

## Investments in Debt and Equity Securities

### INTRODUCTION

The cash flow associated with an investment in the securities of another company can be straightforward. Such an investment is usually purchased for cash, produces an annual cash flow of interest or dividends that can be recorded as revenue, and is sold for cash. What can be so complicated?

First, the cost and market value of an investment will be different over the period for which it is held. If the investments can or will be sold, market value information is likely far more relevant to the financial statement user, and it is objectively determinable in securities markets. It stands to reason that market value should be recorded. The related issue is what to do with any gain or loss on the value of the investment while it is held. It hasn't been realized though a sale transaction. Is it income or not?

Accounting for investments is further complicated by the fact that investments in voting securities can represent more than just a passive investment undertaken to generate investment income. Long-term investments in voting shares may be used to establish an intercompany relationship through which the investor corporation can control or significantly influence the

operating, investing, and financing strategies of the investee corporation. If the investor can control or influence the dividend policy of the investee, dividends received from the investee are not the result of an arm's-length transaction. If investment revenue was measured as dividends declared, the amount could easily be manipulated. Furthermore, if a control relationship exists, it may not be possible to grasp the activities of the economic entity—both the investor and investee corporations—unless their records are consolidated, or added together.

In accounting for investments in the shares of other corporations, the accounting problem is twofold:

1. What is the nature of the investment?
2. How can the investment, and the investment revenue, be reported to reveal the economic impact of the investment rather than just its legal form?

We'll explore these questions in this chapter, and provide an overview of this complex area. Keep in mind, though, that many accounting programs devote an entire course to this issue, so what we're doing here is only the tip of the proverbial iceberg!

## CLASSIFICATION OF INTERCORPORATE INVESTMENTS

### passive investment

an intercorporate investment in which the investor cannot significantly influence or control the operations of the investee company

### strategic investment

an investment in another company for strategic purposes; usually conveys control or significant influence or is a joint venture

### Investment Objectives

Companies invest in the securities of other enterprises for a variety of reasons. The investment can be a **passive investment**, meant primarily to increase investment income, or a **strategic investment**, meant to enhance operations in some way:

- *Investment of Idle Cash.* Companies often have cash on hand that is not needed at present but will be needed in the future. Rather than allow the idle cash to remain in a low-interest bank account, companies find temporary investments with short terms that provide a higher return. These investments typically have low risk and are easily converted to cash. Cash on hand can be invested in investments that may generate return through interest or dividends and also may be sold when market price has increased. These investments will likely be of higher risk and/or a longer term, but the intent is to sell the investment when money is needed for other activities and/or when the price is attractive.
- *Active Trading Investment Portfolio.* Some companies, primarily financial institutions, invest in trading portfolios. Securities in the portfolio are actively traded as part of the normal course of business, generally yielding a return because of price fluctuations or a dealer's margin.
- *Long-Term Investments to Generate Earnings.* Cash on hand can be invested in less liquid securities in order to increase investment income. These investments are usually money market instruments (for example, bonds), and the intent is to keep the investment until maturity.
- *Strategic Alliances.* An investment, especially in voting shares, may establish or cement a beneficial intercompany relationship that will increase the profitability of the investing company, both directly and indirectly. Strategic decisions may be made to invest in suppliers, customers, and even competitors.
- *Legal Frameworks.* Companies may choose to establish operations in one large company with numerous branches, or organize activities in a set of smaller companies, all or partially controlled by a central holding company. This may be done for tax reasons, to allow outside shareholders a small stake in particular operations, to satisfy legal requirements in particular jurisdictions, and/or to limit potential liability claims to particular portions of the enterprise.

## CLASSIFICATION OF INVESTMENTS

Many securities are **financial instruments** under the definitions established in Section 3860 of the *CICA Handbook*. A financial instrument is any contract that gives rise to both a financial asset of one party and a financial liability or equity instrument of another party. In the context of intercorporate investments, financial assets are defined as any contractual right to receive cash or another financial asset from another company. Bonds and share investment meet this definition.

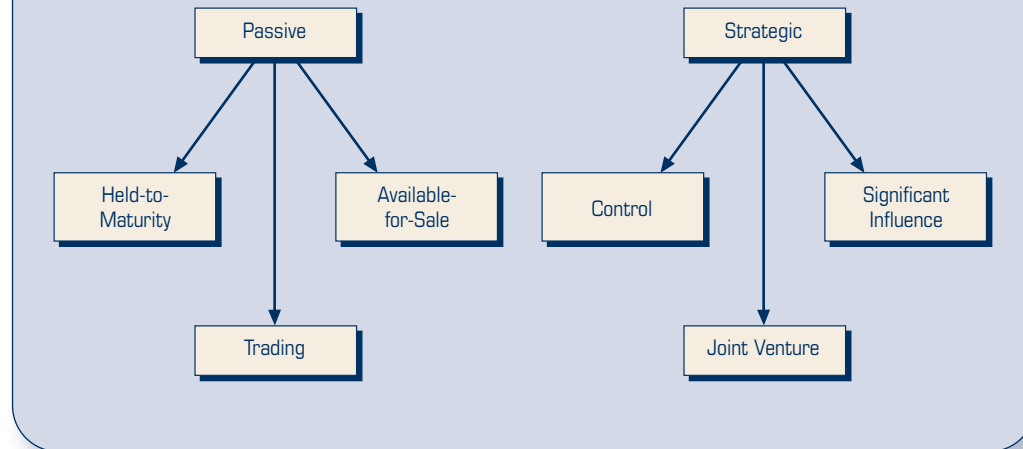
Investments that are financial instruments are classified according to the rules in proposed Section 3855, "Financial Instruments—Recognition and Measurement." These classifications and rules are brand new, effective in any fiscal year beginning after 1 October 2006—that is, in the 2007 fiscal year. This chapter is based on the 2003 exposure draft in this area; *strategic investments* in shares are specifically excluded from the financial instruments sections of the *CICA Handbook*, but are accorded specific attention in other sections. For those interested in the rules in place up to 2006, refer to the superceded investments chapter available on the Online Learning Centre.

This section explores the classification rules in depth. The classifications that follow are summarized in Exhibit 11-1.

**DEBT VERSUS EQUITY INVESTMENTS** An investment in a debt instrument of another entity can be classified as available for sale, held to maturity, or a trading investment. An investment in common shares may be available for sale, held to maturity, or a trading investment, or, if strategic, a control investment, a significant influence investment, or a joint venture. It depends on intent and circumstances. We'll define these terms in the sections that follow.

## EXHIBIT 11-1

## CLASSIFICATION OF INVESTMENTS

**held-to-maturity investments**

those investments that have a defined maturity date, fixed or determinable payments, and for which there is positive intent to hold to maturity

**Held-to-Maturity Investments**

**Held-to-maturity** investments must meet three tests:

- First, rather obviously, the securities must have a maturity date. This includes bonds and other money market instruments, but excludes common shares and any other investment with an indeterminate length.
- The securities must have fixed or determinable payments: set amounts at set points in time.
- Management must have the positive intent to hold the investments to their maturity dates.

For example, if a company buys a bond with a 10-year maturity date, and management plans to hold it until maturity, it is classified as a held-to-maturity security. On the other hand, if management stands ready to sell the investment if the price is appealing or if the company needs cash, then the bond is an available-for-sale investment. If management plans for the investment are *undecided*, the investment is available for sale. This is the meaning of positive intent—there must be an *active will* to hold to maturity.

**MANAGEMENT INTENT** Management intent can be a slippery classification tool. Management can change its intentions, or even misrepresent its intentions. This reduces the credibility of the financial statements, and future management representations.

**RECLASSIFICATION OR SALE** Reclassification, or sale, of a held-to-maturity investment calls the integrity of the original classification into question. Therefore,

[If the company] ... has sold or reclassified more than an insignificant amount of held-to-maturity investments in the past two years, then no securities can be classified as held-to-maturity. (CICA ED 3855)

Of course, there are a few exceptions to this sweeping prohibition—for example, if there was

- an isolated event (e.g., a change in tax law or a major business combination) that caused the reclassification or sale;

- a significant decline in the credit rating of the issuer of the investment and sale is the only appropriate response; or
- a sale of securities on a date very close to the original maturity date,

then the sale is not “held against” the integrity of the initial classification. In any of these circumstances, the held-to-maturity classification is still open for future use.

### Available-for-Sale Investments

Any investment that is available for sale if the company needs cash, or if the market value is appealing, is considered an **available-for-sale investment**. This category includes short-term money-market investments, such as Treasury bills, but also bonds and shares of other companies that could be sold. While the investments are held, they will generate investment and dividend income. When they are sold, they will yield a realized gain or loss on sale. Market value will fluctuate during the time that the investments are held.

The *CICA Handbook* definition of this category is negatively put: investments that are not in the other categories are classified here. The available-for-sale category is the catch-all. To understand what this involves, we must proceed on to the other categories.

### Trading Investments

The **trading investment** category is determined primarily by management intent. That is, when the investment is bought, the investment must be designated as a trading investment. This means that it is

1. held principally for the purpose of selling, or
2. is part of a portfolio of investments managed together for short-term profit.

For the most part, trading investments are held by financial institutions, which engage in trading activities as part of the normal course of business. Any marketable financial instrument can be designated as a trading investment when purchased. Even if there is no plan to sell the investment in the near future, the investment can still be a trading investment, as long as intent to trade is present.

### Controlled Investments

What are **controlled investments**? The *CICA Handbook* defines **control** as

the continuing power to determine ... strategic operating, investing and financing policies [of the other enterprise] without the cooperation of others.

*(CICA 1590.03)*

Since strategic policies of the enterprise are typically established by the Board of Directors, the right to elect a majority of the Board of Directors would normally constitute control. Of course, percentage share ownership is still the primary input to this decision. If a company owns more than 50% of the voting shares of a company, it must establish why it does not have control; if it owns 50% or less, it must establish why it does have control.

An important phrase in the AcSB’s definition of control is “without the cooperation of others.” This means that, for control to be deemed to exist, the investor has to be able to withstand hostile takeover attempts. If an opponent can gather enough shares (or the support of enough voting shareholders) to take over control, then control does not exist in fact. Many corporations are “controlled” by a major shareholder who owns the largest single block of shares, but if this is less than 50%, then control does not really exist in an accounting sense.

#### **available-for-sale investment**

any investment that is not classified as a control, joint venture, significant influence, held-to-maturity, or trading investment; the catch-all category of investment

#### **trading investment**

an investment designated by management as held for trading; part of a portfolio managed for short-term profit or acquired principally for resale. Financial institutions are the major holders of trading investments.

#### **controlled investment**

the investment in a controlled subsidiary; normally consolidated for financial reporting

#### **control**

the continuing power to determine the strategic policies of an investee without the cooperation of other shareholders

An investor can control a corporation while holding less than a majority of the corporation's voting shares through any of several methods:

- The investee corporation may have two or more classes of shares that have different voting rights, in which case control can be maintained by holding a majority of the votes but not necessarily a majority of voting shares. Examples are given in Chapter 13.
- The investor may hold convertible securities or stock options and, if control is challenged, securities could be converted or exercised. Afterward, the investor has an absolute majority of the votes.
- A shareholders' agreement may exist that gives control to a shareholder who owns less than 50% of the shares (or, to look at the reverse side, restricts the voting power of other investors). This device is common in private corporations, but can exist in public corporations as well.
- An investor with a minority of the shares may also be a major source of debt financing, and the debt agreement gives the investor the right to select a majority of the investee's Board of Directors.

If the investee is controlled by the investor corporation, the investor corporation is called a **parent company** and the investee corporation is known as a **subsidiary**.

#### parent company

a corporation that controls one or more other corporations through ownership of a majority of the shares, carrying the right to elect at least a majority of the Board of Directors

### Significant Influence Investments

**Significant influence investments** exist when an investor has the ability to exert influence over the strategic operating, investing, and financing policies of the investee corporation even though the investor does not control the investee. Significant influence can be exerted through several means, and not just by equity investment. The *CICA Handbook* cites the following possible evidence of significant influence:

The ability to exercise significant influence may be indicated by, for example, representation on the board of directors, participation in policy-making processes, material intercompany transactions, interchange of managerial personnel or provision of technical information. *(CICA 3050.04)*

Normally, ownership of 20% or more of an investee corporation's shares is deemed to indicate that significant influence exists. But this is a guideline, not a rule.

If the investor holds less than 20% of the voting interest in the investee, it is presumed that the investor does not have the ability to exercise significant influence, unless such influence is clearly demonstrated. On the other hand, the holding of 20% or more of the voting interest in the investee does not in itself confirm the ability to exercise significant influence. *(CICA 3050.04)*

It's important to not put too much weight on the percentage of share ownership, though; a great deal depends on who owns the other shares, as well as on the other (non-ownership) financial and operating relationships between the investor and the investee corporations. For example, ownership of 30% of an investee corporation may not give the investee significant influence (or any influence) if the other 70% is held by a single shareholder who will not tolerate any influence. Conversely, an ownership interest of 15% may give the investor virtually unchallenged influence if ownership of the other 85% is widely dispersed.

It is worth noting that, in the United States, the 20% ownership guideline is a firm rule; if 20% or more but less than a majority of the shares is owned by an investor, then significant influence is automatically deemed to exist. Therefore, an investor corporation may avoid the presumption of significant influence (and the accounting requirements that significant influence entails) by holding only 19.9%. In Canadian GAAP, however, it is the substance that matters, not a fraction of a percentage.

#### subsidiary company

an investee company in which the investor company (the parent) controls the investee, usually by having the right to appoint a majority of the Board of Directors and/or holding in excess of 50% of the voting shares

#### significant influence investment

an investment representing ownership interest to the extent that the investor can affect strategic operating, investing, and/or financing policies of the investee

**joint venture**

an investment resulting in a contractual arrangement whereby two or more venturers jointly control an economic activity; the joint venture is subject to joint control by the joint venturers

**Joint Ventures**

Another type of strategic equity investment is a **joint venture**.

A joint venture is an economic activity resulting from a contractual arrangement whereby two or more venturers jointly control the economic activity.

(CICA 3055.03(c))

Joint ventures are distinct in that they are subject to *joint control*, regardless of share ownership percentage. That is, the investors must unanimously agree on key operating, investing, and financing decisions before they are implemented. This feature of joint control means that majority ownership does not confer control, nor does the right to appoint the majority of the Board of Directors.

Joint ventures are quite common in mining operations and in oil and gas ventures. The joint venturers all contribute something to exploration activities, and all share in any wealth generated. For example, a small mining company may have exploration rights over a property, and agree to explore the property with a larger joint venture partner, who provides management, working capital, and capital assets in exchange for a certain percentage of the profits. However, key decisions over when and where to explore, or when to put the property into commercial production, etc. are subject to common control of both venturers.

**Change in Classification**

Intent and ability to hold must be assessed at every balance sheet date. If intent changes, and the investment is still unsold, then its balance sheet classification and accounting treatment will change.

