment of the performance and financial position of the company.

25 IFRS 10, Consolidated Financial Statements; IFRS 3, Business Combinations; FASB ASC Topic 805 [Business Combinations]; FASB ASC Topic 810 [Consolidations].
6.2 Acquisition Method

IFRS and US GAAP currently require the acquisition method of accounting for business combinations, although both have a few specific exemptions.

Fair value of the consideration given by the acquiring company is the appropriate measurement for acquisitions and includes the acquisition-date fair value of contingent consideration. Direct costs of the business combination, such as professional and legal fees, valuation experts, and consultants, are expensed as incurred.

The acquisition method (which replaces the purchase method) addresses three major accounting issues that often arise in business combinations and the preparation of consolidated (combined) financial statements:

- The recognition and measurement of the assets and liabilities of the combined entity;
- The initial recognition and subsequent accounting for goodwill; and
- The recognition and measurement of any non-controlling interest.

6.2.1 Recognition and Measurement of Identifiable Assets and Liabilities

IFRS and US GAAP require that the acquirer measure the identifiable tangible and intangible assets and liabilities of the acquiree (acquired entity) at fair value as of the date of the acquisition. The acquirer must also recognize any assets and liabilities that the acquiree had not previously recognized as assets and liabilities in its financial statements. For example, identifiable intangible assets (for example, brand names, patents, technology) that the acquiree developed internally would be recognized by the acquirer.

6.2.2 Recognition and Measurement of Contingent Liabilities

On the acquisition date, the acquirer must recognize any contingent liability assumed in the acquisition if 1) it is a present obligation that arises from past events, and 2) it can be measured reliably. Costs that the acquirer expects (but is not obliged) to incur, however, are not recognized as liabilities as of the acquisition date. Instead, the acquirer recognizes these costs in future periods as they are incurred. For example, expected restructuring costs arising from exiting an acquiree’s business will be recognized in the period in which they are incurred.

There is a difference between IFRS and US GAAP in their inclusion of contingent liabilities. IFRS include contingent liabilities if their fair values can be reliably measured. US GAAP includes only those contingent liabilities that are probable and can be reasonably estimated.

6.2.3 Recognition and Measurement of Indemnification Assets

On the acquisition date, the acquirer must recognize an indemnification asset if the seller (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. The seller may also indemnify the acquirer against losses above a specified amount on a liability arising from a particular contingency. For example, the seller guarantees that an acquired contingent liability will not exceed a specified amount. In this situation, the acquirer recognizes an indemnification asset at the same time it recognizes the indemnified liability, with both measured on the same basis. If the

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26 A contingent liability must be recognized even if it is not probable that an outflow of resources or economic benefits will be used to settle the obligation.
indemnification relates to an asset or a liability that is recognized at the acquisition date and measured at its acquisition date fair value, the acquirer will also recognize the indemnification asset at the acquisition date at its acquisition date fair value.

6.2.4 Recognition and Measurement of Financial Assets and Liabilities

At the acquisition date, identifiable assets and liabilities acquired are classified in accordance with IASB (or US GAAP) standards. The acquirer reclassifies the financial assets and liabilities of the acquiree based on the contractual terms, economic conditions, and the acquirer’s operating or accounting policies, as they exist at the acquisition date.

6.2.5 Recognition and Measurement of Goodwill

IFRS allows two options for recognizing goodwill at the transaction date. The goodwill option is on a transaction-by-transaction basis. “Partial goodwill” is measured as the fair value of the acquisition (fair value of consideration given) less the acquirer’s share of the fair value of all identifiable tangible and intangible assets, liabilities, and contingent liabilities acquired. “Full goodwill” is measured as the fair value of the entity as a whole less the fair value of all identifiable tangible and intangible assets, liabilities, and contingent liabilities. US GAAP views the entity as a whole and requires full goodwill. Because goodwill is considered to have an indefinite life, it is not amortized. Instead, it is tested for impairment annually or more frequently if events or circumstances indicate that goodwill might be impaired.

EXAMPLE 7

Recognition and Measurement of Goodwill

Acquirer contributes $800,000 for an 80% interest in Acquiree. The identifiable net assets have a fair value of $900,000. The fair value of the entire entity is determined to be $1 million.

<table>
<thead>
<tr>
<th></th>
<th>IFRS Partial Goodwill</th>
<th>IFRS and US GAAP Full Goodwill</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fair value of consideration</td>
<td>$800,000</td>
<td>$1,000,000</td>
</tr>
<tr>
<td>80% of Fair value of identifiable net assets</td>
<td>720,000</td>
<td>900,000</td>
</tr>
<tr>
<td>Goodwill recognized</td>
<td>$80,000</td>
<td>$100,000</td>
</tr>
</tbody>
</table>

27 FASB ASC Topic 805 [Business Combinations].
6.2.6  Recognition and Measurement when Acquisition Price Is Less than Fair Value

Occasionally, a company faces adverse circumstances such that its market value drops below the fair value of its net assets. In an acquisition of such a company, where the purchase price is less than the fair value of the target’s (acquiree’s) net assets, the acquisition is considered to be a bargain acquisition. IFRS and US GAAP require the difference between the fair value of the acquired net assets and the purchase price to be recognized 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.

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

Example 8 shows the consolidated balance sheet of an acquiring company after the acquisition.

**EXAMPLE 8**

**Acquisition Method Post-Combination Balance Sheet**

Franklin Company, headquartered in France, acquired 100% of the outstanding shares of Jefferson, Inc. by issuing 1,000,000 shares of its €1 par common stock (€15 market value). Immediately before the transaction, the two companies compiled the following information:

<table>
<thead>
<tr>
<th></th>
<th>Franklin Book Value (000)</th>
<th>Jefferson Book Value (000)</th>
<th>Jefferson Fair Value (000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash and receivables</td>
<td>€10,000</td>
<td>€300</td>
<td>€300</td>
</tr>
<tr>
<td>Inventory</td>
<td>€12,000</td>
<td>€1,700</td>
<td>€3,000</td>
</tr>
<tr>
<td>PP&amp;E (net)</td>
<td>€27,000</td>
<td>€2,500</td>
<td>€4,500</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>€49,000</td>
</tr>
<tr>
<td>Current payables</td>
<td>€8,000</td>
<td>€600</td>
<td>€600</td>
</tr>
<tr>
<td>Long-term debt</td>
<td>€16,000</td>
<td>€2,000</td>
<td>€1,800</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>€24,000</td>
</tr>
<tr>
<td>Net assets</td>
<td>€25,000</td>
<td>€1,900</td>
<td>€5,400</td>
</tr>
<tr>
<td>Shareholders’ equity:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capital stock (€1 par)</td>
<td>€5,000</td>
<td>€400</td>
<td></td>
</tr>
<tr>
<td>Additional paid in capital</td>
<td>€6,000</td>
<td>€700</td>
<td></td>
</tr>
<tr>
<td>Retained earnings</td>
<td>€14,000</td>
<td>€800</td>
<td></td>
</tr>
</tbody>
</table>

Jefferson has no identifiable intangible assets. Show the balances in the post-combination balance sheet using the acquisition method.

**Solution:**

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

- Fair value of the stock issued (1,000,000 shares at market value of €15) = €15,000,000
- Book value of Jefferson's net assets = €1,900,000
Excess purchase price | €13,100,000
Fair value of the stock issued | €15,000,000
Fair value allocated to identifiable net assets | 5,400,000
Goodwill | €9,600,000

Allocation of excess purchase price (based on the differences between fair values and book values):

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount (000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inventory</td>
<td>€1,300,000</td>
</tr>
<tr>
<td>PP&amp;E (net)</td>
<td>2,000,000</td>
</tr>
<tr>
<td>Long-term debt</td>
<td>200,000</td>
</tr>
<tr>
<td>Goodwill</td>
<td>9,600,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>€13,100,000</strong></td>
</tr>
</tbody>
</table>

Both IFRS and US GAAP record the fair value of the acquisition at the market value of the stock issued, or €15,000,000. In this case, the purchase price exceeds the book value of Jefferson's net assets by €13,100,000. Inventory, PP&E (net), and long-term debt are adjusted to fair values. The excess of the purchase price over the fair value of identifiable net assets results in goodwill recognition of €9,600,000.

The post-combination balance sheet of the combined entity would appear as follows:

<table>
<thead>
<tr>
<th><strong>Franklin Consolidated Balance Sheet (Acquisition Method) (000)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash and receivables</td>
</tr>
<tr>
<td>Inventory</td>
</tr>
<tr>
<td>PP&amp;E (net)</td>
</tr>
<tr>
<td>Goodwill</td>
</tr>
<tr>
<td>Total assets</td>
</tr>
<tr>
<td>Current payables</td>
</tr>
<tr>
<td>Long-term debt</td>
</tr>
<tr>
<td>Total liabilities</td>
</tr>
<tr>
<td>Capital stock (€1 par)</td>
</tr>
<tr>
<td>Additional paid in capital</td>
</tr>
<tr>
<td>Retained earnings</td>
</tr>
<tr>
<td>Total stockholders’ equity</td>
</tr>
<tr>
<td>Total liabilities and stockholders’ equity</td>
</tr>
</tbody>
</table>

Assets and liabilities are combined using book values of Franklin plus fair values for the assets and liabilities acquired from Jefferson. For example, the book value of Franklin's inventory (€12,000,000) is added to the fair value of inventory acquired from Jefferson (€3,000,000) for a combined inventory of €15,000,000.

28 Under the uniting (pooling) of interests method (which required an exchange of common shares), the shares issued by Franklin would be measured at their par value. In addition, the assets and liabilities of both companies would be combined at their book values resulting in no goodwill being recognized. The retained earnings of Jefferson would also be combined with that of Franklin on the consolidated balance sheet. Uniting (pooling) of interests method is not allowed for transactions initiated after 2004.
Long-term debt has a book value of €16,000,000 on Franklin’s pre-acquisition statements, and Jefferson’s fair value of debt is €1,800,000. The combined long-term debt is recorded as €17,800,000.