**CONCEPT REVIEW**

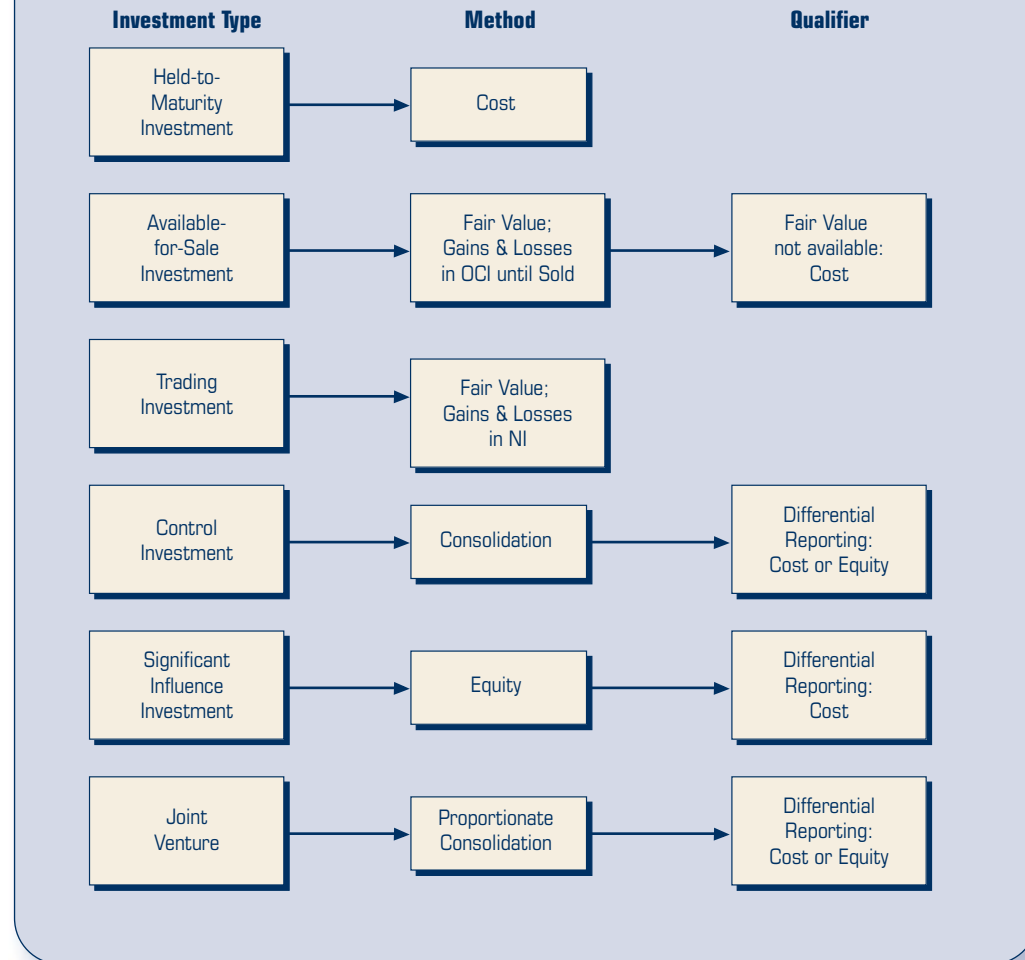
1. Under what circumstances is an investment in bonds classified as a held-to-maturity investment? As an available-for-sale investment?
2. Can an investment in common shares be classified as a held-to-maturity investment? Explain.
3. In the current year, a company sells all its held-to-maturity investments because the market values had appreciated significantly. Can other investments now be classified as held to maturity?
4. An investor owns 40% of the shares of another company. Is this evidence enough to conclude that significant influence exists?
5. An investor owns 60% of the voting shares of another corporation, but has never become heavily involved in the management or governance of the company, although they could if they wished. Does control exist?

**ACCOUNTING FOR INVESTMENTS**

There are six ways to account for investments, depending on how the investment is classified. For a summary of the application of accounting methods, refer to Exhibit 11-2. The highlights of the accounting methods themselves are summarized in Exhibit 11-3. This section is an overview; we'll look at some more detail, and examples, in later sections of this chapter.

## EXHIBIT 11-2

## ACCOUNTING FOR INVESTMENTS—EXTERNAL REPORTING

**cost method of accounting for investments**

investments are recorded at cost and revenue is recorded as time passes (interest) or as declared (dividends); interest income includes premium or discount amortization

**Cost Method**

The **cost method** is used to account for held-to-maturity investments. In the cost method

- The original investment is recorded at its investment cost. This is book value or carrying value, but it also represents fair value on the purchase date. It excludes any accrued interest.
- Transaction costs, such as brokerage fees, may be included in acquisition cost and capitalized, or immediately expensed. (*CICA ED 3855.56.*)
- Interest or dividends declared are recorded as investment income.
- If the investment is a long-term investment in debt securities, any premium or discount is amortized to income over the life of the investment. This will change book value. Book value will be move toward maturity value, and be equal to maturity value on the maturity date.
- When an investment is sold before maturity (which should be a rare event), the difference between proceeds and book value is recorded as a gain or loss on sale.
- When an investment matures, cash increases and the investment decreases. There is no gain or loss on the maturation of debt securities, because cash received is equal to the recorded maturity amount.

**fair value method of accounting for investments**

investments are initially recorded at cost, but adjusted to fair value at each reporting date. Realized gains and losses are included in income; unrealized amounts are included in income (trading investments) or in other comprehensive income (available-for-sale investments)

**unrealized holding gains**

increase in fair value of an asset while held; unrealized because asset is not yet sold

**realized holding gain**

increase in fair value of an asset while held, realized through sale

**Fair Value Method; Unrealized Gains and Losses Recognized in Other Comprehensive Income (OCI)**

The **fair value method**, with unrealized gains and losses included in *other comprehensive income*, is used to account for available-for-sale investments. In this method

- The original investment is recorded at its investment cost. This is fair value on the purchase date.
- Transaction costs, such as brokerage fees, may be included in acquisition cost and capitalized, or immediately expensed.
- Interest or dividends declared are recorded as investment income. Interest income includes amortization of any premium or discount inherent in the initial purchase price
- At the end of each reporting period, the investments are revalued to fair value (market value), whether this is higher or lower than the existing balance in the investment account.
- **Unrealized holding gains**, defined as the difference between the existing balance in the investment account (the new fair value) and the old fair value, are recorded in *other comprehensive income*. Such gains and losses are not included in net income, but are segregated in a special shareholders' equity account, called other comprehensive income (OCI).
- When an investment is sold, the total cumulative **realized holding gain** or loss is reported in net income; related *cumulative* unrealized holding gains are eliminated from other comprehensive income in shareholders' equity when the sale is recorded.

The investment is reported at fair value on the balance sheet.

**Fair Value Method; Unrealized Gains and Losses Recognized in Net Income**

The fair value method, with unrealized gains and losses included in net income, is used to account for trading investments. In this method

- The original investment is recorded at its investment cost. This is fair value on the purchase date.
- Transaction costs, such as brokerage fees, may be included in acquisition cost and capitalized, or immediately expensed.
- Interest or dividends declared are recorded as investment income.
- At the end of each reporting period, the investments are revalued to fair value, whether this is higher or lower than the existing balance in the investment account.
- Holding gains, defined as the difference between the existing balance in the investment account (the new fair value) and the old fair value, are recorded in *net income*. That is, net income includes the change in value of the investment each year, whether realized through sale or unrealized because the investment is still held.

The investment is reported at fair value on the balance sheet.

**VOLATILITY** The difference between the two applications of the fair value method obviously relates to holding gain and loss recognition. For trading investments, unrealized holding gains and losses are included on the income statement. For available-for-sale investments, unrealized gains are collected in other comprehensive income until realized. *Realization* is a primary test for revenue recognition. For trading investments, realization is not considered necessary because of their rapid turnover. Remember, though, that if investment prices are volatile, inclusion of holding gains introduces volatility to net income.

Companies with trading portfolios have registered concern about this volatility, because they are often using their trading portfolios to hedge, or offset, fluctuations caused by similar portfolios of financial liabilities, which are carried at cost, and not adjusted to fair value. Standard-setters continue to grapple with these issues.



**ESTIMATING FAIR VALUE** Since financial statements will reflect **fair value** for some investments, it stands to reason that fair value must be carefully estimated. After all, fair value is not substantiated by the objective evidence of a transaction of the reporting entity. Fair value is defined as

The amount of the consideration that would be agreed upon in an arm's length transaction between knowledgeable, willing parties who are under no compulsion to act. *(CICA ED 3855.17(j))*

Many equity investments have a quoted market price in an active market, which is used as fair value. These market prices reflect normal market transactions and are readily available from brokers or in the financial press. When trading is light, recent bid prices are acceptable, although light trading may indicate that estimating fair value is problematic. For example, a recent price might not be relevant if significant events had taken place after the bid date (*CICA ED 3855.A26*).

What if there are no recent transactions? The AcSB suggests that fair value can be estimated, through judicious use of valuation techniques. These valuation techniques must incorporate all factors that market participants consider when establishing prices. Fair value can be estimated through well-recognized valuation alternatives such as discounted cash flow models and option pricing models. In other cases, fair value can be inferred by referring to the current value of similar financial instruments, adjusting the market price for differences in terms and risk. Estimates are needed, and the reasonableness of any result must be carefully considered before the value can be used in the financial statements. It makes sense to disclose the method used to assess fair value, and any assumptions made.

**FAIR VALUE NOT AVAILABLE** In some cases, it may not be possible to obtain fair value. In these cases, the investments must be carried at cost (*CICA ED 3855.59c*). However, if investments are classified as available for sale, and there is no apparent market value, the classification is somewhat suspect. Fair values should be ascertainable in most situations.

## Equity Method

The **equity method** is used for significant influence investments. Under the equity method:

- The original investment is recorded at its acquisition cost; this is initial book value.
- The investor's proportionate share of the investee's net income (subject to certain adjustments) is recognized on the investor's income statement as revenue and on the balance sheet as an increase in book value.
- Dividends are recorded as a decrease in the investment account rather than as investment revenue. This reduces book value.
- When the investment is sold, the difference between proceeds and book value is recorded as a gain or loss on sale.

At any point in time, the equity method investment account consists of

1. the investment's cumulative historical cost, plus
2. the investor's cumulative share of the investee's adjusted earnings since the investment was made, minus
3. the investor's share of dividends paid by the investee since the shares were purchased.

The difference between the investor's share of the investee's net income and the dividends actually received is called **unremitted earnings** and increases book value above cost.

### equity method of accounting for investments

investments are initially recorded at cost, and revenue is recorded as the investor's appropriate share of earnings, increasing the investment account; dividends received reduce the investment account

### unremitted earnings

when accounting for a significant influence investment, the difference between the investor's cumulative share of an investee's net income and the cumulative dividends actually received

**consolidation**

combining the financial statements of a parent company and its subsidiary(ies); fair value on acquisition is established, and intercompany transactions are eliminated

**proportionate consolidation**

combining the financial statements of an investor company and a joint venture enterprise; only the investor's proportionate share of the financial elements of the joint venture are included

**The Consolidation Method**

When an investor controls an investee, **consolidation** is required. The parent investor must prepare consolidated statements, to enable investors (and others) to see the assets, liabilities, revenues, and expenses of the entire economic entity, consisting of the parent and all of its subsidiaries.

When consolidated statements are prepared, the investment account relating to a controlled subsidiary disappears entirely from the balance sheet. Instead, the subsidiary's assets and liabilities are added to those of the parent and reported together as a single economic entity. If the parent owns less than 100% of the subsidiary's shares, the interest of the non-controlling (i.e., minority) shareholders is shown as a separate account on the parent's consolidated balance sheet and income statement.

**Proportionate Consolidation Method**

Joint ventures are reported by means of **proportionate consolidation**. Such a consolidated statement again involves adding the investor and investee financial statements together. This time, though, a *pro-rata* share of the investee's assets, liabilities, revenues, and expenses is calculated and added to the investor's own financial results. (This differs from a regular consolidation, where *all* the subsidiary's assets, etc., are included regardless of the ownership interest, partially offset by the non-controlling interest accounts.) Proportionate consolidation is considered in depth in advanced accounting courses, and will not be further explored in this chapter.

**Differential Reporting**

We discussed *differential reporting* in Chapter 1. Essentially, if an organization has no public accountability and all owners consent, including those not otherwise entitled to vote, simpler accounting rules may be adopted in certain areas.

Remember that the entities that are eligible for this GAAP treatment are private companies—those with no shares or debt traded on public markets. Usually, this is the smaller business sector, but not always. There are some large private companies in Canada. For these companies, if the equity holders all agree, the cost of more complex accounting standards can be avoided. The benefit of information provided is not worth the effort. Accounting for long-term investments is one of those areas.

For investments, the following policies would be GAAP under **differential reporting**.

Significant influence investments	—	Cost
Controlled investments	—	Cost or Equity
Joint ventures	—	Cost or Equity

GAAP is responsive to user needs in this area.

### Recording versus Reporting

It is very important to make a distinction between the way that an investor records investments in its books and the way that the investment is reported in the investor's financial statements. We're already seen that reporting may involve cost, fair value, equity, consolidation, or proportionate consolidation. Often, an investor will account for a strategic investment by using the cost method during the year simply because it is the easiest method; this is the investor's *recording method*. When financial statements are prepared, a different *reporting method* may be more appropriate for the financial reporting objectives of the company. In that case, the accounts relating to the investment are adjusted by means of a worksheet and adjusting entries.

Public companies may prepare non-consolidated (or separate entity) statements for specific users, such as for their bankers, as well as consolidated general purpose statements. Indeed, knowledgeable bankers will insist on seeing a corporation's non-consolidated statements because they have immediate recourse only to the assets and cash flows of the specific legal entity to which they are making the loan. Business history is full of instances in which a bank has lent money to a parent company only to discover later that all of the cash flow is in an operating subsidiary that is out of reach of the bank (sometimes, in a foreign country). If the lender does not have the shares or assets of the operating subsidiary as collateral for the loan, the lender has no recourse. As well, non-consolidated statements are essential for income tax purposes, because every corporation is taxed separately (with some exceptions) and the corporation's separate entity financial statements must be attached to the tax return.

Private companies often do not prepare consolidated statements, because they don't really have "general purpose" financial statements; their range of users is limited. The *CICA Handbook* provides an explicit exemption for private companies through differential disclosure.

### CONCEPT REVIEW

1. Where are unrealized holding gains and losses recognized in the financial statements when using the fair value method? Give two alternatives.
2. Under the equity method, if an investee declares no dividends, there may still be investment income. Why is this the case?
3. Will an investment in subsidiary account appear on a set of consolidated financial statements? Explain.
4. What is the difference between consolidation and proportional consolidation?
5. If a company adopts differential reporting, how may a subsidiary be accounted for?

**EXHIBIT 11-3****SUMMARY OF ACCOUNTING METHODS  
ACCOUNTING FOR INVESTMENTS**

<b>Method</b>	<b>Carrying Value</b>	<b>Investment Income</b>	<b>Unrealized Holding Gains and Losses</b>	<b>Realized Gains and Losses</b>
Cost	Cost or amortized cost	Interest or dividends; effective interest method	N/A	Included in net income
Fair value; Unrealized G/L included in other comprehensive income	Fair value	Interest or dividends; effective interest method	Included in other comprehensive income; part of shareholders' equity	Cumulative amount included in net income when realized
Fair value; Unrealized G/L included in net income	Fair value	Interest or dividends; effective interest method	Included in net income	Included in net income; the annual change in value
Equity	Cost plus unremitted earnings to date	Share of investee earnings adjusted for amortizations and intercompany profits	N/A	Included in net income; sale unlikely
Consolidation	Investment account replaced with financial statements elements of investee in reporting	Investment revenue represented through inclusion of investee income statement elements; adjusted for amortizations and intercompany profits	N/A	Included in net income; sale unlikely
Proportional consolidation	Investment account replaced with fractional financial statements elements of investee in reporting	Investment revenue represented through inclusion of <i>fractional</i> investee income statement elements; adjusted for amortizations and intercompany profits	N/A	Included in net income; Sale unlikely

## THE COST METHOD

The cost method presents no special complications. Interest-bearing debt securities that are purchased between interest dates are recorded at cost, which is market value on the date of acquisition. Accrued interest since the last interest payment date is recorded as interest receivable. Accrued interest is added to the cash paid because, at each interest date, the interest is paid to whomever holds the securities regardless of when they actually purchased them. When debt securities are sold between interest dates, the seller collects accrued interest, which is recorded as interest revenue. When the debt securities are purchased, the accrued interest must be recorded separately from the cost of the security itself.

### Example—Debt Investment

To illustrate the cost-basis accounting for investment in debt, assume that on 1 November 20X1, Able Company purchases face amount of \$30,000 of Charlie Corporation 8% coupon bonds that mature on 31 December 20X7, at 100, plus accrued interest. Interest is paid semi-annually on 30 June and 31 December. Able classifies this investment as a held-to-maturity investment. Able includes transaction costs, if any, in acquisition cost and nets commissions on sale with proceeds received.

Notice that bond prices are quoted as percentages of the face value of the bond. A quote of 98 implies that a \$30,000 face amount bond has a market price of \$29,400. Able paid par, or 100, and so paid \$30,000. The quoted price does not include accrued interest, which also must be paid to the seller of the bond. The bond price is based on the present value of the cash flows, discounted at the market interest rate.

**ACQUISITION** The entries to record the acquisition is as follows:

Investment in Charlie Corporation bonds	30,000	
Accrued interest receivable ( $\$30,000 \times 8\% \times 4/12$ )	800	
Cash		30,800

**REVENUE** When interest is received on 31 December, a portion of it represents the accrued interest recorded at the acquisition date.

To record receipt of interest on 31 December:

Cash ( $\$30,000 \times 8\% \times 6/12$ )	1,200	
Investment income: Interest		400
Accrued interest receivable		800

**MATURITY** When a held-to-maturity investment comes due, the investor receives the face value, or principal, plus interest, since maturity occurs on an interest date.

To record receipt of face value plus interest:

Cash	31,200	
Investment income: Interest		1,200
Investment in Charlie Corporation bonds		30,000

In the unlikely event that the held-to-maturity security is sold before maturity, the difference between book value and the selling price (net of accrued interest), less commissions

and other expenses, is recorded as a gain or loss. Suppose that on 31 March 20X2 Able Company sells its Charlie Corporation bonds at 105 plus accrued interest, and incurs commissions and other expenses of \$550. The cash generated includes the accrued interest of \$600 ( $\$30,000 \times 8\% \times 3/12$ ) plus the net proceeds from the bond itself, \$30,950 ( $(\$30,000 \times 105\%)$ , less \$550 commissions.) The gain on the sale is \$950; the proceeds of \$30,950 are greater than the cost of \$30,000.

The entry to record the sale is as follows:

Cash	31,550	
Investment income: Interest		600
Investment in Charlie Corporation bonds		30,000
Gain on sale of investment		950

Gains and losses on disposal are recognized on the income statement as part of income from continuing operations.

### Amortization of Premium or Discount

What happens if debt securities are bought for an amount other than par value, for example, at 98 or 104? The investment is recorded at its cost, which is greater or less than the face amount of the debt. Any **premium** or **discount** should be amortized in order to bring the carrying value up (or down) to par value at maturity. Otherwise, a substantial gain or loss will be recognized at maturity. This is particularly true when the investment is a so-called “zero coupon” bond that carries little or no annual cash interest payment. These bonds are purchased at a very low price relative to their face value. The implicit interest must then be recognized by amortizing the discount.

#### premium

a difference between the issuance price (or cost) and the maturity value of a debt security where the maturity value is lower

#### discount

a difference between the issuance price (or cost) and the maturity value of a debt security where the maturity value is higher

**ISSUANCE PRICE** To ascertain market value, the present value of the cash flows associated with the debt is calculated using the market interest rate as the discount rate. For example, assume that Marcus Corp purchased Baker Company bonds when the market interest rate was 6%. The Baker bonds had a \$500,000 maturity value, paid 5.5% interest semi-annually, and had a five-year life. The market value is calculated as follows:

Principal $\$500,000 \times (P/F, 3\%, 10) (.74409) =$	\$ 372,045
Interest $\$13,750 (P/A, 3\%, 10) (8.53020) =$	117,290
Market value	<u>\$ 489,335</u>

Both the principal of \$500,000 and the semi-annual interest payments of  $\$500,000 \times (5.5\% \times 6/12)$ , or \$13,750, must be included in the present value calculation. Notice that the discount rate used is 3%. This is the 6% market rate multiplied by 6/12, as payments and compounding are semi-annual. The number of periods is 10, which is the five-year life multiplied by two payments per year. Principal is a lump sum, and the interest amount is an ordinary annuity.

The market value on this investment is \$489,335, which is .97867 of face value ( $\$489,335/\$500,000$ ). This investment would therefore be quoted at 97.867. Acquisition would be recorded as follows, assuming that the investment is to be held to maturity:

Investment in debt securities: Baker bonds	489,335	
Cash		489,335

Since the bond will mature at \$500,000, the \$10,665 ( $\$500,000 - \$489,335$ ) discount must be amortized to interest income over the life of the investment.

**effective interest method**

a measure of interest expense or revenue over the life of a financial instrument not issued at par; measure expense or revenue as a constant rate over the term of the financial instrument

**METHODS** There are two methods of amortization, the **straight-line** and **effective interest** methods. Straight line is simpler and is much more common in practice, but the effective interest method is preferable because it provides a constant yield on the recorded value of the investment. Both methods will be illustrated in this chapter. The effective interest method must be used whenever the premium or discount is material. However, straight line may be used when the results are not materially different than the effective interest method. Fortunately, this is a common outcome!

**EXAMPLE: EFFECTIVE INTEREST AMORTIZATION** Using the effective interest amortization method, interest income is measured as a constant percentage of the bond investment. Interest income is measured using the market interest rate when the bonds were issued. The investment carrying value is multiplied by the market interest rate to obtain interest income. The difference between cash received and interest income is the premium or discount amortization. The investment value changes by the amortization, and the investment book value climbs to face value at maturity.

Effective interest method calculations are illustrated in Exhibit 11-4. Notice that

- The cash payment amount is constant each period, consistent with the terms of the bond. This is the stated interest rate of 2.75% each six months, or  $5.5\% \times 6/12$ .
- Interest revenue is a constant percentage of the bond carrying amount. To obtain interest revenue, multiply the bond carrying value by the market interest rate. For example, the first amount is \$14,680 or 3% of \$489,335.
- Amortization is the difference between the cash payment and interest revenue. On the first line, this is \$930, or  $\$14,680 - \$13,750$ .
- The bond carrying value grows each period by the amortization amount. On the first line, this is \$489,335 plus \$930, to equal \$490,265.
- The bond carrying value is increased to face value by the end of the 10-period amortization process.

**EXHIBIT 11-4****EFFECTIVE INTEREST AMORTIZATION**

Period	Cash Payment	3% Interest Revenue	Amortization	Bond Carrying Value
0				\$489,335
1	\$13,750	\$14,680	\$ 930	490,265
2	13,750	14,708	958	491,223
3	13,750	14,737	987	492,210
4	13,750	14,766	1,016	493,226
5	13,750	14,797	1,047	494,273
6	13,750	14,828	1,078	495,351
7	13,750	14,861	1,111	496,462
8	13,750	14,894	1,144	497,606
9	13,750	14,928	1,178	498,784
10	13,750	14,966*	1,216	500,000

\* \$14,964 + \$2 rounding error

Interest income is recorded for the first period as follows:

Cash	13,750	
Investment in debt securities: Baker bonds	930	
Investment income: Interest		14,680

**EXAMPLE: STRAIGHT-LINE AMORTIZATION** Using the straight-line method, interest income is measured as a constant amount each period, cash received plus a discount amortization, or less premium amortization. The investment value changes by the amortization amount, and the investment book value approaches face value at maturity.

The straight-line amortization method calculations are illustrated in Exhibit 11-5. Notice that

- The cash payment, interest revenue, and amortization are constant each period.
- Amortization is obtained by dividing the discount of \$10,665 (\$500,000 – \$489,335) by 10 (the number of interest payments).
- Interest revenue is the sum of cash payment plus amortization, or \$13,750 plus \$1,067 or \$1,066.
- The bond carrying value is increased to face value by the end of the 10-period amortization process.

### EXHIBIT 11-5

#### EFFECTIVE INTEREST AMORTIZATION

Period	Cash Payment	Interest Revenue	Amortization	Bond Carrying Value
0				\$489,335
1	\$13,750	\$14,817	\$1,067*	490,402
2	13,750	14,817	1,067	491,469
3	13,750	14,817	1,067	492,536
4	13,750	14,817	1,067	493,603
5	13,750	14,817	1,067	494,670
6	13,750	14,816	1,066	495,736
7	13,750	14,816	1,066	496,802
8	13,750	14,816	1,066	497,868
9	13,750	14,816	1,066	498,934
10	13,750	14,816	1,066	500,000

\* \$10,665/10; rounded

**PURCHASE AT PREMIUM** Suppose Marcus paid more than the face of the bonds, because the market interest rate was 4% when the bonds were purchased. In this case, the market value would be

Principal \$500,000 × (P/F, 2%, 10) (.82035) =	\$ 410,175
Interest \$13,750 (P/A, 2%, 20) (8.98259) =	<u>123,511</u>
Market value	<u>\$ 533,686</u>

The excess paid over the face amount is a premium. At acquisition, the bonds would be recorded at \$533,686, but over the period to their maturity the \$33,686 premium would be amortized, reducing the carrying amount (and reducing investment income) each year.



Using the effective interest method, the amortization table would appear as follows:

### EXHIBIT 11-6

#### EFFECTIVE INTEREST AMORTIZATION

Period	Cash Payment	2% Interest Revenue	Amortization	Bond Carrying Value
0				\$533,686
1	\$13,750	\$10,674	\$3,076	530,610
2	13,750	10,612	3,138	527,472
3	13,750	10,550	3,200	524,272
etc.				

Only the first three interest periods have been included here; the table is constructed as for a discount situation, except that the carrying value begins at a value *higher* than face value, the cash received is *reduced* by premium amortization to arrive at interest income, and the investment carrying value is *reduced* to face value over the life of the investment.

The first interest payment would be recorded as follows:

Cash	13,750	
Investment in debt securities: Baker bonds		3,076
Investment income: Interest		10,674

**EXAMPLE: SHARE INVESTMENT** To illustrate the cost-basis accounting for investment in shares, assume that on 1 November 20X1, Able Company purchases 50,000 shares of Phillips Company common shares for \$20 per share. Commissions and legal fees with respect to the purchase are \$50,000; Able includes these expenditures in the acquisition cost. This investment gives Able control of Phillips, and Able will consolidate at year-end. During the year, however, Able will record the investment using the cost method.

**ACQUISITION** The entries to record the purchase are as follows:

Investment in Phillips Company common shares	1,050,000	
Cash [(50,000 shares × \$20) + \$50,000 fees]		1,050,000

**REVENUE** On 31 December, Phillips declares a dividend of \$0.50 per share. The dividend is recorded when declared:

Dividends receivable (50,000 × \$0.50)	25,000	
Investment income: Dividends		25,000

The dividend is paid on January 13 and the cash receipt is recorded:

Cash	25,000	
Dividend receivable		25,000

**SALE** If the investment is sold, the difference between book value and the selling price, less commissions and other expenses, is recorded as a gain or loss. Assume that the shares of Phillips Company common shares were sold for \$2,300,000, less \$61,000 of fees and commissions.

Cash (\$2,300,000 – \$61,000)	2,239,000	
Investment in Phillips Company common shares		1,050,000
Gain on sale of investment		1,189,000

### Impairment

The market value of a held-to-maturity debt security will fluctuate, based on market interest rates. Also, if the credit rating of the borrower changes, the market value of the investment will fluctuate, as the risk attached to future cash flow is changed. This, again, changes the risk premium appropriately included in the discount rate. When the value of an investment falls below its acquisition cost, assets may be overstated. Conservatism might dictate loss recognition. However, since the security is not held for sale, and its maturity value is assured, market value is not a relevant measurement attribute. Therefore, the loss is not recognized in net income.

**Impairment** is a different situation. At each year-end, every investment must be reviewed to see if value is *permanently impaired*. If such an impairment exists, the investment must be written down (*CICA ED 3855.66*)

The following evidence about the issuer (the investee) would suggest impairment:

1. Significant financial difficulty;
2. A breach of contract, such as failure to pay required interest or principal on outstanding debt;
3. Concessions granted because of financial difficulties;
4. High probability of bankruptcy or financial reorganization;
5. Prior impairment losses;
6. Disappearance of an active market for the investment because of financial difficulties; or
7. An historical pattern of financial difficulties. (*CICA ED 3855.A44*)

These situations must be evaluated to see if there is real impairment. So, for instance, if an active market for an investment disappears because a once-public company has gone private, but the company is still in good financial position, there is no impairment. Similarly, a downgrade in credit rating does not mean impairment unless it is accompanied by one of the above conditions.

When an impairment loss must be recorded, it is measured as the difference between the investment's carrying value and fair value. The carrying value of the investment is reduced to fair value either directly or indirectly through an allowance. Impairment losses are not reversed as long as the asset is held.

**EXAMPLE** Review the facts of the Baker bond given above, originally purchased for \$489,335. After three years, if the effective interest amortization method is used, the carrying value of the bond is \$495,351. Assume that the value of this investment has become impaired. Baker is in financial reorganization, and the fair value of the bond was \$213,500, because interest and principal payments have been reduced significantly as part of the financial reorganization.

The impairment is recognized:

Impairment loss (\$495,351 – \$213,500)	281,851	
Investment in debt securities: Baker bonds		281,851

Alternatively, the impairment can be recorded in a valuation allowance:

Impairment loss (\$495,351 – \$213,500)	281,851	
Allowance for impairment loss: Baker bonds		281,851

The allowance is shown as a contra account to the investment on the balance sheet. The loss would be reported on the income statement. The investment account now has a balance of \$213,500, which cannot be written back up to original cost if fair value subsequently recovers. Note that, for tax purposes, such losses are deductible only when realized, so the impairment loss is tax deductible only when the (reduced) payments are actually accepted.

### CONCEPT REVIEW

1. A debt security is bought for \$14,700, including \$700 of accrued interest, and sold for \$14,900, including \$900 of accrued interest. Why is there no gain or loss on sale?
2. How is the market value of a bond determined?
3. Is interest revenue on a held-to-maturity investment necessarily just the cash entitlement? Explain.
4. Suppose that the value of a company's held-to-maturity investment falls below its cost. Would the carrying value of the investment necessarily be impaired? Explain.

### THE FAIR VALUE METHOD; UNREALIZED GAINS AND LOSSES RECOGNIZED IN OTHER COMPREHENSIVE INCOME

The fair value method recognizes that the most relevant attribute for reporting investments is fair value. Therefore, at reporting dates, investments are adjusted to fair value. Gains and losses are excluded from net income until the investment is sold. This is an attempt to avoid recognition of gains and losses that have not been realized through sale.

**EXAMPLE** As an example of the fair value method, assume that on 1 December 20X5, YZone Manufacturing Limited purchased two investments, both designated as available-for-sale investments. YZone bought 5,000 shares of Gerome Limited, a public company, for \$26.75 per share plus \$1,200 in broker's fees. YZone also purchased a \$100,000, 9%, ten-year Provincial Hydro bond that pays interest each 31 October and 30 April, at 100 plus accrued interest. YZone includes broker's fees in the cost of the investment, and nets proceeds on sale with fees charged.

To record purchase of investments:

Investment in Provincial Hydro bonds	100,000	
Accrued interest receivable ( $\$100,000 \times 9\% \times 1/12$ )	750	
Investment in Gerome Ltd. shares ( $5,000 \times \$26.75$ ) + \$1,200	134,950	
Cash ( $\$107,750 + \$134,950$ )		235,700

**REVENUE** Bond interest is accrued on 31 December.

To record accrual of interest:

Accrued interest receivable ( $\$100,000 \times 9\% \times 1/12$ )	750	
Investment income: Interest		750

**FAIR VALUE ADJUSTMENT** At year-end, fair value is determined through reference to stock market quotations. The Gerome shares are trading for \$24.75 and the bonds are trading at 100.5. This means that the shares must be reflected in the financial statements at \$123,750 (5,000 shares at \$24.75) and the bonds at \$100,500.