Franklin’s post-merger financial statement reflects in stockholders’ equity the stock issued by Franklin to acquire Jefferson. Franklin issues stock with a par value of €1,000,000; however, the stock is measured at fair value under both IFRS and US GAAP. Therefore, the consideration exchanged is 1,000,000 shares at market value of €15, or €15,000,000. Prior to the transaction, Franklin had 5,000,000 shares of €1 par stock outstanding (€5,000,000). The combined entity reflects the Franklin capital stock outstanding of €6,000,000 (€5,000,000 plus the additional 1,000,000 shares of €1 par stock issued to effect the transaction). Franklin’s additional paid in capital in capital of €6,000,000 is increased by the €14,000,000 additional paid in capital from the issuance of the 1,000,000 shares (€15,000,000 less par value of €1,000,000) for a total of €20,000,000. At the acquisition date, 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.

In the periods subsequent to the business combination, the financial statements continue to be affected by the acquisition method. Net income reflects the performance of the combined entity. Under the acquisition method, amortization/depreciation is based on historical cost of Franklin’s assets and the fair value of Jefferson’s assets. Using Example 8, as Jefferson’s acquired inventory is sold, the cost of goods sold would be €1,300,000 higher and depreciation on PP&E would be €2,000,000 higher over the life of the asset than under the pooling of interests method or if the companies had not combined.29

6.4 The Consolidation Process

Consolidated financial statements combine the separate financial statements for distinct legal entities, the parent and its subsidiaries, as if they were one economic unit. Consolidation combines the assets, liabilities, revenues, and expenses of subsidiaries with the parent company. Transactions between the parent and subsidiary (intercompany transactions) are eliminated to avoid double counting and premature income recognition. Consolidated statements are presumed to be more meaningful in terms of representational faithfulness. It is important for the analyst to consider the differences in IFRS and US GAAP, valuation bases, and other factors that could impair the validity of comparative analyses.

6.4.1 Business Combination with Less than 100% Acquisition

The acquirer purchases 100% of the equity of the target company in a transaction structured as a merger or consolidation. For a transaction structured as an acquisition, however, the acquirer does not have to purchase 100% of the equity of the target in order to achieve control. The acquiring company may purchase less than 100% of the target because it may be constrained by resources or it may be unable to acquire all the outstanding shares. As a result, both the acquirer and the target remain separate

29 Under the pooling method, cost of goods sold and depreciation expense would be lower, because both would be based on the book value of the Jefferson’s assets. Therefore, analysts must be aware of companies that used the uniting (pooling) of interests prior to the method being disallowed. This is because in the periods after pooling was disallowed, the assets of an entity that had used uniting of interests (pooling) may be understated and income overstated relative to companies that used the acquisition method. These differences will affect the comparability of return on investment ratios.
legal entities. Both IFRS and US GAAP presume a company has control if it owns more than 50% of the voting shares of an entity. In this case, the acquiring company is viewed as the parent, and the target company is viewed as the subsidiary. Both the parent and the subsidiary typically prepare their own financial records, but the parent also prepares consolidated financial statements at each reporting period. The consolidated financial statements are the primary source of information for investors and analysts.

6.4.2 Non-controlling (Minority) Interests: Balance Sheet

A non-controlling (minority) interest is the portion of the subsidiary’s equity (residual interest) that is held by third parties (i.e., not owned by the parent). Non-controlling interests are created when the parent acquires less than a 100% controlling interest in a subsidiary. IFRS and US GAAP have similar treatment for how non-controlling interests are classified. Non-controlling interests in consolidated subsidiaries are presented on the consolidated balance sheet as a separate component of stockholders’ equity. IFRS and US GAAP differ, however, on the measurement of non-controlling interests. Under IFRS, the parent can measure 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 US GAAP, the parent must use the full goodwill method and measure the non-controlling interest at fair value.

Example 9 illustrates the differences in reporting requirements.

### EXAMPLE 9

**Non-controlling Asset Valuation**

On 1 January 2012, the hypothetical Parent Co. acquired 90% of the outstanding shares of the hypothetical Subsidiary Co. in exchange for shares of Parent Co.’s no par common stock with a fair value of €180,000. The fair market value of the subsidiary’s shares on the date of the exchange was €200,000. Below is selected financial information from the two companies immediately prior to the exchange of shares (before the parent recorded the acquisition):

<table>
<thead>
<tr>
<th>Parent Book Value</th>
<th>Subsidiary Book Value</th>
<th>Fair Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash and receivables</td>
<td>€40,000</td>
<td>€15,000</td>
</tr>
<tr>
<td>Inventory</td>
<td>125,000</td>
<td>80,000</td>
</tr>
<tr>
<td>PP&amp;E (net)</td>
<td>235,000</td>
<td>95,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>€400,000</strong></td>
<td><strong>€190,000</strong></td>
</tr>
<tr>
<td>Payables</td>
<td>55,000</td>
<td>20,000</td>
</tr>
<tr>
<td>Long-term debt</td>
<td>120,000</td>
<td>70,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>€175,000</strong></td>
<td><strong>€90,000</strong></td>
</tr>
<tr>
<td>Net assets</td>
<td>€225,000</td>
<td>€100,000</td>
</tr>
</tbody>
</table>

*(continued)*

30 IFRS 10, Consolidated Financial Statements and FASB ASC Topic 810 [Consolidation].
1. Calculate the value of PP&E (net) on the consolidated balance sheet under both IFRS and US GAAP.

2. Calculate the value of goodwill and the value of the non-controlling interest at the acquisition date under the full goodwill method.

3. Calculate the value of goodwill and the value of the non-controlling interest at the acquisition date under the partial goodwill method.

Solution to 1:
Relative to fair value, the PP&E of the subsidiary is understated by €60,000. Under the acquisition method (IFRS and US GAAP), as long as the parent has control over the subsidiary (i.e., regardless of whether the parent had purchased 51% or 100% of the subsidiary’s stock), it would include 100% of the subsidiary’s assets and liabilities at fair value on the consolidated balance sheet. Therefore, PP&E on the consolidated balance sheet would be valued at €390,000.

Solution to 2:
Under the full goodwill method (mandatory under US GAAP and optional under IFRS), goodwill on the consolidated balance sheet would be the difference between the total fair value of the subsidiary and the fair value of the subsidiary’s identifiable net assets.

<table>
<thead>
<tr>
<th>Fair value of the subsidiary</th>
<th>€200,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fair value of subsidiary’s identifiable net assets</td>
<td>160,000</td>
</tr>
<tr>
<td>Goodwill</td>
<td>€40,000</td>
</tr>
</tbody>
</table>

The value of the non-controlling interest is equal to the non-controlling interest’s proportionate share of the subsidiary’s fair value. The non-controlling interest’s proportionate share of the subsidiary is 10% and the fair value of the subsidiary is €200,000 on the acquisition date. Under the full goodwill method, the value of the non-controlling interest would be €20,000 (10% × €200,000).

Solution to 3:
Under the partial goodwill method (IFRS only), goodwill on the parent’s consolidated balance sheet would be €36,000, the difference between the purchase price and the parent’s proportionate share of the subsidiary’s identifiable assets.

<table>
<thead>
<tr>
<th>Acquisition price</th>
<th>€180,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>90% of fair value</td>
<td>144,000</td>
</tr>
<tr>
<td>Goodwill</td>
<td>€36,000</td>
</tr>
</tbody>
</table>

The value of the non-controlling interest is equal to the non-controlling interest’s proportionate share of the fair value of the subsidiary’s identifiable net assets. The non-controlling interest’s proportionate share is 10%, and the fair value of the subsidiary’s identifiable net assets on the acquisition date is €160,000. Under the partial goodwill method, the value of the non-controlling interest would be €16,000 (10% × €160,000).

Regardless of which method is used, goodwill is not amortized under either IFRS or US GAAP but it is tested for impairment at least annually.
For comparative purposes, below is the balance sheet at the acquisition date under the full goodwill and partial goodwill methods.

<table>
<thead>
<tr>
<th>Comparative Consolidated Balance Sheet at Acquisition Date: Acquisition Method</th>
<th>Full Goodwill</th>
<th>Partial Goodwill</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash and receivables</td>
<td>€55,000</td>
<td>€55,000</td>
</tr>
<tr>
<td>Inventory</td>
<td>205,000</td>
<td>205,000</td>
</tr>
<tr>
<td>PP&amp;E (net)</td>
<td>390,000</td>
<td>390,000</td>
</tr>
<tr>
<td>Goodwill</td>
<td>40,000</td>
<td>36,000</td>
</tr>
<tr>
<td>Total assets</td>
<td>€690,000</td>
<td>€686,000</td>
</tr>
<tr>
<td>Payables</td>
<td>€75,000</td>
<td>€75,000</td>
</tr>
<tr>
<td>Long-term debt</td>
<td>190,000</td>
<td>190,000</td>
</tr>
<tr>
<td>Total liabilities</td>
<td>€265,000</td>
<td>€265,000</td>
</tr>
</tbody>
</table>

Shareholders’ equity:

| Noncontrolling interests | €20,000 | €16,000 |
| Capital stock (no par) | €267,000 | €267,000 |
| Retained earnings | 138,000 | 138,000 |
| Total equity | €425,000 | €421,000 |

| Total liabilities and shareholders’ equity | €690,000 | €686,000 |

### 6.4.3 Non-controlling (Minority) Interests: Income Statement

On the income statement, non-controlling (minority) interests are presented as a line item reflecting the allocation of profit or loss for the period. Intercompany transactions, if any, are eliminated in full.

Using assumed data consistent with the facts in Example 9, the amounts included for the subsidiary in the consolidated income statements under IFRS and US GAAP are presented below:

<table>
<thead>
<tr>
<th></th>
<th>Full Goodwill</th>
<th>Partial Goodwill</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>€250,000</td>
<td>€250,000</td>
</tr>
<tr>
<td>Cost of goods sold</td>
<td>137,500</td>
<td>137,500</td>
</tr>
<tr>
<td>Interest expense</td>
<td>10,000</td>
<td>10,000</td>
</tr>
<tr>
<td>Depreciation expense</td>
<td>39,000</td>
<td>39,000</td>
</tr>
<tr>
<td>Income from continuing operations</td>
<td>€63,500</td>
<td>€63,500</td>
</tr>
<tr>
<td>Non-controlling interest (10%)</td>
<td>(6,350)</td>
<td>(6,350)</td>
</tr>
<tr>
<td>Consolidated net income to parent’s shareholders</td>
<td>€57,150</td>
<td>€57,150</td>
</tr>
</tbody>
</table>

Income to the parent’s shareholders is €57,150 using either method. This is because the fair value of the PP&E is allocated to non-controlling shareholders as well as to the controlling shareholders under the full goodwill and the partial goodwill methods. Therefore, the non-controlling interests will share in the adjustment for excess
depreciation resulting from the €60,000 increase in PP&E. Because depreciation expense is the same under both methods, it results in identical net income to all shareholders, whichever method is used to recognize goodwill and to measure the non-controlling interest.