To record changes in fair value:

Investment in Provincial Hydro bonds ( $\$100,500 - \$100,000$ )	500	
Unrealized holding gain: Provincial Hydro Bond		500
Unrealized holding loss: Gerome Ltd. shares ( $\$123,750 - \$134,950$ )	11,200	
Investment in Gerome Ltd. shares		11,200

The 100.5 bond price is quoted exclusive of accrued interest. Notice that the unrealized loss on the Gerome Limited shares includes the write-off of the broker's fees.

**REPORTING** Unrealized gains and losses are not recorded as income, but rather as unrealized holding gains, part of other comprehensive income in shareholders' equity.

Common shares (assumed)	\$500,000
Retained earnings (assumed)	897,300
Other comprehensive income:	
Unrealized holding losses, net ( $\$11,200 - \$500$ )	(10,700)
Total shareholders' equity	<u>\$1,386,600</u>

Other comprehensive income includes the *changes* in unrealized holding gains and losses during the year. *Cumulative* unrealized holding gains are a special component of shareholders' equity on the balance sheet. At this point, the balance sheet reflects a net unrealized holding loss (a debit) of \$10,700.

In the 20X5 income statement, YZone reported interest income of \$750. The balance sheet reflects investments at their fair value of \$224,250, or \$100,500 plus \$123,750. The cumulative unrealized losses are disclosed as a debit balance in shareholders' equity.

**SECOND YEAR** In 20X6, YZone has further transactions with respect to its available-for-sale investments. Interest on the Provincial Hydro bonds is paid on 30 April and 31 October:

To record receipt of interest on 30 April:

Cash ( $\$100,000 \times 9\% \times 6/12$ )	4,500	
Investment income: Interest		3,000
Accrued interest receivable		1,500

To record receipt of interest on 31 October:

Cash ( $\$100,000 \times 9\% \times 6/12$ )	4,500	
Investment income: Interest		4,500

The bond is sold on 30 November for 103 plus accrued interest. A broker's fee of \$300 is charged.

To record the sale:

Cash ( $(\$100,000 \times 103\%) + \$750 - \$300$ )	103,450	
Unrealized holding gain: Provincial Hydro Bond	500	
Investment income: Interest		750
Investment in Provincial Hydro bonds		100,500
Gain on sale of investment		2,700

When an available-for-sale investment is sold, *cumulative* unrealized holding gains or losses, a \$500 gain in this case, are eliminated. The recorded \$2,700 gain on sale is included in net income.

Gerome Limited paid a \$0.43 per share dividend in 20X6:

Cash ( $5,000 \times \$0.43$ )	2,150	
Investment revenue: Dividend revenue		2,150

The Gerome shares are still unsold at year-end. Their quoted share price is now \$31.50 or a total of \$157,500. Since the shares are now recorded at \$123,750, an unrealized holding gain is recorded:

Investment in Gerome Ltd. shares ( $\$157,500 - \$123,750$ )	33,750	
Unrealized holding gain: Gerome Ltd. shares		33,750

**SECOND YEAR REPORTING** At the end of 20X6 the financial statement will reflect:  
On the income statement:

Investment revenue ( $\$3,000 + \$4,500 + \$2,700 + \$2,150$ )	\$12,350
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Y Zone may choose to disclose the various sources on investment income together on the income statement, as illustrated, or break down the various components.

In other comprehensive income:

Opening balance (debit)	\$10,700
Changes in unrealized holding gains and losses (\$33,750 – \$500)	(33,250)
Closing balance (credit)	<u>\$22,550</u>

**Other comprehensive income** includes the changes in unrealized holding gains during the year. The change in unrealized amounts comes from two sources: first, the \$33,750 new unrealized holding gain on Gerome Limited shares and, second, the \$500 realization of a previously recorded unrealized gain on the Provincial Hydro bonds. The realization of a gain is a *decrease* in other comprehensive income.

On the balance sheet:

Available for sale investments, Gerome Ltd. shares	\$157,500
Shareholders' equity	
Other comprehensive income:	
Unrealized holding gains	22,550

As a proof of the cumulative amount, compare the \$157,500 carrying value of the Gerome shares with their original cost, \$134,950. The result is \$22,550.

**THIRD YEAR** In 20X7, the Gerome Limited shares are sold for \$30.50, less \$1,700 in broker's fees:

To record the sale of shares:

Cash ((5,000 × \$30.50) – \$1,700)	150,800	
Unrealized holding gain: Gerome Ltd. shares (cumulative balance)	22,550	
Investment in Gerome Ltd. shares		157,500
Gain on sale on investment		15,850

At this point, there are no unrealized amounts remaining, and all realized gains and losses have been included in net income.

### Impairment

The above example reflected an unrealized holding loss for the Gerome Limited shares at the end of 20X5. This loss is assumed to be the result of market fluctuations and not a permanent impairment. Of course, the shares, since they are recorded at market value, are not overvalued on the balance sheet. Notice, though, that the loss is excluded from income. If, on the other hand, the decline in market value reflected a permanent impairment, *the loss must be included in net income*. The impairment test is identical to that described under the cost method—the key element is to look for conditions that indicate a permanent decline in value.

If value of the Gerome Limited shares had been impaired at the end of 20X5, the entry would have been as follows:

Impairment loss	11,200	
Investment in Gerome Ltd. shares		11,200

When an impairment loss is recorded, any cumulative holding gains and losses in other comprehensive income are reversed out. An impairment loss cannot be reversed, through gain recognition, until the investment is sold (*CICA ED 3855.A51*). Of course, these Gerome Limited shares recovered their value, in our example, in 20X6. This would not have happened if the investment was truly impaired.

### Other Issues

**BASKET PURCHASES OF SECURITIES** A purchase of two or more classes of securities for a single lump sum is a basket purchase. The total purchase price must be allocated to the different types of securities. The general principles are as follows:

- When the market price of each class of security is known, the proportional method of allocation is used, wherein the total cost is allocated in proportion to the market values of the various securities in the basket.
- If the market price is not known for one class of security, the incremental method can be used, wherein the purchase price is allocated first to the securities with known prices, and then the remainder of the lump-sum purchase price is attributed to the class of investment that does not have a market price.

The incremental method is not a lot of help when more than one security in the basket does not have a market price. In this case, recourse had best be made to pricing models offered in finance literature and practice. Since few accountants are expert at the pricing of financial instruments, valuations may be obtained from independent financial consultants in order to allocate the total purchase price.

**INVESTMENTS MADE IN A FOREIGN CURRENCY** It is not unusual for an enterprise to purchase equity or debt instruments that are priced in a foreign currency. The purchase price must be converted into Canadian dollars for recording on the Canadian investor's books and reporting in the investor's financial statements. To record the purchase, the exchange rate on or about the date of purchase is used.

For example, assume that LeBlanc Limited purchases 20,000 shares of AllAm Incorporated, a U.S. corporation. The purchase price is U.S.\$65 per share, for a total of U.S.\$1,300,000. At the time of the purchase, the U.S. dollar is worth Cdn.\$1.35. The purchase would be recorded in Canadian dollars as follows:

Investment in AllAm Inc.	1,755,000	
Cash (U.S.\$1,300,000 × Cdn.\$1.35)		1,755,000

This entry establishes the cost of the investment to LeBlanc, and will be the carrying value of the investment. Changes in the value of the U.S. dollar in subsequent reporting periods are irrelevant to the cost of an equity investment.

For debt instruments, the issue is a bit more complicated. Debt instruments, by definition, are payable in a given amount of currency. When the debt is stated or denominated in a currency other than the investor's reporting currency, the equivalent value of the instrument in the reporting currency changes as the exchange rate changes. Therefore, an investment in foreign currency-denominated bonds must be restated on every balance sheet date to the equivalent amount in Canadian dollars, using the exchange rate at the balance sheet date (known as the spot rate). The change in Canadian dollar equivalents between balance sheet dates is an exchange gain or loss, and is reported on the income statement.

### THE FAIR VALUE METHOD; GAINS AND LOSSES RECOGNIZED IN NET INCOME

The fair value method, with gains and losses recognized in net income as they arise, is similar in structure to our previous example. The difference lies in the entries to record changes in value, and the entries on sale. Balance sheet values represent fair values, a highly relevant measurement for financial statement users.

**EXAMPLE** Return to the example of YZone Manufacturing above. YZone now classifies its investments as trading investments. The fair value method is unchanged except for the treatment of the changes in value.

At the end of 20X5, YZone would record holding gains and losses on the income statement:

Investment in Provincial Hydro bonds	500	
Investment revenue; unrealized holding gain:		
Provincial Hydro Bond		500
Gerome Ltd. shares	11,200	
Investment in Gerome Ltd. shares		11,200

Investment revenue: unrealized holding loss

The investment revenue accounts, even though unrealized, would be reported on the income statement. Therefore, there would be no special equity accounts recorded on the balance sheet.

Entries in 20X6 would be identical for interest and dividends, but the sale of the Provincial Hydro bond would be recorded as follows:

Cash	103,450	
Investment income: Interest		750
Investment in Provincial Hydro bonds		100,500
Gain on sale of investment		2,200

A \$2,700 gain was recorded in 20X6 in the available-for-sale example, versus \$2,200 in this trading investment example. YZone has still earned \$2,700 on the bond. In the trading investment example, \$500 is included in net income in 20X5 and \$2,200 in 20X6. *Timing* of gain and loss recognition has changed.

At the end of 20X6

Investment in Gerome Ltd. shares (\$157,500 – \$123,750)	33,750	
Investment income: unrealized holding gain:		
Gerome Ltd. shares		33,750

When the Gerome shares are sold in 20X7

Cash	150,800	
Loss on sale of investment	6,700	
Investment in Gerome Ltd. shares		157,500



Recognizing the gain or loss caused by the change in value in net income immediately has again changed the timing, but not the amount, of the net gain. When unrealized holding gains and losses were deferred, in the prior example, a net gain of \$15,850 was recognized in 20X7. When gains and losses are recognized as they occur, there is a loss of \$11,200 in 20X5, a gain of \$33,750 in 20X6, and a loss of \$6,700 in 20X7. The total is still \$15,850.

**IMPAIRMENT** Since losses on declines in fair value are included in income immediately, there are no impairment rules applied to this method. Declines in market value may reverse if market value recovers.

### CONCEPT REVIEW

1. An available-for-sale investment is bought for \$10,000, and has a fair value of \$14,000 at the end of the first year, \$16,000 at the end of the second year, and is sold for \$21,000 in the third year. What amount of gain is recorded in net income in the third year?
2. Assume that the same investment is classified as a trading investment. What gain is included in income in the third year?
3. An available-for-sale investment had a carrying value of \$50,000 and a fair value of \$40,000. If the decline in value is considered a normal fluctuation in market value, what amount will be recorded in net income? What if the decline was considered an impairment?

## THE EQUITY METHOD

Conceptually, the equity method treats the investee company as if it were condensed into one balance sheet item and one income statement item and then merged into the investor company at the proportion owned by the investor. The equity method is sometimes called “one-line consolidation” because it results in the same effect on the investor’s earnings and retained earnings as would result from consolidating the financial statements of the investor and investee companies. It does so without combining both companies’ financial statements.

**ILLUSTRATION** In its simplest form, the equity method requires that the investment account represent the investor’s proportionate share of the book value of the investee and that the investment income represent the investor’s proportionate share of the investee’s income. Assume, for initial simplicity, that Teck Computer Company (TCC) makes an initial investment of \$100,000 for 40% of the voting shares of RPP Software on 1 January 20X1. In 20X1, RPP has earnings of \$30,000 and pays dividends totalling \$10,000. If the investment is accounted for by the equity method, TCC will make the following two entries at the end of 20X1:

To record TCC’s share of RPP’s net income:

Investment in RPP Software	12,000	
Investment income ( $\$30,000 \times 40\%$ )		12,000

To record receipt of dividends from RPP:

Cash ( $\$10,000 \times 40\%$ )	4,000	
Investment in RPP Software		4,000

Note that dividends from the investee are not recorded as investment income. Under the equity method, the investor company records its proportionate share of the investee earnings as investment income and increases its investment account by this amount. When the investee pays dividends, its net worth is reduced, and thus the investment account of the investor is reduced. Dividends are viewed as a dis-investment, that is, a return of the investment to the investor, rather than a return on the investment.

Following the two entries for 20X1, the investment account for RPP will reflect the following:

Investment in RPP Software, at equity	
Original investment	\$100,000
Proportionate share of earnings of investee ( $\$30,000 \times 40\%$ )	12,000
Dividends received from investee ( $\$10,000 \times 40\%$ )	(4,000)
Ending balance	<u>\$108,000</u>

The difference between investee earnings and investee dividends is the amount of earnings accruing to the investor that the investee retained, or the unremitted earnings of the investee. Thus, the equity-based investment account is equal to the original investment plus the investor's proportionate share of the investee's cumulative retained earnings since the investment was made. In this sense, the equity method represents an extension of accrual accounting to investments in common shares. However, the balance sheet doesn't reflect the cost of the investment anymore. This number isn't market value, either, and is hard to interpret.

#### EXTRAORDINARY ITEMS AND DISCONTINUED OPERATIONS

When the investee reports extraordinary items, or discontinued operations, the investor company must report its proportionate share of these items on its income statement separately, in the same way it would if they were incurred by the investor company. However, separate disclosure is needed if they remain material items on the income statement of the investor, which usually is larger than the investee.

**NECESSARY ADJUSTMENTS** The equity method is typically more complicated than this simple example. It is usually necessary to make certain adjustments to the amount of annual income that is recorded on the investor's books. Two factors must be considered:

1. When an investor company acquires the equity securities of an investee company, it may pay more for the securities than their book value. In this situation, the investor's proportionate share of the investee's net income must be adjusted. The adjustment is needed to amortize the underlying fair value of the net assets acquired.

When there is an investment to be accounted for under the equity method, it is necessary to

- a. Measure the fair value of net assets acquired;
- b. Compare the proportionate fair value to the price paid; and
- c. Determine the amount of goodwill, if any.

The fair values of assets and goodwill are not explicitly recognized under the equity method, but the investor's share of income must be decreased by appropriate amortization on the fair values of depreciable assets and any writedown caused by an impairment of goodwill.

2. If the investor and the investee have transactions with each other during the year, either company, or both companies, will have the profits from these transactions recorded in income. For example, assume that the investor sold inventory to the investee at a profit of \$25,000. If the investee subsequently sold these goods to a third party, then the intercompany sales price is validated, or realized, in this subsequent transaction and no particular accounting concerns arise. However, if the inventory is still on the investee's balance sheet, then the profit is unrealized as far as the investor is concerned. It is not acceptable to recognize an increase in net income if all that's happened is a sale to a "customer" that the vendor can significantly influence. Therefore, the equity method, properly applied, involves adjustments for unrealized intercompany profits of both companies.

### Example: Equity Method

On 2 January 20X1, Giant Company purchased 3,600 shares of the 18,000 outstanding common shares of Small Corporation for \$300,000 cash. Two Giant Company senior executives were elected to the Small Corporation Board of Directors. Giant is deemed to be able to exercise significant influence over Small's operating and financial policies, so the equity method of accounting for the investment is appropriate.

**ACQUISITION** Giant records its investment as follows:

Investment in Small, at equity	300,000	
Cash		300,000

**FAIR VALUE INCREMENTS AND GOODWILL** The balance sheet for Small at 2 January 20X1, and estimated market values of its assets and liabilities are as follows:

	Book Value	Market Value	Difference
Cash and receivables	\$ 100,000	\$ 100,000	\$ 0
Inventory (FIFO basis)	400,000	405,000	5,000
Plant and equipment, net (10-year remaining life)	500,000	700,000	200,000
Land	150,000	165,000	15,000
Total assets	\$1,150,000	\$1,370,000	
Less: liabilities	(150,000)	(150,000)	0
Net assets	\$1,000,000	\$1,220,000	\$220,000

Giant bought 20% of Small's shareholders' equity, which has a book value of \$200,000 ( $\$1,000,000 \times 20\%$ ); \$200,000 is the proportion of Small book value purchased by Giant. Giant paid \$300,000 for its 20% interest in Small. The amount above book value that Giant paid, \$100,000, is called the *purchase price discrepancy*. The accounting problem is to determine why Giant paid that much, and then to account for the acquisition price accordingly.

First, each asset and liability is examined to see if book value understates fair market value. To the extent this is true, the \$100,000 excess is explained. If there is a remaining unexplained residual, it is attributed to goodwill. This is based on the assumption that intangible assets, which promise future cash flow, explain the purchase price.

The "difference" column shows the specific assets whose market value exceeds book value. Giant acquired a portion (20%) of each of these items, including the amount by which market value exceeds book value.

	Book Value	Market Value	Difference	20% of Difference
Inventory	\$400,000	\$405,000	\$ 5,000	\$ 1,000
Plant & equipment (10-year remaining life)	500,000	700,000	200,000	40,000
Land	150,000	165,000	15,000	3,000
Totals			<u>\$220,000</u>	<u>\$44,000</u>

Thus, \$44,000 of the \$100,000 purchase price premium over book value that Giant paid can be identified with these specific assets. The remaining difference, \$56,000, cannot be specifically identified with any asset and therefore represents goodwill. Goodwill is defined as the excess of the amount invested in acquiring all or a portion of another firm over the fair value of the net identifiable assets acquired. Goodwill can also be computed as follows:

Computation of Goodwill Purchased by Giant Company	
Purchase price (of 20% interest)	\$300,000
Market value of identifiable assets	\$1,370,000
Less: Market value of liabilities	<u>(150,000)</u>
Total	\$1,220,000
Market value of 20% of identifiable net assets acquired: ( $\$1,220,000 \times 20\%$ )	<u>(244,000)</u>
Goodwill	<u>\$ 56,000</u>

Giant, then, has acquired a 20% interest in Small at a cost of \$300,000, and the items acquired can be represented as follows:

20% of the net book value of Small ( $\$1,000,000 \times .20$ )	\$200,000
20% of excess of market value over book value for:	
Inventory ( $20\% \times \$5,000$ )	\$ 1,000
Plant and equipment ( $20\% \times \$200,000$ )	40,000
Land ( $20\% \times \$15,000$ )	<u>3,000</u>
Goodwill	56,000
Total	<u>\$300,000</u>

**SUBSEQUENT AMORTIZATION** The equity method requires that Giant record its initial \$300,000 investment in Small in one investment account, despite the fact that it has many components. No formal recognition is given to the various component parts of the investment. However, the amount of income recognized annually will be changed as a result of these components.

When Small disposes of any of the above items, either in the normal course of business or by asset sales, Giant must record appropriate adjustments to its investment account, through the annual entry that recognizes investment income.

For example, since Small uses FIFO to cost its inventory, the beginning inventory is treated as sold first during the coming year. Likewise, its plant and equipment is used and depreciated each year for 10 years. Since the valuation of these items from Giant's investment perspective is different from that recorded by Small, Giant will adjust annual investment income to reflect the using up of the difference between the market value and the book value of these assets.

Assuming that all of Small's beginning inventory is sold during 20X1, Small's cost of goods sold for 20X1 is understated by \$1,000 from the single-entity (Giant) perspective. Also, amortization is understated. If the plant and equipment have a remaining useful life of 10 years and Small uses straight-line amortization, Giant needs to increase the amortization expense for Small by \$40,000 divided by 10 years, or \$4,000 each year for the next 10 years.

Next, goodwill must be considered. Goodwill is not amortized, but must be evaluated for possible impairment. If there is an impairment, investment income must be decreased accordingly.

No annual adjustments need be made for the excess of market value over book value for the land. Only if Small disposes of the land would an adjustment need to be made, showing that the cost of 20% of the land from the Giant perspective is understated by \$3,000 on Small's books. Giant's proportionate share of any gain (loss) on disposal of the land would be decreased (increased) by \$3,000.

**INVESTMENT REVENUE** Giant's income from its investment in Small requires adjusting to reflect the above analysis. Suppose that for the fiscal year ending 31 December 20X1, Small reports the following:

Income before discontinued operations	\$ 73,000
Net earnings from discontinued operations	30,000
Net income	<u>\$103,000</u>
Cash dividends, paid on 31 December	<u>\$ 50,000</u>

Goodwill has been evaluated for potential impairment, but no writedown is required. In 20X1, Small sold goods to Giant for \$46,000 during the year, and none have been resold by Giant at year-end. The goods originally cost Small \$38,000, and thus Small has recorded an \$8,000 increase in income that has not been confirmed by a transaction with an outside party. Since Giant owns 20% of Small, and records only 20% of Small's income, it must eliminate 20% of the gain, or \$1,600 of the \$8,000 unrealized gain.

Investment income is a combination of Giant's share of a variety of items.

Small's net income before discontinued operations (\$73,000 × 20%)	\$14,600
Cost of goods sold adjustment for the fair value of inventory purchased (\$5,000 × 20%)	(1,000)
Additional amortization on plant and equipment fair value (\$40,000 ÷ 10)	(4,000)
Elimination of unrealized inter-company profit in inventory (\$8,000 × 20%)	<u>(1,600)</u>
Net investment income, ordinary income	<u>\$ 8,000</u>
Small's net earnings from discontinued operations (\$30,000 × 20%)	<u>\$ 6,000</u>

The investment revenue for 20X1, after all the adjustments, is \$8,000 of ordinary income and a gain from discontinued operations of \$6,000. These two items would be shown separately on the income statement. If no adjustments had been made, Giant would have recorded a total of \$20,600 of income ( $\$103,000 \times 20\%$ ). This result of the equity method is quite common; less income than you might expect is recorded. This happens because the investor very often pays more than book value for its interest in the investee, and resulting amortizations reduce income. Then, too, intercompany transactions are quite common, and elimination of unrealized profits can also reduce income.

**ENTRIES** At 31 December Giant would make the following entries to reflect its interest in the earnings of Small:

Investment in Small, at equity	14,000	
Investment income (as above)		8,000
Earnings from discontinued operations ( $\$30,000 \times 20\%$ )		6,000

To record the receipt of cash dividends paid by Small:

Cash ( $\$50,000 \times 20\%$ )	10,000	
Investment in Small, at equity		10,000

**BALANCE IN INVESTMENT ACCOUNT** After these entries are posted, the balance in the investment in account is \$304,000.

Beginning balance (acquisition price)	\$300,000
Proportionate share of Small's net income	14,000
Dividends received	(10,000)
Investment account balance, 31 December 20X1	<u>\$304,000</u>

The total investment income Giant reports from its investment in Small is \$14,000. Since Giant received \$10,000 of this in the form of cash dividends, the net increase of its investment is \$4,000.

### Unrealized Profit Elimination

The example shown above involved an intercompany unrealized profit that had been recorded by the investee. This is called an **upstream profit**, because the transaction went from the bottom of the investment river (the investee) to the top (the investor). Since the investor picks up only its share of the investee's income, it also picks up only a partial, or 20%, elimination of the profit.

Assume instead that the transaction in the Giant example is **downstream**, a sale from the investor to the investee. Again, none of the inventory is sold at year-end. In this case, Giant has recorded, as part of gross profit, an \$8,000 sale that has not been confirmed by a sale to an outside party. No adjustment is made to the investor's sales or gross profit. Instead, investment income is reduced by the *full \$8,000 intercompany downstream unrealized profit*. Thus, the bottom line net income for the investor company will reflect the elimination of the gross profit, but through a reduction of investment income rather than a reduction of reported gross profit.

#### upstream profits

intercompany profits on transactions between an investor company and investee where the investee records the profit

#### downstream profits

intercompany profits on transactions between an investor company and investee where the parent records the profit

The rule is that upstream unrealized profits are fractionally eliminated (the investor's share only) but downstream unrealized profits are eliminated in their entirety, because the full amount is in the investor's accounts.

### Goodwill Impairment

The procedures for evaluating goodwill for potential impairment were explained in Chapter 10. If goodwill had to be written down, investment income is reduced by the amount of the writedown. This may well create an investment loss for the year, and the investment account on the balance sheet would be reduced as a result. This is the obvious result of a writedown: assets go down!

### CONCEPT REVIEW

1. Why is the equity method sometimes called the one-line consolidation method?
2. Explain what is meant by unrealized profits. Why should they be eliminated when the investor's financial statements are being prepared?
3. What difference is there between the amounts reported as income from equity-reported investments and the cash flow from those investments?

### CONSOLIDATION

A parent company is required to consolidate its financial statements with those of its subsidiaries when general purpose financial statements are issued. The parent company uses the cost or equity method to account for the investment during the year, but, at the end of the reporting period, must prepare consolidated financial statements for reporting to its shareholders and other financial statement users. Consolidated statements are prepared by combining the sets of financial statements into one, which is intended to portray the activities of the whole enterprise. This is an application of substance over form, as consolidated statements portray the economic entity that exists in substance, rather than relying on the legal form that has been used to organize the activities of an enterprise.

Consolidation is accomplished using the purchase method. That is, the parent company purchases the subsidiary, and the two companies are combined as of that date. Fair market values of the subsidiary's assets are recognized from this acquisition transaction, including goodwill. Prior results are not combined.

It is important to understand that consolidation does not happen on anyone's books; there's a spreadsheet that imports financial statements from the parent and the subsidiary as inputs. Then, certain adjustments are processed, and the consolidated financial statements are produced.

Consolidation is mostly an additive process; the financial statements are added together, line by line. Common adjustments include

1. The investment account must be eliminated from the parent company's financial statements, and the corresponding equity accounts must be eliminated from the subsidiary's financial statements.
2. If net assets' book values reflected on the subsidiary's books on the date of acquisition are different from their market values on that date, the difference, called a fair value increment, must be recognized on the consolidated financial statements, along with any goodwill inherent in the purchase price. This reflects the fact that the parent acquired assets, including intangible assets, at fair value.
3. If fair values (i.e., market values) were recognized, they must be amortized in subsequent years.
4. Goodwill is not amortized. Goodwill is written down if impaired. The impairment test must be done on an annual basis.

5. Any portion of the subsidiary that is consolidated but is owned by non-controlling, or minority, subsidiary shareholder must be recognized as a separate balance sheet and income statement account.
6. Intercompany receivables and payables, gains and losses, and revenues and expenses must be eliminated so that the financial statements will reflect only transactions with outsiders.
7. If there are any intercompany unrealized profits at year-end, these must be eliminated so that income is not misstated.

**THE END RESULT OF CONSOLIDATION** A whole course in consolidations is offered at the advanced accounting level in many accounting programs. We won't go into that much depth here! The Appendix to this chapter contains a basic consolidation example, along with brief explanations of the elimination entries. This example will give you a taste of the consolidation process. However, it is worthwhile to take a look at the end result for a few minutes, even if you're not covering the Appendix material. Look at Exhibit 11A-1 now. What should you notice about these consolidated results, as shown in the final column?

- Consolidated assets are higher than just the parent's alone, and also are different from just the parent and the subsidiary added together. The subsidiary's assets are written up (or down) to reflect their fair values on the date on acquisition. Goodwill inherent in the purchase price is recognized. Goodwill is shown with intangible assets.
- Assets and liabilities of the parent and the subsidiary are added together, and intercompany balances are eliminated.
- The parent's investment account and investment revenue are eliminated.
- The portion of the subsidiary that is not owned by the parent is included in consolidated totals, but the outside interests are reflected in consolidated financial statements via a balance sheet account and an income statement account that relate to the **non-controlling interests**.
- The consolidated income statement reflects higher expenses, because fair values recognized are amortized.
- The consolidated income statement reflects eliminations for intercompany unrealized profits.
- Dividends reported are only those dividends paid by the parent.
- Equity accounts of the subsidiary that existed on acquisition are eliminated.

#### **non-controlling interest (minority interest)**

when a company controls a subsidiary but does not own 100% of the voting shares, it still includes 100% of the net assets and net income in the consolidated financial statements; the non-controlling interest in earnings is the portion of the subsidiary's earnings that accrue to the other, minority shareholders; the non-controlling interest in net assets—a balance sheet credit—is the portion of net assets that represent the minority shareholders' share

**COMPLICATIONS** Consolidations can be very complicated. Many parent companies have more than one subsidiary, and all must be consolidated together, with all intercompany transactions eliminated. This can seem mind boggling when there are 200 subsidiaries, but it's no big challenge for consolidation computer software as long as all of the intercompany transactions and balances are coded correctly.

Profit eliminations are potentially complex, too, when the impact on future (deferred) income tax is considered. Then, too, intercompany unrealized profits usually have an impact for multiple years, and appropriate entries must be made. The parent's percentage ownership in the subsidiary can change, either up or down. There are also many subtleties associated with fair value amortizations. We could go on, but we're sure you get the picture.

**DIFFERENTIAL ACCOUNTING** Remember, though, that non-public companies can adopt differential reporting for controlled investments and use either the cost or the equity method for accounting.

#### **RECLASSIFICATION**

It happens that investment intent changes, and investments that were once available for sale become held to maturity, or significant influence investments are reclassified as available for sale. Trading investments, because of the specialized nature of the portfolio category, may not be reclassified (*CICA ED 3855.71*).



Sometimes, reclassifications are caused by the action of others—for example, significant influence may be lost if another shareholder becomes dominant. Most often, though, management intent is the driving factor in these changes. Granted, the financial position of the investor and the investee influences management intent. It may not be possible to hold investments to maturity if the investor is in need of funds. The investee might be struggling, or suddenly prosperous, and this may influence intent.

If investments are reclassified, the investment is transferred to the alternate portfolio, at an appropriate value. For example, if investments are transferred to the held-to-maturity or the significant influence category, the transfer takes place at carrying value, and the investment is then accounted for using the cost or equity method as appropriate. If the investments are transferred to available for sale, the transfer takes place at fair value and other comprehensive income is created. Future income is recognized based on the new classification rules. Refer to Exhibit 11-7 for a summary of the rules for reclassification. Note in particular that

- If held-to-maturity investments are transferred to available for sale, the transfer takes place at fair value and the difference between amortized cost (the carrying value) and fair value is included in other comprehensive income until realized through sale.
- If available-for-sale investments are reclassified as held to maturity, then the cumulative gain or loss in other comprehensive income is amortized to interest income over the remaining term of the investment.

Reclassifications are clearer if a formal entry is made to reclassify the investment. For example, if a held-to-maturity bond investment with a carrying value of \$98,000 and a fair value of \$105,000 is reclassified as available for sale, the following entry would be made:

Available-for-sale investment: bonds	105,000	
Held-to-maturity investment: bonds		98,000
Unrealized holding gain: bonds		7,000

Remember, such a reclassification out of the held-to-maturity classification means that this classification cannot be used for two years, as management intent has proven unreliable.

### EXHIBIT 11-7

#### RECLASSIFICATION RULES

Transfer From	Transfer To	Transfer Value	Prior Gains and Losses
Any appropriate category	Available-for-sale	Fair value	Gain or loss at date of transfer recognized in other comprehensive income until sale
Any appropriate category	Equity	Carrying value	No gain or loss recorded; any cumulative amounts in other comprehensive income remain until sale
Available-for-sale	Held-to-maturity	Carrying value	Unrealized gain or loss to date amortized to interest income

Note: transfers to and from trading category **not permitted**

## CLASSIFICATION AND DISCLOSURE REQUIREMENTS

### temporary investment

an investment in debt or equity securities that can be liquidated quickly and is intended by management as a short-term use of cash

### Temporary versus Long-Term Investments

Should investments be classified as temporary or long-term in the financial statements? The answer will have a large effect on the current liquidity picture portrayed. An investment is classified as a **temporary investment** if *both* of the following conditions are satisfied:

1. The investment matures within the next year (or operating cycle) or is capable of reasonably prompt liquidation (either by sale on the open market or sale to a financial institution), and
2. The investment is intended by management to be a temporary use of cash.