Although net income to parent’s shareholders is the same, the impact on ratios would be different because total assets and stockholders’ equity would differ.

### Impact on Ratios

<table>
<thead>
<tr>
<th></th>
<th>Full Goodwill (%)</th>
<th>Partial Goodwill (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Return on assets</td>
<td>8.28</td>
<td>8.33</td>
</tr>
<tr>
<td>Return on equity</td>
<td>13.45</td>
<td>13.57</td>
</tr>
</tbody>
</table>

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

### 6.4.4 Goodwill Impairment

Although goodwill is not amortized, it must be tested for impairment at least annually or more frequently if events or changes in circumstances indicate that it might be impaired. If it is probable that some or all of the goodwill will not be recovered through the profitable operations of the combined entity, it should be partially or fully written off by charging it to an expense. Once written down, goodwill cannot be later restored.

IFRS and US GAAP differ on the definition of the levels at which goodwill is assigned and how goodwill is tested for impairment.

*Under IFRS*, at the time of acquisition, the total amount of goodwill recognized is allocated to each of the acquirer’s cash-generating units that will benefit from the expected synergies resulting from the combination with the target. A cash-generating unit represents the lowest level within the combined entity at which goodwill is monitored for impairment purposes. Goodwill impairment testing is then conducted under a one-step approach. The recoverable amount of a cash-generating unit is calculated and compared with the carrying value of the cash-generating unit. An impairment loss is recognized if the recoverable amount of the cash-generating unit is less than its carrying value. The impairment loss (the difference between these two amounts) is first applied to the goodwill that has been allocated to the cash-generating unit. Once this has been reduced to zero, the remaining amount of the loss is then allocated to all of the other non-cash assets in the unit on a pro rata basis.

*Under US GAAP*, at the time of acquisition, the total amount of goodwill recognized is allocated to each of the acquirer’s reporting units. A reporting unit is an operating segment or component of an operating segment that is one level below the operating segment as a whole. Goodwill impairment testing is then conducted under a two-step approach: identification of impairment and then measurement of the loss. First, the carrying amount of the reporting unit (including goodwill) is compared to its fair value. If the carrying value of the reporting unit exceeds its fair value, potential

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31 A cash-generating unit is the smallest identifiable group of assets that generates cash inflows that are largely independent of the cash inflows from other assets or groups of assets.

32 The recoverable amount of a cash-generating unit is the higher of net selling price (i.e., fair value less costs to sell) and its value in use. Value in use is the present value of the future cash flows expected to be derived from the cash-generating unit. The carrying value of a cash-generating unit is equal to the carrying value of the unit’s assets and liabilities including the goodwill that has been allocated to that unit.
impairment has been identified. The second step is then performed to measure the amount of the impairment loss. The amount of the impairment loss is the difference between the implied fair value of the reporting unit’s goodwill and its carrying amount. The implied fair value of goodwill is determined in the same manner as in a business combination (it is the difference between the fair value of the reporting unit and the fair value of the reporting unit’s assets and liabilities). The impairment loss is applied to the goodwill that has been allocated to the reporting unit. After the goodwill of the reporting unit has been eliminated, no other adjustments are made automatically to the carrying values of any of the reporting unit’s other assets or liabilities. However, it may be prudent to test other asset values for recoverability and possible impairment.

Under both IFRS and US GAAP, the impairment loss is recorded as a separate line item in the consolidated income statement.

**EXAMPLE 10**

**Goodwill Impairment: IFRS**

The cash-generating unit of a French company has a carrying value of €1,400,000, which includes €300,000 of allocated goodwill. The recoverable amount of the cash-generating unit is determined to be €1,300,000, and the estimated fair value of its identifiable net assets is €1,200,000. Calculate the impairment loss.

**Solution:**

<table>
<thead>
<tr>
<th>Recoverable amount of unit</th>
<th>€1,300,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carrying amount of unit</td>
<td>1,400,000</td>
</tr>
<tr>
<td>Impairment loss</td>
<td>€100,000</td>
</tr>
</tbody>
</table>

The impairment loss of €100,000 is reported on the income statement, and the goodwill allocated to the cash-generating unit would be reduced by €100,000 to €200,000.

If the recoverable amount of the cash-generating unit had been €800,000 instead of €1,300,000, the impairment loss recognized would be €600,000. This would first be absorbed by the goodwill allocated to the unit (€300,000). Once this has been reduced to zero, the remaining amount of the impairment loss (€300,000) would then be allocated on a pro rata basis to the other non-cash assets within the unit.

**EXAMPLE 11**

**Goodwill Impairment: US GAAP**

A reporting unit of a US corporation (e.g., a division) has a fair value of $1,300,000 and a carrying value of $1,400,000 that includes recorded goodwill of $300,000. The estimated fair value of the identifiable net assets of the reporting unit at the impairment test date is $1,200,000. Calculate the impairment loss.

**Solution:**

**Step 1 – Determination of an Impairment Loss**

Because the fair value of the reporting unit is less than its carrying book value, a potential impairment loss has been identified.

Fair value of unit: $1,300,000 < $1,400,000
Step 2 – Measurement of the Impairment Loss

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fair value of reporting unit</td>
<td>$1,300,000</td>
</tr>
<tr>
<td>Less: net assets</td>
<td>1,200,000</td>
</tr>
<tr>
<td>Implied goodwill</td>
<td>$100,000</td>
</tr>
<tr>
<td>Current carrying value of goodwill</td>
<td>$300,000</td>
</tr>
<tr>
<td>Less: implied goodwill</td>
<td>100,000</td>
</tr>
<tr>
<td>Impairment loss</td>
<td>$200,000</td>
</tr>
</tbody>
</table>

The impairment loss of $200,000 is reported on the income statement, and the goodwill allocated to the reporting unit would be reduced by $200,000 to $100,000.

If the fair value of the reporting unit was $800,000 (instead of $1,300,000), the implied goodwill would be a negative $400,000. In this case, the maximum amount of the impairment loss recognized would be $300,000, the carrying amount of goodwill.

6.5 Financial Statement Presentation Subsequent to the Business Combination

The presentation of consolidated financial statements is similar under IFRS and US GAAP. For example, selected financial statements for GlaxoSmithKline are shown in Exhibits 8 and 9. GlaxoSmithKline is a leading pharmaceutical company headquartered in the United Kingdom.

The consolidated balance sheet in Exhibit 8 combines the operations of GlaxoSmithKline and its subsidiaries. The analyst can observe that in 2011 GlaxoSmithKline had investments in financial assets (other investments of £590,000,000 and liquid investments of £184,000,000), and investments in associates and joint ventures of £560,000,000. In 2011 GlaxoSmithKline acquired 100% interests in four companies. The increase in goodwill on the balance sheet reflects the fact that GlaxoSmithKline paid an amount in excess of the fair value of the identifiable net assets in these acquisitions. The analyst can also note that GlaxoSmithKline is the parent company in a less than 100% acquisition. The minority interest of £795,000,000 in the equity section is the portion of the combined entity that accrues to non-controlling shareholders.

<p>| Exhibit 8 GlaxoSmithKline Consolidated Balance Sheet at 31 December 2011 |
|---------------------------------------------------------------|--------|--------|</p>
<table>
<thead>
<tr>
<th>Notes</th>
<th>2011 £m</th>
<th>2010 £m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-current assets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property, plant and equipment</td>
<td>17</td>
<td>8,748</td>
</tr>
<tr>
<td>Goodwill</td>
<td>18</td>
<td>3,754</td>
</tr>
<tr>
<td>Other intangible assets</td>
<td>19</td>
<td>7,802</td>
</tr>
<tr>
<td>Investments in associates and joint ventures</td>
<td>20</td>
<td>560</td>
</tr>
<tr>
<td>Other investments</td>
<td>21</td>
<td>590</td>
</tr>
<tr>
<td>Deferred tax assets</td>
<td>14</td>
<td>2,849</td>
</tr>
<tr>
<td>Derivative financial instruments</td>
<td>41</td>
<td>85</td>
</tr>
</tbody>
</table>
The consolidated income statement for GlaxoSmithKline is presented in Exhibit 9. IFRS and US GAAP have similar formats for consolidated income statements. Each line item (e.g., turnover [sales], cost of sales, etc.) includes 100% of the parent and the
subsidiary transactions after eliminating any **upstream** (subsidiary sells to parent) or **downstream** (parent sells to subsidiary) intercompany transactions. The portion of income accruing to non-controlling shareholders is presented as a separate line item on the consolidated income statement. Note that net income would be the same under IFRS and US GAAP.\(^{33}\) The analyst will need to make adjustments for any analysis comparing specific line items that might differ between IFRS and US GAAP.

---

**Exhibit 9  GlaxoSmithKline Consolidated Income Statement for the Year Ended 31 December 2011**

<table>
<thead>
<tr>
<th></th>
<th>Notes</th>
<th>2011</th>
<th>2010</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Results before major restructuring business performance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Notes</td>
<td>£m</td>
<td>£m</td>
<td>£m</td>
<td>£m</td>
</tr>
<tr>
<td>Turnover</td>
<td>27,387</td>
<td>28,392</td>
<td>28,368</td>
<td></td>
</tr>
<tr>
<td>Cost of sales</td>
<td>(7,259)</td>
<td>(7,592)</td>
<td>(7,380)</td>
<td></td>
</tr>
<tr>
<td>Gross profit</td>
<td>20,128</td>
<td>20,555</td>
<td>20,988</td>
<td></td>
</tr>
<tr>
<td>Selling, general and administration</td>
<td>(8,429)</td>
<td>(13,053)</td>
<td>(9,592)</td>
<td></td>
</tr>
<tr>
<td>Research and development</td>
<td>(3,912)</td>
<td>(4,457)</td>
<td>(4,106)</td>
<td></td>
</tr>
<tr>
<td>Other operating income</td>
<td>610</td>
<td>493</td>
<td>1,135</td>
<td></td>
</tr>
<tr>
<td><strong>Operating profit</strong></td>
<td>8,397</td>
<td>7,807</td>
<td>8,425</td>
<td></td>
</tr>
<tr>
<td>Finance income</td>
<td>90</td>
<td>90</td>
<td>116</td>
<td>70</td>
</tr>
<tr>
<td>Finance costs</td>
<td>(797)</td>
<td>(831)</td>
<td>(783)</td>
<td></td>
</tr>
<tr>
<td>Profit on disposal of interests in Associates</td>
<td>585</td>
<td>585</td>
<td>8</td>
<td>115</td>
</tr>
<tr>
<td>Share of after tax profits of associates and joint ventures</td>
<td>15</td>
<td>81</td>
<td>64</td>
<td></td>
</tr>
<tr>
<td><strong>Profit before taxation</strong></td>
<td>8,290</td>
<td>7,698</td>
<td>3,157</td>
<td>7,891</td>
</tr>
<tr>
<td><strong>Taxation</strong></td>
<td>(2,354)</td>
<td>(1,304)</td>
<td>(2,222)</td>
<td></td>
</tr>
<tr>
<td><strong>Profit after taxation for the year</strong></td>
<td>5,936</td>
<td>5,458</td>
<td>1,853</td>
<td>5,669</td>
</tr>
<tr>
<td>Profit attributable to non-controlling interests</td>
<td>197</td>
<td>197</td>
<td>219</td>
<td>138</td>
</tr>
<tr>
<td>Profit attributable to shareholders</td>
<td>5,739</td>
<td>5,261</td>
<td>1,634</td>
<td>5,531</td>
</tr>
<tr>
<td>5,936</td>
<td>(478)</td>
<td>1,853</td>
<td>5,669</td>
<td></td>
</tr>
</tbody>
</table>

\(^{33}\) It is possible, however, for differences to arise through the application of different accounting rules (e.g., valuation of fixed assets).
### 6.6 Variable Interest and Special Purpose Entities

Special purpose entities (SPEs) are enterprises that are created to accommodate specific needs of the sponsoring entity.\(^\text{34}\) The sponsoring entity (on whose behalf the SPE is created) frequently transfers assets to the SPE, obtains the right to use assets held by the SPE, or performs services for the SPE, while other parties (capital providers) provide funding to the SPE. SPEs can be a legitimate financing mechanism for a company to segregate certain activities and thereby reduce risk. SPEs may take the form of a limited liability company (corporation), trust, partnership, or unincorporated entity. They are often created with legal arrangements that impose strict and sometimes permanent limits on the decision-making powers of their governing board or management.

Beneficial interest in an SPE may take the form of a debt instrument, an equity instrument, a participation right, or a residual interest in a lease. Some beneficial interests may simply provide the holder with a fixed or stated rate of return, while beneficial interests give the holder the rights or the access to future economic benefits of the SPE’s activities. In most cases, the creator/sponsor of the entity retains a significant beneficial interest in the SPE even though it may own little or none of the SPE’s voting equity.

In the past, sponsors were able to avoid consolidating SPEs on their financial statements because they did not have “control” (i.e., own a majority of the voting interest) of the SPE. SPEs were structured so that the sponsoring company had financial control over their assets or operating activities, while third parties held the majority of the voting interest in the SPE.

These outside equity participants often funded their investments in the SPE with debt that was either directly or indirectly guaranteed by the sponsoring companies. The sponsoring companies, in turn, were able to avoid the disclosure of many of these guarantees as well as their economic significance. In addition, many sponsoring companies created SPEs to facilitate the transfer of assets and liabilities from their own balance sheets. As a result, they were able to recognize large amounts of revenue and gains, because these transactions were accounted for as sales. By avoiding consolidation, sponsoring companies did not have to report the assets and the liabilities of the SPE; financial performance as measured by the unconsolidated financial statements was potentially misleading. The benefit to the sponsoring company was improved asset turnover, lower operating and financial leverage metrics, and higher profitability.

---

\(^{34}\) The term “special purpose entity” is used by IFRS and “variable interest entity” and “special purpose entity” is used by US GAAP.
Enron, for example, used SPEs to obtain off-balance sheet financing and artificially improve its financial performance. Its subsequent collapse was partly attributable to its guarantee of the debt of the SPEs it had created.

To address the accounting issues arising from the misuse and abuse of SPEs, the IASB and the FASB have worked to improve the consolidation models to take into account financial arrangements where parties other than the holders of the majority of the voting interests exercise financial control over another entity. IFRS 10, *Consolidated Financial Statements*, revised the definition of control to encompass many special purpose entities. Special purpose entities involved in a structured financial transaction will require an evaluation of the purpose, design, and risks.

In developing new accounting standards to address this consolidation issue, the FASB used the more general term variable interest entity (VIE) to more broadly define an entity that is financially controlled by one or more parties that do not hold a majority voting interest. Therefore, under US GAAP, a VIE includes other entities besides SPEs. FASB ASC Topic 810 [*Consolidation*] provides guidance for US GAAP, which classifies special purpose entities as variable interest entities if:

1. total equity at risk is insufficient to finance activities without financial support from other parties, or
2. equity investors lack any one of the following:
   - the ability to make decisions;
   - the obligation to absorb losses; or
   - the right to receive returns.

Common examples of variable interests are entities created to lease real estate or other property, entities created for the securitization of financial assets, or entities created for R&D activity.

Under FASB ASC Topic 810 [*Consolidation*], the primary beneficiary of a VIE must consolidate it as a subsidiary regardless of how much of an equity investment the beneficiary has in the VIE. The primary beneficiary (which is often the sponsor) is the entity that is expected to absorb the majority of the VIE’s expected losses, receive the majority of the VIE’s residual returns, or both. If one entity will absorb a majority of the VIE’s expected losses and another unrelated entity will receive a majority of the VIE’s expected residual returns, the entity absorbing a majority of the losses must consolidate the VIE. If there are non-controlling interests in the VIE, these would also be shown in the consolidated balance sheet and consolidated income statement of the primary beneficiary.

### 6.6.1 Illustration of an SPE for a Leased Asset

Consider the situation in which a sponsoring company creates a special purpose entity with minimal and independent third party equity. The SPE borrows from the debt market and acquires or constructs an asset. The asset may be acquired from the sponsoring company or from an outside source. The sponsoring company then leases the asset, and the cash flow from lease payments is used to repay the debt and provide a return to equity holders. Because the asset is pledged as collateral, risk is reduced and a lower interest rate may be offered by the financing organization. In addition, because equity investors are not exposed to all the business risks of the sponsoring company but only those of the restricted SPE, they may be more willing to invest in this relatively safe investment. The sponsor retains the risk of default and receives the benefits of ownership of the leased asset through a residual value guarantee. Under these conditions, the sponsor is the primary beneficiary and consolidates the SPE.
6.6.2 Securitization of Assets

Example 12 shows the effects of securitizing assets on companies’ balance sheets.

EXAMPLE 12

Receivables Securitization

Odena, a (fictional) Italian auto manufacturer, wants to raise €55M in capital by borrowing against its financial receivables. To accomplish this objective, Odena can choose between two alternatives:

Alternative 1  Borrow directly against the receivables; or
Alternative 2  Create a special purpose entity, invest €5M in the SPE, have the SPE borrow €55M, and then use the funds to purchase €60M of receivables from Odena.

Using the financial statement information provided below, describe the effect of each Alternative on Odena, assuming that Odena meets the definition of control and will consolidate the SPE.

Odena Balance Sheet

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>€30,000,000</td>
<td></td>
</tr>
<tr>
<td>Accounts receivable</td>
<td>€60,000,000</td>
<td></td>
</tr>
<tr>
<td>Other assets</td>
<td>€40,000,000</td>
<td></td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td><strong>€130,000,000</strong></td>
<td></td>
</tr>
<tr>
<td>Current liabilities</td>
<td>€27,000,000</td>
<td></td>
</tr>
<tr>
<td>Noncurrent liabilities</td>
<td>€20,000,000</td>
<td></td>
</tr>
<tr>
<td><strong>Total liabilities</strong></td>
<td><strong>€47,000,000</strong></td>
<td></td>
</tr>
<tr>
<td>Shareholder equity</td>
<td>€83,000,000</td>
<td></td>
</tr>
<tr>
<td><strong>Total liabilities and equity</strong></td>
<td><strong>€130,000,000</strong></td>
<td></td>
</tr>
</tbody>
</table>
Alternative 1:
Odena's cash will increase by €55M (to €85M) and its debt will increase by €55M (to €75M). Its sales and net income will not change.

Odena: Alternative 1 Balance Sheet

<table>
<thead>
<tr>
<th></th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>€85,000,000</td>
</tr>
<tr>
<td>Accounts receivable</td>
<td>60,000,000</td>
</tr>
<tr>
<td>Other assets</td>
<td>40,000,000</td>
</tr>
<tr>
<td>Total assets</td>
<td>€185,000,000</td>
</tr>
<tr>
<td>Current liabilities</td>
<td>€27,000,000</td>
</tr>
<tr>
<td>Noncurrent liabilities</td>
<td>75,000,000</td>
</tr>
<tr>
<td>Total liabilities</td>
<td>€102,000,000</td>
</tr>
<tr>
<td>Shareholder equity</td>
<td>€83,000,000</td>
</tr>
<tr>
<td>Total liabilities and equity</td>
<td>€185,000,000</td>
</tr>
</tbody>
</table>

Alternative 2:
Odena's accounts receivable will decrease by €60M and its cash will increase by €55 (it invests €5M in cash in the SPE). However, if Odena is able to sell the receivables to the SPE for more than their carrying value (for example, €65), it would also report a gain on the sale in its profit and loss. Equally important, the SPE may be able to borrow the funds at a lower rate than Odena, since they are bankruptcy remote from Odena (i.e., out of reach of Odena's creditors), and the lenders to the SPE are the claimants on its assets (i.e., the purchased receivables).