If these two conditions are not satisfied, the investment is classified as long term.

Held-to-maturity investments are obviously classified as long-term investments, at least until the investment's maturity date falls within the one-year window. Available-for-sale investments may be either temporary or long term, depending on a careful assessment of the factors above. Trading investments would usually be temporary in nature, but again, specific circumstances must be carefully reviewed. If the trading window is over one year, the investments would be long term.

### Disclosure of Financial Instruments

All held-to-maturity, available-for-sale, and trading investments are financial instruments, so disclosure must be made of

- *Significant terms and conditions.* Terms and conditions include due dates, interest rates, interest payment dates, and all major terms. This disclosure is meant to help financial statement users assess the amount, timing, and uncertainty of cash flows related to the investment.
- *Interest rate risk.* Financial statement readers must be informed of the effective interest rate that is embedded in the purchase price, and any maturity dates or contractual repricing dates prior to maturity.
- *Credit risk.* An investor assumes credit risk when lending money to another company, which is what investing in a debt instrument amounts to. What if the company doesn't pay? Collateral is often present to protect the investor. In any event, a company must disclose the maximum credit risk it has accepted, which would usually be limited to the face value of the investment.

### Disclosure of Strategic Investments

Disclosures relating to strategic investments, that is, significant influence, control, and joint venture relationships, are generally more extensive than those recommended for financial instruments. There are two reasons for the more extensive disclosure:

1. By their nature, strategic investments are intended to extend the reach of the reporting enterprise and to increase the volume of non-arm's length transactions.
2. There are substantial differences between the income effects of strategic investments and their cash flow effects, as has been described in the preceding section.

The least extensive disclosure relates to controlled subsidiaries. When control exists, normal practice is to consolidate the subsidiaries and the parent, with the result that there is a single reporting entity that includes two or more separate legal entities. When the subsidiaries are consolidated, all intercompany transactions are eliminated and the several enterprises are reported as one. Little additional disclosure is required.

Some companies list their consolidated subsidiaries in their annual reports, but this is a voluntary disclosure. Most companies do not tell the readers who their subsidiaries are, perhaps because the subsidiaries are so thoroughly integrated into the parent's operations that their existence is irrelevant to most statement users.

If one company acquired another company during the accounting period—a business combination—the parent company must disclose the transaction and the amounts of the identifiable assets and liabilities that were acquired. The amount and form of consideration given for the purchase must also be disclosed, such as cash, common shares, preferred shares, long-term debt, etc. Only the amount of cash consideration is shown on the face of the cash flow statement, however.

Joint ventures are reported on the basis of proportionate consolidation. The notes to the consolidated statements should disclose summary financial amounts for interests in joint ventures, such as total current assets and long-term assets, current and long-term liabilities, major components of net income, and major categories of cash flow.<sup>1</sup>

The disclosures recommended by the *CICA Handbook* for investments in significantly influenced investees are quite extensive. They include disclosure of

- The amount of investment in significantly influenced companies.
- The basis of reporting each investment (i.e., cost or equity).
- The income from investments in significantly influenced investees, reported separately from other investment income.

In practice, compliance with these recommendations is uneven. Materiality undoubtedly plays a role, since a company may well have investments that confer significant influence but that constitute a small portion of the reporting enterprise's operations.

## CASH FLOW STATEMENT

Companies often make short-term investments in highly liquid financial instruments such as certificates of deposit, guaranteed investment certificates, or treasury bills. This type of investment is a temporary use of cash in order to earn a return when the company has a temporary excess of cash. In Chapter 5, we pointed out that if such financial instruments are considered to be *cash equivalents*, they are included in the definition of cash when the cash flow statement is prepared. Consequently, investments in cash equivalents do not appear in the cash flow statement, but instead are included in the cash balance.

For other investments in debt and equity securities, the cash flow impacts occur in three ways:

1. There is a cash outflow when an investment is purchased.
2. Cash payments are received by the investor (dividends or interest).
3. Cash is received when the investment is sold or is redeemed at maturity.

For most investments, the initial cash outflow is reported as an investing activity on the cash flow statement in the period that the investment is made. If securities are held for trading, they are analogous to inventory, and related cash flows are classified as operating (*CICA* 1540.17).

When the recorded values of available-for-sale investments or trading investment changes because of changes in fair value, this is a non-cash event; it does not appear on the cash flow statement. For trading investments, gains and losses on the income statement are adjusted as non-cash amounts. For available-for-sale investments, other comprehensive income is affected, but no adjustments are needed on the cash flow statement.

On sale, the net cash proceeds that the company receives when it sells or redeems an investment security are reported as a positive (inflow) amount in the investing activities section of the cash flow statement. Any gain or loss on disposal must be removed from net income when computing the operating cash flow, since a gain or loss is merely the difference between the cash proceeds and the investment's carrying value at the time of the sale. Note also that premium or discount amortization in investment income if the investment is held to maturity are also non-cash items, and must be included as a reconciliation item in the operating activities section.

Reporting the periodic cash flows for dividends received on strategic investments presents a somewhat greater challenge. If the investment is being reported on the equity basis, then

1. Cash received in dividends must be reported on the cash flow statement, as cash flow from investment revenue.

<sup>1</sup> The difference between the price paid for the investment and the underlying net book value of the investee's net assets, and the accounting treatment (e.g., amortization policies) for the difference.

2. The investor's share of the investee's earnings must be removed from net income when calculating the operating cash flow.

If the strategic investment gives the investor control over the investee and the parent prepares consolidated statements, the cash flows between the parent and subsidiary are eliminated in consolidation and do not appear on the cash flow statement at all. A consolidated cash flow statement is prepared.



### International Perspective

**FAIR VALUE METHOD** Both the United States and the IASC require that securities be remeasured to fair value at each balance sheet date, except for debt securities that are being held to maturity and for situations where there is significant influence or control. As with the new Canadian rules, unrealized holding gains and losses on available-for-sale investments are included in other comprehensive income until realization. Thus, the 2004 Canadian rules are a step toward international harmonization.

**CONSOLIDATION** Accounting for investments is an area where there are significant differences between Canadian accounting rules and those of many other countries. Many European companies do not consolidate or include the earnings of unconsolidated subsidiaries on an equity basis in their earnings. Moreover, when the operations of a business segment do not go as well as planned, many countries allow the parent to transfer those operations to an unconsolidated subsidiary. Thus, the income statements and balance sheets of many foreign companies will not provide the same kind of information as those of Canadian-based companies.

The European Union (E.U.) has a priority for standardizing the financial reporting among its member countries. In particular, the E.U.'s Seventh Directive requires firms to provide consolidated statements that include controlled subsidiaries. Consolidated statements are considered as supplementary statements; however, the unconsolidated, separate-entity statements are the primary statements. The E.U. is also moving toward requiring use of the equity method for investments in which the investor has a significant influence, where significant influence is defined similarly to Canadian GAAP.

**SIGNIFICANT INFLUENCE** Canadian standards for strategic investments are substantially in line with the recommendations of the IASC. The United States, however, has different classification standards. Significant influence is rigidly defined in the United States as ownership of between 20% and 50% of the outstanding equity of the investee; other factors that shape an investee's influence are ignored.

### SUMMARY OF KEY POINTS

1. Companies invest in the securities of other entities for a variety of reasons, including increasing return on idle funds, active trading of an investment portfolio, long-term investments for earnings generation, creating strategic alliances, and creating appropriate legal vehicles for business activities.
2. Appropriate accounting for investments is determined by the substance of the investment vehicle, and also the intent of the investor. Differential reporting can be adopted by non-public organizations in this area.
3. Investments must be classified as held to maturity, available for sale, trading, control, significant influence, or joint ventures.
4. Held-to-maturity investments are accounted for using the cost method. The security is recorded at cost and interest revenue is accrued as time passes. If the investments are purchased at a premium or discount from face value, the premium or discount should be amortized to income over the life of the investment.

5. Available-for-sale investments are accounted for using the fair value method, where the investment is remeasured at current fair value at each balance sheet date. Gains or losses are recognized in other comprehensive income (shareholders' equity) until the investment is sold, when the cumulative realized amount is recorded in net income.
6. Trading investments are accounted for using the fair value method, where the investment is remeasured at current fair value at each balance sheet date. Gains or losses are recognized in net income immediately.
7. Held-to-maturity and available-for-sale investments are subject to impairment tests, where a permanent decline in value is recorded as a loss, which is not reversed.
8. Long-term investments in equity instruments are classified according to the power of the investor within the corporate governance structure of the investee. If the investor controls the investee, the investment is a subsidiary, and is consolidated. If the investor has power but does not have control without the cooperation of others, there is a significant influence investment that must be accounted for using the equity method.
9. If a non-public organization adopts differential reporting, a significant influence investment may be reported at cost, and controlled investments and joint ventures accounted for with cost or equity methods.
10. Investments that are acquired in a foreign currency must be reported on the investor's books at their equivalent cost in Canadian dollars, using the exchange rate in effect at the time of the purchase. Investments in debt instruments that are denominated in a foreign currency must be restated to their current equivalent amount in Canadian dollars at each balance sheet date. Exchange gains and losses are recognized in income immediately.
11. In the equity method, the investment is first recorded at cost, but the balance of the investment account changes to reflect the investor's proportionate share of the investee's adjusted earnings, losses, and dividends. Investment revenue includes the investor's share of profits (or losses), less amortizations of fair values present at acquisition, goodwill writedowns, and elimination of unrealized intercompany profits.
12. Consolidation requires combining the financial statements of the parent and the subsidiary at reporting dates.
13. Under purchase accounting, the parent consolidates the fair values of identifiable assets and liabilities. Any excess of the purchase price above the fair values of the assets is recorded as goodwill.
14. When statements are consolidated, all intercompany transactions and any unrealized profits are eliminated. The portion of the subsidiary that is not owned by the parent is reflected in the consolidated statements as a non-controlling or minority interest.
15. Investments may be reclassified from one category to another. The reclassification generally takes place at the prior carrying value, and any gains and losses are subject to specific rules depending on the reclassification category.
16. Investments are classified as current assets on the balance sheet if they are temporary; otherwise, they are long term.
17. Significant disclosure is needed for investments. Exact disclosures vary depending on how the investment is classified.
18. The cash flow statement reflects cash paid for investments, cash received on sale, and cash received as investment income. Non-cash gains and losses, and premium and discount amortization, are adjusted in operations when the indirect method of presentation is used.
19. IASC, Canadian, and U.S. rules for investments to be carried at cost or fair value are generally harmonized.
20. There are radically different requirements governing consolidation around the world. This is an area that requires careful examination of reporting policies when analyzing financial statements.

## KEY TERMS

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controlled investment, 611	premium, 621
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## REVIEW PROBLEM

On 1 January F20X5, Acme Fruit Company has the following investments:

	<b>Net Carrying Value at 1 January 20X5</b>
Available-for-sale investments:	
Apple (2,000 common shares)	\$19,000
Quince (10,000 common shares)	50,000
Cherry (5,000 common shares)	40,000

Other comprehensive income, on the balance sheet, includes a \$5,000 unrealized loss with respect to the Apple shares, a \$5,000 unrealized gain with respect to the Quince shares, and a \$2,000 unrealized gain with respect to the Cherry shares.

Assume that there are no income taxes.

The following transactions and reclassifications occur during the year:

- a. On 1 February 20X5, Acme purchases \$30,000 of face amount bonds issued by Plum Incorporated for \$29,500 plus accrued interest. The bonds have a coupon rate of 8%, pay interest semi-annually on 30 June and 31 December, and mature on 31 December 20X9. The investment is classified as held to maturity. Straight-line amortization of the discount is appropriate.
- b. Dividends of \$0.75 per share are received on the Apple common shares on 30 May.
- c. Interest on the Plum bonds is received on 30 June and 31 December.
- d. On 1 July, the Quince shares are sold for \$58,000. The proceeds are used to buy 1,000 Banana Company shares for \$40 per share.
- e. On 30 November, Apple shares are sold for \$21,000.
- f. At 31 December, the market values of the various investments are determined to be as follows:

ii. Cherry common	\$ 57,500
ii. Banana common	23,000
iii. Plum bonds (excluding accrued interest)	31,000

The decline in value of the Banana Company shares is deemed to be an impairment.

- g. The Cherry and Banana shares are temporary investments at year-end, while the Plum bonds are long term.

**Required:**

1. What amount of investment income or loss, from all sources, is shown on the income statement for 20X5?
2. Show the change in other comprehensive income for the year, and the equity balances within other comprehensive income that would be reported at the end of 20X5.
3. Show the accounts and amounts related to the investments that are reported in the assets section of the 20X5 balance sheet of Acme Fruit Company.

**REVIEW PROBLEM—SOLUTION**

<b>1. Investment income</b>		
Plum bonds:		
Interest: $\$30,000 \times 8\% \times 11/12$	\$2,200	
Discount amortization: $\$500 \times 11/59$	93	\$2,293
Apple dividends: 2,000 shares $\times$ \$0.75		1,500
Gain on sale of Quince shares ( $\$8,000 + \$5,000$ )		13,000
Loss on sale of Apple shares ( $\$2,000 - \$5,000$ )		(3,000)
Impairment loss on Banana shares ( $\$23,000 - \$40,000$ )		(17,000)
Total investment income (loss)		<u>\$ (3,207)</u>
<b>2. Change in other comprehensive income, 20X5:</b>		
Elimination of unrealized loss on Apple shares		\$ 5,000
Elimination of unrealized gain on Quince shares		(5,000)
New unrealized gain on Cherry shares		17,500
Change in other comprehensive income in 20X5		<u>\$17,500</u>
Other comprehensive income, balance sheet, 31 December, 20X5		
Unrealized gain on Cherry shares ( $\$2,000 + \$17,500$ )*		<u>\$19,500</u>
<b>3. Investment assets at 31 December 20X5</b>		
Temporary investments ( $\$57,500 + \$23,000$ )		<u>\$ 80,500</u>
Long-term investments		<u>\$ 29,593</u>

\* Also, opening balance of \$2,000, net, plus \$17,500 increase in 20X5.

**APPENDIX**

**Consolidation Illustration**

The main body of this chapter explained the general principles underlying consolidation but did not demonstrate a consolidation because of the complexities that quickly arise. This Appendix, however, does provide a simple demonstration of a consolidation following a business combination for those readers who are interested in how the numbers fit together. The final section of the Appendix briefly addresses the issue of consolidating foreign subsidiaries.

**BASIC ILLUSTRATION**

P Company bought 80% of the voting shares of S Company one year ago for \$4,700,000. The other 20% of S Company shares are owned by a small group of S Company top management. P Company controls S Company by virtue of its voting control and must consolidate its financial statements at the end of each fiscal period. Refer to the financial statements shown in the first two columns of Exhibit 11A-1, which are at the end of the first year of ownership.

During the year, P Company used the cost method of recording the investment, and thus the investment account is still recorded at \$4,700,000. P Company shows \$80,000 of other income on its income statement; S Company had declared \$100,000 of dividends, which were paid \$80,000 to P Company and \$20,000 to the other shareholders.

As of the date of acquisition, S Company had net assets (that is, assets minus liabilities) of \$3,782,000 at book value. By definition, this is equal to shareholders' equity on the date of acquisition. There was \$140,000 in the common shares account, and \$3,642,000 in retained earnings, to equal \$3,782,000. P Company would determine the fair value of net assets on this date, through appraisal and other examination. Assume that fair values were equal to book values except for capital assets with a 10-year life, which were worth \$1,000,000 more than book value. There was no impairment of goodwill by the end of the first year of acquisition.

During the year, S Company had sales of \$4,000,000 to P Company. All the goods had been resold to other customers, except goods for which P Company had paid \$300,000, which were still in inventory. These items had cost S Company \$200,000. Finally, P Company owed \$175,000 to S Company at year-end.