SPE Balance Sheet

<table>
<thead>
<tr>
<th></th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts receivable</td>
<td>€60,000,000</td>
</tr>
<tr>
<td>Total assets</td>
<td>€60,000,000</td>
</tr>
<tr>
<td>Long-term debt</td>
<td>€55,000,000</td>
</tr>
<tr>
<td>Equity</td>
<td>5,000,000</td>
</tr>
<tr>
<td>Total liabilities and equity</td>
<td>€60,000,000</td>
</tr>
</tbody>
</table>

Because Odena consolidates the SPE, its financial balance sheet would look like the following:

Odena: Alternative 2 Consolidated Balance Sheet

<table>
<thead>
<tr>
<th></th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>€85,000,000</td>
</tr>
<tr>
<td>Accounts receivable</td>
<td>60,000,000</td>
</tr>
<tr>
<td>Other assets</td>
<td>40,000,000</td>
</tr>
<tr>
<td>Total assets</td>
<td>€185,000,000</td>
</tr>
<tr>
<td>Current liabilities</td>
<td>€27,000,000</td>
</tr>
<tr>
<td>Noncurrent liabilities</td>
<td>75,000,000</td>
</tr>
</tbody>
</table>
Therefore, the consolidated balance sheet of Odena would look exactly the same as if it borrowed directly against the receivables. In addition, as a result of the consolidation, the transfer (sale) of the receivables to the SPE would be reversed along with any gain Odena recognized on the sale.

### 6.7 Additional Issues in Business Combinations That Impair Comparability

Accounting for business combinations is a complex topic. In addition to the basics covered so far in this reading, we briefly mention some of the more common issues that impair comparability between IFRS and US GAAP.

#### 6.7.1 Contingent Assets and Liabilities

Under IFRS, the cost of an acquisition is allocated to the fair value of assets, liabilities, and contingent liabilities. Contingent liabilities are recorded separately as part of the cost allocation process, provided that their fair values can be measured reliably. Subsequently, the contingent liability is measured at the higher of the amount initially recognized or the best estimate of the amount required to settle. Contingent assets are not recognized under IFRS.

Under US GAAP, contractual contingent assets and liabilities are recognized and recorded at their fair values at the time of acquisition. Non-contractual contingent assets and liabilities must also be recognized and recorded only if it is “more likely than not” they meet the definition of an asset or a liability at the acquisition date. Subsequently, a contingent liability is measured at the higher of the amount initially recognized or the best estimate of the amount of the loss. A contingent asset, however, is measured at the lower of the acquisition date fair value or the best estimate of the future settlement amount.

#### 6.7.2 Contingent Consideration

Contingent consideration may be negotiated as part of the acquisition price. For example, the acquiring company (parent) may agree to pay additional money to the acquiree’s (subsidiary’s) former shareholders if certain agreed upon events occur. These can include achieving specified sales or profit levels for the acquiree and/or the combined entity. Under both IFRS and US GAAP, contingent consideration is initially measured at fair value. IFRS and US GAAP classify contingent consideration as an asset, liability or equity. In subsequent periods, changes in the fair value of liabilities (and assets, in the case of US GAAP) are recognized in the consolidated income statement. Both IFRS and US GAAP do not remeasure equity classified contingent consideration; instead, settlement is accounted for within equity.

#### 6.7.3 In-Process R&D

IFRS and US GAAP recognize in-process research and development acquired in a business combination as a separate intangible asset and measure it at fair value (if it can be measured reliably). In subsequent periods, this research and development
is subject to amortization if successfully completed (a marketable product results) or to impairment if no product results or if the product is not technically and/or financially viable.

6.7.4 Restructuring Costs

IFRS and US GAAP do not recognize restructuring costs that are associated with the business combination as part of the cost of the acquisition. Instead, they are recognized as an expense in the periods the restructuring costs are incurred.

SUMMARY

Intercompany investments play a significant role in business activities and create significant challenges for the analyst in assessing company performance. Investments in other companies can take five basic forms: investments in financial assets, investments in associates, joint ventures, business combinations, and investments in special purpose and variable interest entities. Key concepts are as follows:

- Investments in financial assets are those in which the investor has no significant influence. They can be measured and reported as
  - Fair value through profit or loss.
  - Fair value through other comprehensive income.
  - Amortized cost.

  IFRS and US GAAP treat investments in financial assets in a similar manner.

- Investments in associates and joint ventures are those in which the investor has significant influence, but not control, over the investee's business activities. Because the investor can exert significant influence over financial and operating policy decisions, IFRS and US GAAP require the equity method of accounting because it provides a more objective basis for reporting investment income.
  - The equity method requires the investor to recognize income as earned rather than when dividends are received.
  - The equity investment is carried at cost, plus its share of post-acquisition income (after adjustments) less dividends received.
  - The equity investment is reported as a single line item on the balance sheet and on the income statement.

- Current IFRS and US GAAP accounting standards require the use of the acquisition method to account for business combinations. Fair value of the consideration given is the appropriate measurement for identifiable assets and liabilities acquired in the business combination.

- Goodwill is the difference between the acquisition value and the fair value of the target's identifiable net tangible and intangible assets. Because it is considered to have an indefinite life, it is not amortized. Instead, it is evaluated at least annually for impairment. Impairment losses are reported on the income statement. IFRS use a one-step approach to determine and measure the impairment loss, whereas US GAAP uses a two-step approach.

- If the acquiring company acquires less than 100%, non-controlling (minority) shareholders' interests are reported on the consolidated financial statements. IFRS allows the non-controlling interest to be measured at either its fair value
(full goodwill) or at the non-controlling interest’s proportionate share of the acquiree’s identifiable net assets (partial goodwill). US GAAP requires the non-controlling interest to be measured at fair value (full goodwill).

- Consolidated financial statements are prepared in each reporting period.
- Special purpose (SPEs) and variable interest entities (VIEs) are required to be consolidated by the entity which is expected to absorb the majority of the expected losses or receive the majority of expected residual benefits.
The following information relates to Questions 1–6

Cinnamon, Inc. is a diversified manufacturing company headquartered in the United Kingdom. It complies with IFRS. In 2009, Cinnamon held a 19 percent passive equity ownership interest in Cambridge Processing that was classified as available-for-sale. During the year, the value of this investment rose by £2 million. In December 2009, Cinnamon announced that it would be increasing its ownership interest to 50 percent effective 1 January 2010 through a cash purchase. Cinnamon and Cambridge have no intercompany transactions.

Peter Lubbock, an analyst following both Cinnamon and Cambridge, is curious how the increased stake will affect Cinnamon’s consolidated financial statements. He asks Cinnamon’s CFO how the company will account for the investment, and is told that the decision has not yet been made. Lubbock decides to use his existing forecasts for both companies’ financial statements to compare the outcomes of alternative accounting treatments.

Lubbock assembles abbreviated financial statement data for Cinnamon (Exhibit 1) and Cambridge (Exhibit 2) for this purpose.

### Exhibit 1  Selected Financial Statement Information for Cinnamon, Inc. (£ Millions)

<table>
<thead>
<tr>
<th>Year ending 31 December</th>
<th>2009</th>
<th>2010*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>1,400</td>
<td>1,575</td>
</tr>
<tr>
<td>Operating income</td>
<td>126</td>
<td>142</td>
</tr>
<tr>
<td>Net income</td>
<td>62</td>
<td>69</td>
</tr>
</tbody>
</table>

#### 31 December 2009 2010*

| Total assets            | 1,170  | 1,317  |
| Shareholders’ equity    | 616    | 685    |

* Estimates made prior to announcement of increased stake in Cambridge.

### Exhibit 2  Selected Financial Statement Information for Cambridge Processing (£ Millions)

<table>
<thead>
<tr>
<th>Year ending 31 December</th>
<th>2009</th>
<th>2010*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>1,000</td>
<td>1,100</td>
</tr>
<tr>
<td>Operating income</td>
<td>80</td>
<td>88</td>
</tr>
<tr>
<td>Net income</td>
<td>40</td>
<td>44</td>
</tr>
<tr>
<td>Dividends paid</td>
<td>20</td>
<td>22</td>
</tr>
</tbody>
</table>

#### 31 December 2009 2010*

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### Exhibit 2  (Continued)

<table>
<thead>
<tr>
<th>Year ending 31 December</th>
<th>2009</th>
<th>2010*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total assets</td>
<td>800</td>
<td>836</td>
</tr>
<tr>
<td>Shareholders’ equity</td>
<td>440</td>
<td>462</td>
</tr>
</tbody>
</table>

*Estimates made prior to announcement of increased stake by Cinnamon.

1. In 2009, Cinnamon’s earnings before taxes includes a contribution (in £ millions) from its investment in Cambridge Processing that is closest to:
   - A £3.8.
   - B £5.8.
   - C £7.6.

2. In 2010, if Cinnamon is deemed to have control over Cambridge, it will most likely account for its investment in Cambridge using:
   - A the equity method.
   - B the acquisition method.
   - C proportionate consolidation.

3. At 31 December 2010, Cinnamon’s total shareholders’ equity on its balance sheet would most likely be:
   - A highest if Cinnamon is deemed to have control of Cambridge.
   - B independent of the accounting method used for the investment in Cambridge.
   - C highest if Cinnamon is deemed to have significant influence over Cambridge.

4. In 2010, Cinnamon’s net profit margin would be highest if:
   - A it is deemed to have control of Cambridge.
   - B it had not increased its stake in Cambridge.
   - C it is deemed to have significant influence over Cambridge.

5. At 31 December 2010, assuming control and recognition of goodwill, Cinnamon’s reported debt to equity ratio will most likely be highest if it accounts for its investment in Cambridge using the:
   - A equity method.
   - B full goodwill method.
   - C partial goodwill method.

6. Compared to Cinnamon’s operating margin in 2009, if it is deemed to have control of Cambridge, its operating margin in 2010 will most likely be:
   - A lower.
   - B higher.
   - C the same.
Zimt, AG is a consumer products manufacturer headquartered in Austria. It complies with IFRS. In 2009, Zimt held a 10 percent passive stake in Oxbow Limited that was classified as held for trading securities. During the year, the value of this stake declined by €3 million. In December 2009, Zimt announced that it would be increasing its ownership to 50 percent effective 1 January 2010.

Franz Gelblum, an analyst following both Zimt and Oxbow, is curious how the increased stake will affect Zimt’s consolidated financial statements. Because Gelblum is uncertain how the company will account for the increased stake, he uses his existing forecasts for both companies’ financial statements to compare various alternative outcomes.

Gelblum gathers abbreviated financial statement data for Zimt (Exhibit 1) and Oxbow (Exhibit 2) for this purpose.