**GOODWILL** The goodwill on acquisition is calculated as follows:

Purchase price		\$ 4,700,000
Less: Market value acquired		
Book value	\$ 3,782,000	
Market value increment	1,000,000	
Total	\$ 4,782,000	
P Co. share	80%	(3,825,600)
Goodwill		<u>\$ 874,400</u>

Notice that 80% of S Company was purchased and thus 80% is used in the calculation.

**ELIMINATION ENTRIES** Most of what happens in a consolidation is that the two sets of financial statements are added together. However, entries are needed for a variety of things.

**1. Investment elimination entry** This is a busy entry, as it eliminates the equity accounts of the subsidiary on the date of acquisition, eliminates the parent's investment account, sets up the non-controlling interest on the date of acquisition, and recognizes fair value differences and goodwill inherent in the purchase price.

Common shares (S Co.)	140,000	
Retained earnings (S Co.)	3,642,000	
Capital assets (\$1,000,000 × 80%)	800,000	
Goodwill	874,400	
Investment in S Co.		4,700,000
Non-controlling interest (\$3,782,000 × 20%)		756,400

The non-controlling interest account is a balance sheet account that is typically classified between long-term debt and shareholders' equity. It is the portion of the subsidiary's net assets—equity—owned by shareholders other than the parent. This account often is called “minority interest.”

**2. Amortization entry** Next, accounts created in the investment elimination entry must be amortized to reflect the passage of time, one year in this case. Assuming amortization over 10 years for the capital assets:

Amortization expense	80,000	
Capital assets, net (\$800,000 ÷ 10)		80,000



If any goodwill was impaired, it would be recorded in a similar manner: an expense would be debited and goodwill credited.

- 3. Dividend entry** S Company paid dividends to its shareholders, and these are recorded in its books. Assuming that P Company uses the cost method for recording the investment, the dividend paid to the majority shareholder is recorded as dividend revenue on the parent's income statement, while the dividend paid to the non-controlling shareholders reduces their interest in remaining net assets on the subsidiary. After this elimination, the only dividends left are those paid to the shareholders of P Company.

Dividend revenue	80,000	
Non-controlling interest	20,000	
Dividends declared		100,000

- 4. Intercompany balances and transactions elimination entries** These amounts are eliminated so that all that remains on the consolidated accounts are transactions that the consolidated entity has had with outside parties. Note that the entries do not change net income or net assets; they simply deflate offsetting components.

Sales	4,000,000	
Cost of sales		4,000,000
Accounts payable	175,000	
Accounts receivable		175,000

- 5. Intercompany unrealized profit eliminations** Inventory on the books of the parent is recorded at \$300,000, when it has a cost to the consolidated entity of \$200,000. The \$100,000 overstatement must be eliminated, and the corresponding overstatement of the subsidiary's net income must be corrected.

Cost of sales	100,000	
Inventory		100,000

The debit to cost of sales reduces income. This entry creates a temporary difference between accounting and taxable income, and should result in an adjustment to tax expense and the balance sheet tax future (deferred) income tax account; this tax entry has been omitted in the interests of simplicity.

- 6. Non-controlling interest share of income** The non-controlling (or minority) interest has been allocated its share of equity and subsidiary dividends, but they also have an interest in the earnings of the subsidiary for the current period (\$254,000), at least to the extent that these earnings have been confirmed by transactions with outside parties (\$254,000 – \$100,000). Thus, the non-controlling interest's share in confirmed subsidiary profits is allocated to them by creating an "expense" on the income statement that increases the non-controlling interest element on the balance sheet. This works much the same way as a debit to wages expense increases the wages payable account, if wages have not yet been paid.

Provision for non-controlling interest (I/S)	30,800	
Non-controlling interest (B/S) (\$154,000 × 20%)		30,800

All these entries are posted to the worksheet. The final step in the consolidation worksheet is to cross-add each account line, giving effect to the adjustments and eliminations above, as is illustrated in the final column of Exhibit 11A-1. The final column provides the amounts that are used to prepare the consolidated financial statements.

Be sure to remember that all of the consolidation entries are worksheet entries only. The entries listed above do not get recorded on any company's books.

### Foreign Subsidiaries

The procedure illustrated above is the same for all subsidiaries. However, an additional complication arises when the subsidiary is in a foreign country. The subsidiary's financial statements will be in a foreign currency, and must be restated to Canadian dollars before consolidation can occur. Because exchange rates change, the net asset value of the subsidiary will be different at each year-end, even if there has been no change in the assets and liabilities. Thus, a gain or loss will arise simply from the mechanics of the foreign currency translation and consolidation process. This cumulative gain or loss is a component of other comprehensive income, accumulated in shareholders' equity.

## EXHIBIT 11A-1

### CONSOLIDATION WORKSHEET

	P. Co.	S. Co.	Consolidation Elimination Entries		P. Co. + S. Co. Consolidated Results
Cash	\$ 460,000	\$ 64,000			\$ 524,000
Accounts receivable	2,390,000	790,000	(4)	175,000 cr.	3,005,000
Inventory	4,910,000	1,700,000	(5)	100,000 cr.	6,510,000
Capital assets, net	8,224,000	4,622,000	(1)	800,000 dr.	
			(2)	80,000 cr.	13,566,000
Investment in S. Co.	4,700,000	–	(1)	4,700,000 cr.	0
Intangible assets	400,000	–	(1)	874,400 dr.	1,274,400
<b>Totals</b>	<b>\$21,084,000</b>	<b>\$ 7,176,000</b>			<b>\$24,879,400</b>
Current liabilities	\$ 5,320,000	\$ 1,100,000	(4)	175,000 dr.	\$ 6,245,000
Long-term debt	8,100,000	1,500,000			9,600,000
Future income taxes	1,050,000	640,000			1,690,000
Non-controlling interest	–	–	(1)	756,400 cr.	
			(3)	20,000 dr.	
			(6)	30,800 cr.	767,200
Common shares	2,600,000	140,000	(1)	140,000 dr.	2,600,000
Retained earnings	4,014,000	3,796,000		from below	3,977,200
<b>Totals</b>	<b>\$21,084,000</b>	<b>\$ 7,176,000</b>			<b>\$24,879,400</b>
Sales	\$16,800,000	\$9,300,000	(4)	4,000,000 dr.	\$22,100,000
Cost of sales	9,900,000	4,216,000	(4)	4,000,000 cr.	
			(5)	100,000 dr.	10,216,000
Operating expenses	5,650,000	4,590,000	(2)	80,000 dr.	10,320,000
Other income	80,000	–	(3)	80,000 dr.	0
Income tax expense	560,000	240,000			800,000
Non-controlling interest	–	–	(6)	30,800 dr.	30,800
Net income	\$ 770,000	\$ 254,000			\$ 733,200
Opening retained earnings	3,454,000	\$3,642,000	(1)	3,642,000 dr.	3,454,000
Dividends	210,000	100,000	(3)	100,000 cr.	210,000
Closing retained earnings	<b>\$ 4,014,000</b>	<b>\$3,796,000</b>		0	<b>\$ 3,977,200</b>

### SUMMARY OF KEY POINTS

1. Goodwill is measured as the amount by which the purchase price (of a purchased subsidiary) exceeds the fair value of the subsidiary's identifiable assets at the date of acquisition, for the portion of the shares purchased by the parent company.
2. Consolidation is performed on worksheets; there are no entries in either the parent's or the subsidiary's books.
3. When a subsidiary is purchased, the cost of the acquisition is recorded in an investment account on the parent's books.
4. When the subsidiary's financial statements are consolidated with those of the parent, the investment account is eliminated, and instead all of the assets and liabilities of the subsidiary are added to the parent's on the balance sheet. Any offsetting balances between the parent and the subsidiary are eliminated against the other.
5. Amortization of the subsidiary's assets is based on fair value. Goodwill is not amortized, but must be written down if its value is impaired.
6. All of the revenues and expenses of the subsidiary are added to those of the parent on the parent's consolidated income statement. Intercompany transactions are eliminated, to avoid double-counting, and any unrealized profits are eliminated.
7. If the parent does not own all of the subsidiary, the proportion of the subsidiary's net asset book value that is not owned by the parent is reported by the parent on its balance sheet as a credit, placed below liabilities but before shareholders' equity.
8. The minority interest's proportionate share of the subsidiary's net income is deducted on the parent's consolidated income statement, to offset the fact that all of the subsidiary's revenues and expenses have been combined with the parent's.
9. The account balances of foreign subsidiaries must be translated into Canadian dollars before they can be consolidated. Exchange rate movement causes translation gains and losses, which are accounted for differently depending on whether the subsidiary is integrated or self-sustaining.

### QUESTIONS

- Q11-1 Why do companies invest in the securities of other enterprises?
- Q11-2 Distinguish between debt and equity securities.
- Q11-3 How can a debt investment be classified? An equity investment? How should each category be accounted for?
- Q11-4 What criteria must be met for an investment to be classified as held to maturity? Trading? Available for sale?
- Q11-5 Why are held-to-maturity investments carried at amortized cost but available-for-sale and trading investments carried at fair value?
- Q11-6 What is the difficulty encountered in relying on management intent as a classification criteria?
- Q11-7 What factors indicate that significant influence may be present between an investor and an investee? How would such an investment be reported?
- Q11-8 What factors indicate that control exists between an investor and an investee? How would such an investment be reported?
- Q11-9 It is often said that an investor with 20% of the voting shares of another company has significant influence, and an investor with 50% has control. Is this always true?
- Q11-10 What is the distinguishing feature of a joint venture? How are joint ventures accounted for?

- Q11-11** How is fair value estimated?
- Q11-12** On 1 August 20X4, Baker Company purchased \$50,000 face amount of Sugar Company 6% coupon value bonds for \$43,200. The market interest rate was 8% on this date. The bond pays interest semi-annually on 31 July and 31 January. At the fiscal year-end for Baker, the bonds have a market value of \$45,000. Show the journal entries (a) to record the investment and (b) to record investment income and any other needed adjustments at 31 December. The investment is classified as held to maturity and the effective interest amortization method is used.
- Q11-13** When is it permissible to use straight-line amortization of a discount or premium on a held-to-maturity investment? Explain.
- Q11-14** Under what circumstances is it appropriate under GAAP to account for a significant influence investment using the cost method? Explain.
- Q11-15** An investor purchased 100 shares of Zenics at \$20 per share on 15 March 20X4. At the end of the 20X4 accounting period, 31 December 20X4, the stock was quoted at \$19 per share. On 5 June 20X5, the investor sold the stock for \$22 per share. Assuming this investment is available for sale, give the journal entry to be made at each of the following dates:
- 15 March 20X4
  - 31 December 20X4
  - 5 June 20X5
- Q11-16** What conditions may indicate that the value of an investment has been impaired? How is an impairment accounted for if the investment is held to maturity? Available for sale? Trading?
- Q11-17** On 31 December 20X1, ABC Company owned 10,000 shares of A Company, with a cost of \$23 per share and a market value of \$24 per share. The shares were purchased in 20X1. At the end of 20X2, the market value was \$28 per share. The investment was sold in 20X3 at \$30 per share. The investment is classified as available for sale. What would be included in other comprehensive income and net income in each of 20X1, 20X2, and 20X3?
- Q11-18** On 31 December 20X1, XYZ Company owned 10,000 shares of B Company, with a cost of \$21 per share and a market value of \$26 per share. The shares were purchased in 20X1. At the end of 20X2, the market value was \$29 per share. The investment was sold in 20X3 at \$33 per share. The investment is classified as a trading investment. What would be included in other comprehensive income and net income in each of 20X1, 20X2, and 20X3?
- Q11-19** The 31 December 20X3 balance sheet shows available-for-sale investments at \$456,800, and cumulative other comprehensive income at \$169,000. Interpret these two values. At what amount were the investments originally purchased?
- Q11-20** An available-for-sale investment is carried at \$550,000, and there is a cumulative gain of \$35,000 recorded in other comprehensive income. The investment is sold for \$520,000. What gain or loss is included in net income because of the sale? What amount is included in this year's other comprehensive income because of the sale? Explain.
- Q11-21** On 1 July 20X2, a company bought an investment in IBM bonds for U.S.\$50,000 when the exchange rate was U.S.\$1 = Cdn.\$1.32. The investment is classified as available for sale. The company paid cash on the acquisition date. At 31 December, the exchange rate was U.S.\$1 = Cdn.\$1.38. The market value was still U.S.\$50,000. Prepare journal entries to record the purchase of bonds and any adjusting entries at year-end.
- Q11-22** Assume that Company R acquired, as a long-term investment, 30% of the outstanding voting common shares of Company S at a cash cost of \$100,000. At the date of acquisition, the balance sheet of Company S showed net assets and total shareholders' equity of \$250,000. The market value of the depreciable assets of Company S was \$20,000 greater than their net book value at date of R's acquisition. Compute goodwill purchased, if any.

- Q11-23** Assume the same facts as in Q11-22, with the addition that net assets that were undervalued at acquisition have a remaining estimated life of 10 years (assume no residual value and straight-line depreciation). There is no goodwill impairment. How much investment revenue would Company R report using the equity method if Company S reported \$80,000 of net income?
- Q11-24** Investor Limited owns 35% of Machines Limited, and has significant influence. The investment was made five years ago, when Machine's fair values equalled book values; \$40,000 of goodwill was inherent in the purchase price. Goodwill is not impaired. In the current fiscal year, Machines reported \$225,000 in income. This includes a \$50,000 profit on inventory sold to Investor Limited, which Investor has not yet resold. How much investment revenue will Investor report using the equity method? How would your answer change if Investor had reported the sale of inventory to Machines?
- Q11-25** What accounts appear in the consolidated financial statements that are not present in either the parent's or the subsidiary's financial statements? Explain each item. What accounts always disappear from the unconsolidated financial statements?
- Q11-26** Equity income, and consolidated income, is usually lower than one would predict by simply adding the investor's income and the pro-rata share of the investee's income. Why does this happen?
- Q11-27** Under what circumstances is an investment reclassified from held to maturity to available for sale? What are the ramifications of the transfer? How is the transfer accounted for?
- Q11-28** Under what circumstances is an investment reclassified from available for sale to held to maturity? How is the cumulative other comprehensive income amount accounted for?
- Q11-29** Under what circumstances is an investment reclassified from significant influence to available for sale? How is the transfer accounted for?
- Q11-30** In many European countries, companies are not required to consolidate subsidiaries. Why might this be the case?

### CASE 11-1 MacKay Industries Limited

MacKay Industries Limited (MIL) is a Canadian company that manufactures leather furniture. Sales in 20X3 were \$265 million, with strong exports to the United States. MIL is the leading Canadian manufacturer of leather furniture, and is ranked fourth in this category in the U.S. market. While MIL has, in the past, had manufacturing facilities in the United States, difficulties in quality control and logistics have recently convinced the owner to centralize all operations in Niagara Falls, Canada. The plant employs 250 workers.

MIL is a private company. The majority of shares are held by the president and CEO, Jeff MacKay, who inherited the business from his father. The firm was founded by Mr. MacKay's grandfather. The remainder of the shares are held by members of the MacKay family. MIL has substantial long-term bank financing in place, secured by company assets and the personal guarantees of Jeff MacKay and key family members.

MacKay himself is a graduate of Harvard Business School and is well regarded in the industry. He focuses on marketing and strategy, and usually leaves operations to his production managers, all of whom receive a bonus based on overall company profits.

You, a professional accountant in public practice, review the annual financial statements of the company, prepare the tax returns, and provide advice on a wide range of issues, including financing, tax, personnel, and accounting policy.

You have been asked to look at the investment portfolio of MIL, and comment on appropriate accounting. Mr. Mackay is aware that rules have recently changed in the investments area, and he'd like a summary of how his investments should be accounted for.

*Investments can be summarized as follows:*

**1. Short-term investments**

MIL has excess cash tied up in short-term investments at various times of the year. This money is often invested in Treasury bills, but may also be invested in common shares of public companies, if MacKay feels there is an opportunity to earn capital appreciation.