<table>
<thead>
<tr>
<th>Exhibit 1</th>
<th>Selected Financial Statement Estimates for Zimt AG (€ Millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Year ending 31 December</strong></td>
<td>2009</td>
</tr>
<tr>
<td>Revenue</td>
<td>1,500</td>
</tr>
<tr>
<td>Operating income</td>
<td>135</td>
</tr>
<tr>
<td>Net income</td>
<td>66</td>
</tr>
<tr>
<td><strong>31 December</strong></td>
<td>2009</td>
</tr>
<tr>
<td>Total assets</td>
<td>1,254</td>
</tr>
<tr>
<td>Shareholders’ equity</td>
<td>660</td>
</tr>
</tbody>
</table>

* Estimates made prior to announcement of increased stake in Oxbow.

<table>
<thead>
<tr>
<th>Exhibit 2</th>
<th>Selected Financial Statement Estimates for Oxbow Limited (€ Millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Year ending 31 December</strong></td>
<td>2009</td>
</tr>
<tr>
<td>Revenue</td>
<td>1,200</td>
</tr>
<tr>
<td>Operating income</td>
<td>120</td>
</tr>
<tr>
<td>Net income</td>
<td>60</td>
</tr>
<tr>
<td>Dividends paid</td>
<td>20</td>
</tr>
<tr>
<td><strong>31 December</strong></td>
<td>2009</td>
</tr>
<tr>
<td>Total assets</td>
<td>1,200</td>
</tr>
<tr>
<td>Shareholders’ equity</td>
<td>660</td>
</tr>
</tbody>
</table>

* Estimates made prior to announcement of increased stake by Zimt.

In 2009, Zimt’s earnings before taxes includes a contribution (in € millions) from its investment in Oxbow Limited closest to:

A  (€0.6) million.

B  (€1.0) million.
8 At 31 December 2010, Zimt’s total assets balance would most likely be:
   A highest if Zimt is deemed to have control of Oxbow.
   B highest if Zimt is deemed to have significant influence over Oxbow.
   C unaffected by the accounting method used for the investment in Oxbow.

9 Based on Gelblum’s estimates, if Zimt is deemed to have significant influence over Oxbow, its 2010 net income (in € millions) would be closest to:
   A €75.
   B €109.
   C €143.

10 Based on Gelblum’s estimates, if Zimt is deemed to have joint control of Oxbow, and Zimt uses the proportionate consolidation method, its 31 December 2010 total liabilities (in € millions) will most likely be closest to:
    A €686.
    B €975.
    C €1,263.

11 Based on Gelblum’s estimates, if Zimt is deemed to have control over Oxbow, its 2010 consolidated sales (in € millions) will be closest to:
    A €1,700.
    B €2,375.
    C €3,050.

12 Based on Gelblum’s estimates, Zimt’s net income in 2010 will most likely be:
   A highest if Zimt is deemed to have control of Oxbow.
   B highest if Zimt is deemed to have significant influence over Oxbow.
   C independent of the accounting method used for the investment in Oxbow.

The following information relates to Questions 13–18
Burton Howard, CFA, is an equity analyst with Maplewood Securities. Howard is preparing a research report on Confabulated Materials, SA, a publicly traded company based in France that complies with IFRS. As part of his analysis, Howard has assembled data gathered from the financial statement footnotes of Confabulated’s 2009 Annual Report and from discussions with company management. Howard is concerned about the effect of this information on Confabulated’s future earnings.

Information about Confabulated’s investment portfolio for the years ended 31 December 2008 and 2009 is presented in Exhibit 1. As part of his research, Howard is considering the possible effect on reported income of Confabulated’s accounting classification for fixed income investments.
### Exhibit 1  Confabulated’s Investment Portfolio (€ Thousands)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Bugle AG</th>
<th>Cathay Corp</th>
<th>Dumas SA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classification</td>
<td>Available-for-sale</td>
<td>Held-to-maturity</td>
<td>Held-to-maturity</td>
</tr>
<tr>
<td>Cost*</td>
<td>€25,000</td>
<td>€40,000</td>
<td>€50,000</td>
</tr>
<tr>
<td>Market value, 31 December 2008</td>
<td>29,000</td>
<td>38,000</td>
<td>54,000</td>
</tr>
<tr>
<td>Market value, 31 December 2009</td>
<td>28,000</td>
<td>37,000</td>
<td>55,000</td>
</tr>
</tbody>
</table>

* All securities were acquired at par value.

In addition, Confabulated’s annual report discusses a transaction under which receivables were securitized through a special purpose entity (SPE) for Confabulated’s benefit.

13 The balance sheet carrying value of Confabulated’s investment portfolio (in € thousands) at 31 December 2009 is closest to:
   A  112,000.
   B  115,000.
   C  118,000.

14 The balance sheet carrying value of Confabulated’s investment portfolio at 31 December 2009 would have been higher if which of the securities had been reclassified as a held for trading security?
   A  Bugle.
   B  Cathay.
   C  Dumas.

15 Compared to Confabulated’s reported interest income in 2009, if Dumas had been classified as available-for-sale, the interest income would have been:
   A  lower.
   B  the same.
   C  higher.

16 Compared to Confabulated’s reported earnings before taxes in 2009, if Bugle had been classified as a held for trading security, the earnings before taxes (in € thousands) would have been:
   A  the same.
   B  €1,000 lower.
   C  €3,000 higher.

17 Confabulated’s reported interest income would be lower if the cost was the same but the par value (in € thousands) of:
   A  Bugle was €28,000.
   B  Cathay was €37,000.
   C  Dumas was €55,000.

18 Confabulated’s special purpose entity is most likely to be:
   A  held off-balance sheet.
   B  consolidated on Confabulated’s financial statements.
   C  consolidated on Confabulated’s financial statements only if it is a “qualifying SPE.”
The following information relates to Questions 19–24

BetterCare Hospitals, Inc. operates a chain of hospitals throughout the United States. The company has been expanding by acquiring local hospitals. Its largest acquisition, that of Statewide Medical, was made in 2001 under the pooling of interests method. BetterCare complies with US GAAP.

BetterCare is currently forming a 50/50 joint venture with Supreme Healthcare under which the companies will share control of several hospitals. BetterCare plans to use the equity method to account for the joint venture. Supreme Healthcare complies with IFRS and will use the proportionate consolidation method to account for the joint venture.

Erik Ohalin is an equity analyst who covers both companies. He has estimated the joint venture’s financial information for 2010 in order to prepare his estimates of each company’s earnings and financial performance. This information is presented in Exhibit 1.

### Exhibit 1
Selected Financial Statement Forecasts for Joint Venture ($ Millions)

<table>
<thead>
<tr>
<th>Year ending 31 December</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>1,430</td>
</tr>
<tr>
<td>Operating income</td>
<td>128</td>
</tr>
<tr>
<td>Net income</td>
<td>62</td>
</tr>
<tr>
<td><strong>31 December</strong></td>
<td></td>
</tr>
<tr>
<td>Total assets</td>
<td>1,500</td>
</tr>
<tr>
<td>Shareholders’ equity</td>
<td>740</td>
</tr>
</tbody>
</table>

Supreme Healthcare recently announced it had formed a special purpose entity through which it plans to sell up to $100 million of its accounts receivable. Supreme Healthcare has no voting interest in the SPE, but it is expected to absorb any losses that it may incur. Ohalin wants to estimate the impact this will have on Supreme Healthcare’s consolidated financial statements.

19 Compared to accounting principles currently in use, the pooling method BetterCare used for its Statewide Medical acquisition has most likely caused its reported:
   A revenue to be higher.
   B total equity to be lower.
   C total assets to be higher.

20 Based on Ohalin’s estimates, the amount of joint venture revenue (in $ millions) included on BetterCare’s consolidated 2010 financial statements should be closest to:
   A $0.
   B $715.
   C $1,430.

21 Based on Ohalin’s estimates, the amount of joint venture net income included on the consolidated financial statements of each venturer will most likely be:
A higher for BetterCare.
B higher for Supreme Healthcare.
C the same for both BetterCare and Supreme Healthcare.

22 Based on Ohalin’s estimates, the amount of the joint venture’s 31 December 2010 total assets (in $ millions) that will be included on Supreme Healthcare’s consolidated financial statements will be closest to:
A $0.
B $750.
C $1,500.

23 Based on Ohalin’s estimates, the amount of joint venture shareholders’ equity at 31 December 2010 included on the consolidated financial statements of each venturer will most likely be:
A higher for BetterCare.
B higher for Supreme Healthcare.
C the same for both BetterCare and Supreme Healthcare.

24 If Supreme Healthcare sells its receivables to the SPE, its consolidated financial results will most likely show:
A a higher revenue for 2010.
B the same cash balance at 31 December 2010.
C the same accounts receivable balance at 31 December 2010.

The following information relates to Questions 25–30

Percy Byron, CFA, is an equity analyst with a UK-based investment firm. One firm Byron follows is NinMount PLC, a UK-based company. On 31 December 2008, NinMount paid £320 million to purchase a 50 percent stake in Boswell Company. The excess of the purchase price over the fair value of Boswell’s net assets was attributable to previously unrecorded licenses. These licenses were estimated to have an economic life of six years. The fair value of Boswell’s assets and liabilities other than licenses was equal to their recorded book values. NinMount and Boswell both use the pound sterling as their reporting currency and prepare their financial statements in accordance with IFRS.

Byron is concerned whether the investment should affect his “buy” rating on NinMount common stock. He knows NinMount could choose one of several accounting methods to report the results of its investment, but NinMount has not announced which method it will use. Byron forecasts that both companies’ 2009 financial results (excluding any merger accounting adjustments) will be identical to those of 2008.

NinMount’s and Boswell’s condensed income statements for the year ended 31 December 2008, and condensed balance sheets at 31 December 2008, are presented in Exhibits 1 and 2, respectively.
### Exhibit 1 NinMount PLC and Boswell Company Income Statements for the Year Ended 31 December 2008 (£ millions)

<table>
<thead>
<tr>
<th>NinMount</th>
<th>Boswell</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Net sales</strong></td>
<td>950</td>
</tr>
<tr>
<td><strong>Cost of goods sold</strong></td>
<td>(495)</td>
</tr>
<tr>
<td><strong>Selling expenses</strong></td>
<td>(50)</td>
</tr>
<tr>
<td><strong>Administrative expenses</strong></td>
<td>(136)</td>
</tr>
<tr>
<td><strong>Depreciation &amp; amortization expense</strong></td>
<td>(102)</td>
</tr>
<tr>
<td><strong>Interest expense</strong></td>
<td>(42)</td>
</tr>
<tr>
<td><strong>Income before taxes</strong></td>
<td>125</td>
</tr>
<tr>
<td><strong>Income tax expense</strong></td>
<td>(50)</td>
</tr>
<tr>
<td><strong>Net income</strong></td>
<td>75</td>
</tr>
</tbody>
</table>

### Exhibit 2 NinMount PLC and Boswell Company Balance Sheets at 31 December 2008 (£ millions)

<table>
<thead>
<tr>
<th>NinMount</th>
<th>Boswell</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cash</strong></td>
<td>50</td>
</tr>
<tr>
<td><strong>Receivables—net</strong></td>
<td>70</td>
</tr>
<tr>
<td><strong>Inventory</strong></td>
<td>130</td>
</tr>
<tr>
<td><strong>Total current assets</strong></td>
<td>250</td>
</tr>
<tr>
<td><strong>Property, plant, &amp; equipment—net</strong></td>
<td>1,570</td>
</tr>
<tr>
<td><strong>Investment in Boswell</strong></td>
<td>320</td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td>2,140</td>
</tr>
<tr>
<td><strong>Current liabilities</strong></td>
<td>110</td>
</tr>
<tr>
<td><strong>Long-term debt</strong></td>
<td>600</td>
</tr>
<tr>
<td><strong>Total liabilities</strong></td>
<td>710</td>
</tr>
<tr>
<td><strong>Common stock</strong></td>
<td>850</td>
</tr>
<tr>
<td><strong>Retained earnings</strong></td>
<td>580</td>
</tr>
<tr>
<td><strong>Total equity</strong></td>
<td>1,430</td>
</tr>
<tr>
<td><strong>Total liabilities and equity</strong></td>
<td>2,140</td>
</tr>
</tbody>
</table>

*Note: Balance sheets reflect the purchase price paid by NinMount, but do not yet consider the impact of the accounting method choice.*

---

25 NinMount’s current ratio on 31 December 2008 *most likely* will be highest if the results of the acquisition are reported using:

A the equity method.

B consolidation with full goodwill.

C consolidation with partial goodwill.

26 NinMount’s long-term debt to equity ratio on 31 December 2008 *most likely* will be lowest if the results of the acquisition are reported using:
A  the equity method.
B  consolidation with full goodwill.
C  consolidation with partial goodwill.

27 Based on Byron’s forecast, if NinMount deems it has acquired control of Boswell, NinMount’s consolidated 2009 depreciation and amortization expense (in £ millions) will be closest to:
A  102.
B  148.
C  204.

28 Based on Byron’s forecast, NinMount’s net profit margin for 2009 most likely will be highest if the results of the acquisition are reported using:
A  the equity method.
B  consolidation with full goodwill.
C  consolidation with partial goodwill.

29 Based on Byron’s forecast, NinMount’s 2009 return on beginning equity most likely will be the same under:
A  either of the consolidations, but different under the equity method.
B  the equity method, consolidation with full goodwill, and consolidation with partial goodwill.
C  none of the equity method, consolidation with full goodwill, or consolidation with partial goodwill.

30 Based on Byron’s forecast, NinMount’s 2009 total asset turnover ratio on beginning assets under the equity method is most likely:
A  lower than if the results are reported using consolidation.
B  the same as if the results are reported using consolidation.
C  higher than if the results are reported using consolidation.

The following information relates to questions 31–38

John Thronen is an analyst in the research department of an international securities firm. He is preparing a research report on Topmaker, Inc., a publicly traded company that complies with IFRS.

On 1 January 2016, Topmaker invested $11 million in Blanca Co. debt securities (with a 5.0% stated coupon on par value, and interest payable each 31 December). The par value of the securities is $10 million, and the market interest rate in effect when the bonds were purchased was 4.0%. Topmaker designates the investment as held to maturity. As of 31 December 2016, the fair value of the securities is $12 million.

Blanca Co. wants to raise $40 million in capital by borrowing against its financial receivables. Blanca plans to create a special-purpose entity (SPE), invest $10 million in the SPE, have the SPE borrow $40 million, and then use the funds to purchase $50 million of receivables from Blanca. Blanca meets the definition of control and plans to consolidate the SPE. Blanca’s balance sheet is presented in Exhibit 1.
Also on 1 January 2016, Topmaker acquired a 15% equity interest with voting power in Rainer Co. for $300 million. Topmaker has representation on Rainer’s board of directors and participates in Rainer’s policymaking process. Thronen believes that Topmaker underestimated the goodwill and balance sheet value of its investment account in Rainer. To estimate these figures, Thronen gathers selected financial information for Rainer as of 31 December 2016 in Exhibit 2. The plant and equipment are depreciated on a straight-line basis and have 10 years of remaining life.

During 2016, Rainer sold $60 million in inventory to Topmaker for $80 million. In 2017, Topmaker resold the entire inventory to a third party.

Thronen is concerned about possible goodwill impairment resulting from expected changes in the industry effective at the end of 2017. He calculates the impairment loss based on the projected consolidated balance sheet data shown in Exhibit 3, assuming that the cash-generating unit and reporting unit of Topmaker are the same.
Finally, Topmaker announces its plan to increase its ownership interest in Rainer to 80% effective 1 January 2018. It will account for the investment in Rainer using the partial goodwill method. Thronen estimates that the fair market value of the Rainer’s shares on the expected date of exchange is $2 billion, with the identifiable assets valued at $1.5 billion.

31 The carrying value reported on the balance sheet of Topmaker’s investment in Blanca’s debt securities at 31 December 2016 is:
   A $10,940,000.
   B $11,000,000.
   C $12,000,000.

32 Based on Exhibit 1 and Blanca’s plans to borrow against its financial receivables, the consolidated balance sheet will show total assets of:
   A $50,000,000.
   B $140,000,000.
   C $150,000,000.

33 Topmaker’s influence on Rainer’s business activities can be best described as:
   A significant.
   B controlling.
   C shared control.

34 Based on Exhibit 2, the goodwill included in Topmaker’s purchase of Rainer is:
   A $21 million.
   B $60 million.
   C $99 million.

35 Based on Exhibit 2, the carrying value of Topmaker’s investment in Rainer at the end of 2016 is closest to:
   A $282 million.
   B $317 million.
   C $321 million.

36 Which of the following statements regarding the sale of inventory by Rainer to Topmaker is correct?
   A The sale represents a downstream sale.
   B Topmaker’s unrealized profits are initially deferred.
   C Profits will decline on Topmaker’s 2016 income statement.

37 Based on Exhibit 3, Topmaker’s impairment loss under IFRS is:
   A $120 million.
   B $300 million.
   C $400 million.

38 The value of the minority interest at the acquisition date of 1 January 2018 is:
   A $300 million.
   B $400 million.
   C $500 million.
SOLUTIONS

1. A is correct. Dividends from equity securities that are classified as available-for-sale are included in income when earned. Cinnamon would record its 19 percent share of the dividends paid by Cambridge; this is £3.8 million (£20 × 0.19). Though the value of Cinnamon’s stake in Cambridge Processing rose by £2 million during the year, under IFRS any unrealized gains or losses for available-for-sale securities are reported in the equity section of the balance sheet as part of other comprehensive income until the securities are sold.

2. B is correct. If Cinnamon is deemed to have control over Cambridge, it would use the acquisition method to account for Cambridge and prepare consolidated financial statements. Proportionate consolidation is used for joint ventures; the equity method is used for some joint ventures and when there is significant influence but not control.

3. A is correct. If Cinnamon is deemed to have control over Cambridge, consolidated financial statements would be prepared and Cinnamon’s total shareholders’ equity would increase and include the amount of the noncontrolling interest. If Cinnamon is deemed to have significant influence, the equity method would be used and there would be no change in the total shareholders’ equity of Cinnamon.

4. C is correct. If Cinnamon is deemed to have significant influence, it would report half of Cambridge’s net income as a line item on its income statement, but no additional revenue is shown. Its profit margin is thus higher than if it consolidated Cambridge’s results, which would impact revenue and income, or if it only reported 19 percent of Cambridge’s dividends (no change in ownership).

5. C is correct. The full and partial goodwill method will have the same amount of debt; however, shareholders’ equity will be higher under full goodwill (and the debt to equity ratio will be lower). Therefore, the debt to equity will be higher under partial goodwill. If control is assumed, Cinnamon cannot use the equity method.

6. A is correct. Cambridge has a lower operating margin (88/1,100 = 8.0%) than Cinnamon (142/1,575 = 9.0%). If Cambridge’s results are consolidated with Cinnamon’s, the consolidated operating margin will reflect that of the combined company, or 230/2,675 = 8.6%.

7. B is correct. Oxbow was classified as a held for trading security. Held for trading securities are reported at fair value, with unrealized gains and losses included in income. The income statement also includes dividends from equity securities that are classified as held for trading. The €3 million decline in the value of Zimt’s stake would reduce income by that amount. Zimt would record its share of the dividends paid (0.1 × €20 million = €2 million). The net effect of Zimt’s stake in Oxbow Limited would be to reduce Zimt’s income before taxes by €1 million for 2009.

8. A is correct. When a company is deemed to have control of another entity, it records all of the other entity’s assets on its own consolidated balance sheet.

9. B is correct. If Zimt is deemed to have significant influence, it would use the equity method to record its ownership. Under the equity method, Zimt’s share of Oxbow’s net income would be recorded as a single line item. Net income of Zimt = 75 + 0.5(68) = 109.
10 B is correct. Under the proportionate consolidation method, Zimt’s balance sheet would show its own total liabilities of €1,421 − 735 = €686 plus half of Oxbow’s liabilities of €1,283 − 706 = €577. €686 + (0.5 × 577) = €974.5.

11 C is correct. Under the assumption of control, Zimt would record its own sales plus 100 percent of Oxbow’s. €1,700 + 1,350 = €3,050.

12 C is correct. Net income is not affected by the accounting method used to account for active investments in other companies. “One-line consolidation” and consolidation result in the same impact on net income; it is the disclosure that differs.

13 C is correct. Held for trading and available-for-sale securities are carried at market value, whereas held-to-maturity securities are carried at historical cost. €28,000 + 40,000 + 50,000 = €118,000.

14 C is correct. If Dumas had been classified as a held for trading security, its carrying value would have been the €55,000 fair value rather than the €50,000 historical cost.

15 B is correct. The coupon payment is recorded as interest income whether securities are held-to-maturity or available-for-sale. No adjustment is required for amortization since the bonds were bought at par.

16 B is correct. Unrealized gains and losses are included in income when securities are classified as held for trading securities. During 2009 there was an unrealized loss of €1,000.

17 B is correct. The difference between historical cost and par value must be amortized under the effective interest method. If the par value is less than the initial cost (stated interest rate is greater than the effective rate), the interest income would be lower than the interest received because of amortization of the premium.

18 B is correct. Under IFRS, SPEs must be consolidated if they are conducted for the benefit of the sponsoring entity. Further, under IFRS, SPEs cannot be classified as qualifying. Under US GAAP, qualifying SPEs (a classification which has been eliminated) do not have to be consolidated.

19 B is correct. Statewide Medical was accounted for under the pooling of interest method, which causes all of Statewide’s assets and liabilities to be reported at historical book value. The excess of assets over liabilities generally is lower using the historical book value method than using the fair value method (this latter method must be used under currently required acquisition accounting). It would have no effect on revenue.

20 A is correct. Under the equity method, BetterCare would record its interest in the joint venture’s net profit as a single line item, but would show no line-by-line contribution to revenues or expenses.

21 C is correct. Net income will be the same under the equity method and proportional consolidation. However, sales, cost of sales, and expenses are different because under the equity method the net effect of sales, cost of sales, and expenses is reflected in a single line.

22 B is correct. Under the proportionate consolidation method, Supreme Healthcare’s consolidated financial statements will include its 50 percent share of the joint venture’s total assets.

23 C is correct. The choice of equity method or proportionate consolidation does not affect reported shareholders’ equity.
24 C is correct. Although Supreme Healthcare has no voting interest in the SPE, it is expected to absorb any losses that the SPE incurs. Therefore, Supreme Healthcare “in substance” controls the SPE and would consolidate it. On the consolidated balance sheet, the accounts receivable balance will be the same since the sale to the SPE will be reversed upon consolidation.

25 A is correct. The current ratio using the equity method of accounting is Current assets/Current liabilities = £250/£110 = 2.27. Using consolidation (either full or partial goodwill), the current ratio = £390/£200 = 1.95. Therefore, the current ratio is highest using the equity method.

26 A is correct. Using the equity method, long-term debt to equity = £600/£1,430 = 0.42. Using the consolidation method, long-term debt to equity = long-term debt/equity = £1,000/£1,750 = 0.57. Equity includes the £320 non-controlling interest under either consolidation. It does not matter if the full or partial goodwill method is used since there is no goodwill.

27 C is correct. The projected depreciation and amortization expense will include NinMount’s reported depreciation and amortization (£102), Boswell’s reported depreciation and amortization (£92), and amortization of Boswell’s licenses (£10 million). The licenses have a fair value of £60 million. £320 purchase price indicates a fair value of £640 for the net assets of Boswell. The net book (fair) value of the recorded assets is £580. The previously unrecorded licenses have a fair value of £60 million. The licenses have a remaining life of six years; the amortization adjustment for 2008 will be £10 million. Therefore, Projected depreciation and amortization = £102 + £92 + £10 = £204 million.

28 A is correct. Net income is the same using any of the methods but under the equity method, net sales are only £950; Boswell’s sales are not included in the net sales figure. Therefore, net profit margin is highest using the equity method.

29 A is correct. Net income is the same using any of the choices. Beginning equity under the equity method is £1,430. Under either of the consolidations, beginning equity is £1,750 since it includes the £320 noncontrolling interest. Return on beginning equity is highest under the equity method.

30 A is correct. Using the equity method, Total asset turnover = Net sales/Beginning total assets = £950/£2,140 = 0.444. Total asset turnover on beginning assets using consolidation = £1,460/£2,950 = 0.495. Under consolidation, Assets = £2,140 − 320 + 1,070 + 60 = £2,950. Therefore, total asset turnover is lowest using the equity method.

31 A is correct. Because the investment is designated as held to maturity, it is reported at amortized cost at the end of Year 1 using the effective interest method, whereby the amortization is calculated as the difference between the amount received and the interest income.

The amount received each period ($500,000) is based on the par value of $10,000,000 and the stated 5% coupon rate. The interest income of $440,000 is calculated by multiplying the 4.0% market rate by the initial fair value or amortized cost at the beginning of the period of $11,000,000. The difference between the $500,000 received and the interest income of $440,000 is the amortization amount, which is equal to $60,000.

The initial fair value of $11,000,000 is reduced by amortization, resulting in an amortized cost at the end of Year 1 of $10,940,000. This amount represents the carrying value reported on the balance sheet if the security is classified as held to maturity.

32 B is correct. The SPE balance sheet will show accounts receivable of $50,000,000, long-term debt of $40,000,000, and equity of $10,000,000. When the balance sheets are consolidated, Blanca’s cash will increase by $40,000,000.
resulting from the sale of the receivables to the SPE (net of its $10,000,000 cash investment in the SPE). Long-term debt will also increase by $40,000,000. The consolidated balance sheet will show total assets of $140,000,000 and look exactly the same as if Blanca borrowed directly against the receivables.

**SPE Balance Sheet**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>Long-term debt</th>
<th>$40,000,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts receivable</td>
<td>$50,000,000</td>
<td>Equity</td>
<td>$10,000,000</td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td><strong>$50,000,000</strong></td>
<td><strong>Total liabilities and equity</strong></td>
<td><strong>$50,000,000</strong></td>
</tr>
</tbody>
</table>

**Blanca Co. Consolidated Balance Sheet**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>Current liabilities</th>
<th>$25,000,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$60,000,000</td>
<td>Noncurrent liabilities</td>
<td>$70,000,000</td>
</tr>
<tr>
<td>Accounts receivable</td>
<td>$50,000,000</td>
<td>Shareholder’s equity</td>
<td>$45,000,000</td>
</tr>
<tr>
<td>Other assets</td>
<td>$30,000,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td><strong>$140,000,000</strong></td>
<td><strong>Total liabilities and equity</strong></td>
<td><strong>$140,000,000</strong></td>
</tr>
</tbody>
</table>

33 A is correct. Topmaker’s representation on the Rainer board of directors and participation in Rainer’s policymaking process indicate significant influence. Significant influence is generally assumed when the percentage of ownership interest is between 20% and 50%. Topmaker’s representation on the board of directors and participation in the policymaking process, however, demonstrate significant influence despite its 15% equity interest.

34 B is correct. The goodwill in Topmaker’s $300 million purchase of Rainer’s common shares using the equity method is $60 million and is calculated as follows:

<table>
<thead>
<tr>
<th>$ Millions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase price</td>
</tr>
<tr>
<td>Less: acquired equity in book value of Rainer’s net assets (15% of $1,340 million)</td>
</tr>
<tr>
<td>Excess purchase price</td>
</tr>
<tr>
<td>Less: attributable to difference between fair and book value of net identifiable assets (plant and equipment) (15% of $260 million)</td>
</tr>
<tr>
<td>Goodwill</td>
</tr>
</tbody>
</table>

35 B is correct. The carrying value of Topmaker’s investment in Rainer using the equity method is $317 million and is calculated as follows:

<table>
<thead>
<tr>
<th>$ Millions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase price</td>
</tr>
<tr>
<td>Plus: Topmaker’s share of Rainer’s net income (15% of $360 million)</td>
</tr>
<tr>
<td>Less: Dividends received (15% of $220 million)</td>
</tr>
</tbody>
</table>
Less: Amortization of excess purchase price attributable to plant and equipment (15% of $260 million) divided by 10 years  
Investment in associate (Rainer) at the end of 2016

<table>
<thead>
<tr>
<th>Description</th>
<th>$ Millions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amortization of excess purchase price</td>
<td>3.9</td>
</tr>
<tr>
<td>Investment in associate (Rainer) at the end of 2016</td>
<td>$317.1</td>
</tr>
</tbody>
</table>

36 B is correct. The inventory sale between Rainer (associate) and Topmaker (parent) is an upstream transaction. Under the equity method, the deferral process for unrealized profits is identical under upstream and downstream inventory transfers. The investor company’s (Topmaker’s) share of unrealized profits is deferred by reducing the recorded amount of equity income on the investor’s income statement. In later periods, when the inventory is sold to third parties, the deferred profits are added to equity income.

37 B is correct. The goodwill impairment loss under IFRS is $300 million and is calculated as the difference between the recoverable amount of a cash-generating unit and the carrying value of the cash-generating unit. Topmaker’s recoverable amount of the cash-generating unit is $14,900 million, which is less than the carrying value of the cash-generating unit ($15,200 million). The result is an impairment loss of $300 million ($14,900 – $15,200). [pp. 46–48]

A is incorrect because $120 million results from incorrectly calculating the impairment loss under US GAAP rather than under IFRS. Under US GAAP, the impairment loss is calculated using the following two-step approach:

Step 1  Determination of Impairment Loss

Because the fair value of $14,800 million is below the carrying value of $15,200 million, a potential impairment loss has been identified.

Step 2  Measurement of the Impairment Loss

<table>
<thead>
<tr>
<th>Description</th>
<th>$ Millions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fair value of reporting unit</td>
<td>$14,800</td>
</tr>
<tr>
<td>Less: identifiable net assets</td>
<td>$14,400</td>
</tr>
<tr>
<td>Implied goodwill</td>
<td>$400</td>
</tr>
<tr>
<td>Current carrying value of goodwill</td>
<td>$520</td>
</tr>
<tr>
<td>Less: implied goodwill</td>
<td>$400</td>
</tr>
<tr>
<td>Impairment loss</td>
<td>$120</td>
</tr>
</tbody>
</table>

38 A is correct. According to IFRS, under the partial goodwill method, the value of the minority interest is equal to the non-controlling interest’s proportionate share of the subsidiary’s identifiable net assets. Rainer’s proportionate share is 20%, and the value of its identifiable assets on the acquisition date is $1.5 billion. The value of the minority interest is $300 million (20% × $1.5 billion).