**2. Hyperion**

MIL bought 4,000 shares of Hyperion, an aircraft engine manufacturer, two years ago, for \$43 per share. The investment is recorded at cost. Hyperion has 490,000 common shares outstanding, of which 20,000 to 40,000 change hands annually. Mr. MacKay is a personal friend of the president and CEO of this small public company. No dividends have been declared on the shares. The stock price quoted at the end of last year was \$42. This year, market values have been in the \$33–\$35 range. Mr. MacKay has stated that he would not consider selling the investment unless market values return to \$43. Mr. MacKay is confident that this will be the case sometime in the next five years.

**3. March Limited**

Mr. MacKay (personally) is the sole shareholder of March Limited, which he incorporated two years ago. The Boards of Directors for March Limited and MIL are almost identical. March is engaged in researching new imitation leather fabrics, and ways of chemically treating real leather to improve its quality. Throughout the last two years, March has spent \$216,000 on these activities. All this amount is financed by MIL; Mr. MacKay himself has put no money into March Limited other than a token investment to create share capital. MIL reports the \$216,000 as a long-term receivable. It has no stated interest rate or term, and will be repaid only when marketable fabrics are developed by March Limited.

**4. Kusak Limited**

MIL owns a \$500,000, 10-year bond issued by Kusak Limited. Kusak is a public company and this bond is publicly traded. MIL bought the bond for \$412,700, plus accrued interest. MIL will hold the bond until maturity, although if funds are needed for operating or capital purposes during that time, the bond would certainly be sold.

**5. DML Corporation**

MIL owns 19,975 (2%) of the voting common shares of DML Corporation, a French furniture manufacturer that MacKay may use to enter the European market sometime in the future. Five years ago, MIL bought notes payable and preferred shares in the company. This year, the notes and preferred shares were exchanged for the common shares pursuant to an agreement signed when the notes and preferred shares were acquired. On the exchange date, the notes and preferred shares had a book value of \$175,000, and this value was used to record the common shares. Their market value was indeterminable on that date because the securities were never traded. Common shares, thinly traded over the counter, have sold for \$7–\$9 in the last 12 months.

MIL has one member on the 18-seat Board of Directors of DML Corporation. Mr. MacKay himself attends these meetings, and reports that he is well regarded in debate. Mr. MacKay usually takes a bilingual advisor with him, as proceedings take place in French, a language in which Mr. MacKay is not fluent. In the past year, DML reported a marginal net income; the company has never declared dividends.

**Required:**

Prepare a report summarizing investment accounting policies as they apply to MIL's investments.

## CASE 11-2

### Jackson Capital Incorporated

Jackson Capital Incorporated (JCI) is a new private investment company that provides capital to business ventures. JCI's business mission is to support companies to allow them to compete successfully in domestic and international markets. JCI aims to increase the value of its investments, thereby creating wealth for its shareholders.

Funds to finance the investments were obtained through a private offering of share capital, conventional long-term loans payable, and a bond issue that is indexed to the TSX Composite. Annual operating expenses are expected to be \$1 million before bonuses, interest, and taxes.

Over the past year, JCI has accumulated a diversified investment portfolio. Depending on the needs of the borrower, JCI provides capital in many different forms, including demand loans, short-term equity investments, fixed-term loans, and loans convertible into share capital. JCI also purchases preferred and common shares in new business ventures where JCI management anticipates a significant return. Any excess funds not committed to a particular investment are held temporarily in money market funds.

JCI has hired three investment managers to review financing applications. These managers visit the applicants' premises to meet with management and review the operations and business plans. They then prepare a report stating their reasons for supporting or rejecting the application. JCI's senior executives review these reports at their monthly meetings and decide whether to invest and what types of investments to make.

Once the investments are made, the investment managers are expected to monitor the investments and review detailed monthly financial reports submitted by the investees. The investment managers' performance bonuses are based on the returns generated by the investments they have recommended.

It is 1 August 20X2. JCI's first fiscal year ended on 30 June 20X2. JCI's draft balance sheet and other financial information are provided in Exhibit I. An annual audit of the financial statements is required under the terms of the bond issue. Potter & Cook, Chartered Accountants, has been appointed auditor of JCI. The partner on the engagement is Richard Potter. You are the in-charge accountant on this engagement. Mr. Potter has asked you to prepare a memo discussing the significant accounting issues raised.

#### Required:

Prepare the memo requested by Mr. Potter.

### EXHIBIT I

#### JACKSON CAPITAL, INCORPORATED DRAFT BALANCE SHEET

**As of 30 June 20X2**

(in thousands of dollars)

<i>Assets</i>	
Cash and marketable securities	\$ 1,670
Investments (at cost)	21,300
Interest receivable	60
Furniture and fixtures (net of accumulated amortization of \$2)	50
	<u>\$23,080</u>
<i>Liabilities</i>	
Accounts payable and accrued liabilities	\$ 20
Accrued interest payable	180
Loans payable	12,000
	<u>\$12,200</u>

<i>Shareholders' equity</i>	
Share capital	12,000
Deficit	(1,120)
	<u>10,880</u>
	<u>\$23,080</u>

### JACKSON CAPITAL INCORPORATED SUMMARY OF INVESTMENT PORTFOLIO

**As at 30 June 20X2**

<i>Investment</i>	<i>Cost of Investment</i>
15% common share interest in Fairex Resource Inc., a company listed on the TSX Venture Exchange. Management intends to monitor the performance of this mining company over the next six months to make a hold/sell decision based on reported reserves and production costs.	\$3.8 million
25% interest in common shares of Hellon Ltd., a private Canadian real estate company, plus 7.5% convertible debentures with a face value of \$2 million, acquired at 98% of maturity value. The debentures are convertible into common shares at the option of the holder.	\$6.2 million
5-year loan denominated in Brazilian currency (reals) to Ipanema Ltd., a Brazilian company formed to build a power generating station. Interest at 7% per annum is due semi-annually. 75% of the loan balance is secured by the power generating station under construction. The balance is unsecured. The Brazilian currency is unstable, as is the Brazilian political situation.	\$8 million
50,000 stock warrants in Tornado Hydrocarbons Ltd., expiring 22 March 20X4.	
The underlying common shares trade publicly.	\$1.3 million

### JACKSON CAPITAL INCORPORATED CAPITAL STRUCTURE

**As at 30 June 20X2**

#### *Loans payable*

The Company has \$2 million in demand loans payable with floating interest rates, and \$4 million in loans due 1 September 20X6, with fixed interest rates.

In addition, the Company has long-term 5% stock indexed bonds payable. Interest at the stated rate is to be paid semi-annually, commencing 1 September 20X2. The principal repayment on 1 March 20X7 is indexed to changes in the TSX Composite as follows: the \$6 million original balance of the bonds at the issue date of 1 March 20X2 is to be multiplied by the stock index at 1 March 20X7, and then divided by the stock index as at 1 March 20X2. The stock-indexed bonds are secured by the Company's investments.

#### *Share capital*

Issued share capital consists of

- 1 million 8% Class A (non-voting) shares redeemable at the holder's option on or after 10 August 20X6 \$7 million
- 10,000 common shares \$5 million

(CICA, adapted)



**CASE 11-3****Major Developments Corporation**

Major Developments Corporation (Major) is a publicly traded company operating primarily in the real estate sector. Major has a 31 March year-end. In 20X5, Major reported revenues of \$704 million and after-tax income of \$118 million. The company buys and sells commercial real estate properties, invests in various securities in the real estate industry, and manufactures commercial elevator components.

Major's common share price climbed steadily from its IPO, in 20X0, until 11 July 20X5. On that date, Bouchard Securities Incorporated. (BS) released a research report on Major that attracted considerable market attention. The report contained the following statements:

It is our contention that in 20X5, Major clearly violated Canadian generally accepted accounting principles (GAAP), as set out in the *CICA Handbook*. We feel the accounting is wrong, not just aggressive.

Major's accounting for two real estate loans violates GAAP. The company consolidates the assets and results of two corporations to whom it has granted loans when it does not own any shares in these companies.

Also, Major owns 48% of the shares of Rely Holdings, a company that lost \$750,000 in its most recent fiscal year. The investment is valued at over \$29 million. This makes no sense, since Major bought about half of these shares for \$5 million in 20X5. The investment is clearly overvalued.

We feel that Major is overvalued and has poor prospects.

Major's stock had been trading in the \$15–\$16 range but immediately dropped to around \$9. BS profited from the decline in the stock price because it held a significant short position in Major's stock. Within four days, lawyers working for Major launched a legal action against BS, claiming damages plus a full retraction of all statements made.

BS's legal counsel is now examining various courses of action. To help prepare for the case, BS's legal counsel has hired you to provide a report on the validity of each of the parties on the disagreements. They need to be briefed fully in order to properly advise BS. You have obtained some information from Major's 20X5 annual report (see Exhibit 1). Major's lawyers have provided the information in Exhibit 2.

**Required:**

Prepare a report for Bouchard Securities Incorporated's legal counsel.

**EXHIBIT 1****EXTRACTS FROM MAJOR'S 20X5 ANNUAL REPORT****Note 1: Accounting Policies**

The consolidated financial statements include the accounts of Major and its majority owned subsidiaries and commencing prospectively in 20X5, the accounts of companies in which Major has no common share ownership, but to which it has advanced loans that are currently in default. The equity method is used for investments in which there is significant influence, considered to be voting ownership of 20% to 50%.

**Note 6: Loans in Default**

Major granted loans to two related companies, Skyscraper Incorporated and Wenon Corporation, on 18 August 20X0 that are now in default, and have been in default since 20X2. These loans are secured by a first charge on residential real estate buildings, which Major has the legal right to repossess. Major has the intention of such legal action in 20X6. Accordingly, the oper-

ating results and net assets associated with these properties have been included in these financial statements.

<b>Note 14: Investments</b>	<b>20X5</b>	<b>20X4</b>
Rely Holdings Inc.	\$29,640,000	\$25,000,000

In 20X5, Major purchased an additional 25% interest in Rely Holdings Incorporated. for \$5 million. Major now owns 48% of Rely Holdings Incorporated.

## EXHIBIT 2

### EXTRACTS FROM INFORMATION PROVIDED BY MAJOR'S LAWYERS

Major has a legal opinion that two loans are in default (see Item A below), and a third-party accounting opinion (see Item B below) that this default permits consolidation of those loans.

#### Item A

In my opinion, the loan to Skyscraper Incorporated and the loan to Wenon Corporation are in default as of 1 February 20X2, under the terms of default of the respective loan agreements, dated 12 August 20X0. The lender has the right under law and contract to repossess these properties, for the purposes of realization of the loans.

—Matthew Krebs, Q.C.

#### Item B

Based on the facts set out in the attached document, we concur that it is acceptable under Canadian generally accepted accounting principles to consolidate Skyscraper Incorporated and Wenon Corporation.

—Jesse and Mitchell,  
Chartered Accountants

(CICA, adapted)

## ASSIGNMENTS



**A11-1 Investment Classification:** Consider the following investment categories:

- A. Held-to-maturity investment
- B. Available-for-sale investment
- C. Trading investment
- D. Significant influence investment
- E. Control investment
- F. Joint venture

An investor company that is a public company has the following items:

1. Sixty-day treasury bill (T-bill).
2. Investment in Nortel common shares bought with idle cash in expectation that the price per share will rise.
3. Investment in Forman Company, a supplier. Forman is a supplier in some financial difficulties. The shares owned amount to 20% of the shares outstanding and allow the investor two seats on the 12-member Board of Directors. Forman will not be paying dividends in the near future. The company is currently recording losses.

4. Investment in Gotcha.com, a dot-com marketing company. The \$600,000 investment gives the investor a 7.5% share of the company, and one seat on an 18-member Board. The shares are not publicly traded, but Gotcha has plans to go public. There are no buyers for these shares that could be quickly found, although Gotcha often buys back its own shares if pressured by unhappy shareholders. The investment is highly speculative. Gotcha has never paid dividends.
5. Investment of \$6,000,000 in Power Corporation government-guaranteed bonds, 8%, bought at \$6,135,000. The securities will be held until maturity.
6. Investment of \$6,000,000 in Power Corporation government-guaranteed bonds, 8%, bought at \$6,135,000. The securities will be held until the investor needs short-term cash, or until interest rates swing and increase the price of the bonds, whichever comes first.
7. Stratos preferred shares, paying a dividend of \$6 per share. The shares are not intended to be sold in the near future.
8. Cygnet common shares, representing 80% of outstanding voting shares. The remaining 20% are held by one other shareholder. The 80% investor receives 80% of the dividends declared, and can appoint eight of the 13-member Board of Directors, including the chair. All operating, investing, and financing decisions must be unanimously agreed to by the two shareholders.
9. Investment in bonds, held as part of a portfolio that is actively traded to match the duration of a loan portfolio held by the investor.

**Required:**

Classify the items above into one of the investment categories, as appropriate. State any assumptions made.



**A11-2 Investment Classification:** For each situation below, indicate how the investment would be classified, and how it would be accounted for. Assume the investor is a public company.

1. Strip bonds (that is, those sold without interest, or “stripped” of interest) are acquired as a temporary investment. Management expects interest rates to fall and the price of the strip bonds to increase significantly over the coming year.
2. Investment in \$500,000 of 10-year bonds, intended to be held to maturity. Another investment in bonds, intended to be held to maturity, was sold last year because interest rate fluctuations made the market price attractive.
3. Common shares are bought in a small, family-owned business. The investor is the only non-family shareholder. The shares constitute 20% of the voting shares and the investor has one member on an eight-member Board of Directors, all of the rest of whom are members of the family investor group. Market values for the shares are not available as they are never sold.
4. A mining property is exchanged for 60% of the voting shares in a company formed to develop the mining property. The remaining 40% of the shares are held by a large mining company that will contribute equipment and expertise to physically mine the site. All decisions regarding operations and financing must be agreed to by both shareholders.
5. Common shares are bought in a large public company, whose shares are broadly held and widely traded. The investor owns 5% of the voting shares, sits on the Board, and is the largest single shareholder. The shares will be held for a long time period, awaiting favourable market price appreciation.
6. Common shares are bought in a large public company whose shares are broadly held and widely traded. The investor owns 45% of the voting shares, puts eight people on a 20-member Board of Directors, and generally has its way in operating, investing, and financing policy of the investee.
7. Common shares are bought in a small, family-owned business. The investor is the only non-family shareholder, but sits on the family-controlled Board. The investor also allows the company to use patented production processes for a fee, a right not previously granted to any other company, and provides \$5,000,000 in long-term loans to the investee.

8. To invest idle cash, common shares are bought in a large, public company, a tiny fraction of the outstanding common shares. The share price appreciated after sale, but the investor is convinced that significant additional price appreciation is probable. Therefore, the shares were not sold when cash was needed; the company borrowed from the bank instead, using the shares as collateral.



**A11-3 Investment Classification:** As of 31 December 20X5, Austin Holdings Limited (a public company) holds a number of investments in the securities of other companies:

1. Austin holds \$8,000,000 in bonds of RJR Limited. These bonds will mature in 20X10. Austin intends to hold these bonds to maturity.
2. Austin holds 15% of the voting shares of Broxit Manufacturing Limited. Austin has two members on the 10-member Board of Directors, and has extensive intercompany transactions with Broxit.
3. Austin holds a \$1,000,000, 10% bond that matures in 20 years time. Austin will sell this bond if the market price is attractive, or if money is needed for planned expansion.
4. Austin owns 4% of the outstanding common shares of Development Corporation, a company whose shares are thinly traded on the over-the-counter market. Austin would like to sell its shares, but no buyer has been found at the price that Austin is determined to realize.
5. Austin owns .5% of the common shares of ABC Limited, public company, held for short-term capital appreciation.
6. Austin owns 30% of the common shares of Phone Sales Limited. The remaining shares are equally divided among three other investors. Each investor has two representatives on the eight-member Board of Directors. All strategic decisions to date appear to have been suggested and decided by the Austin representatives on the Board of Directors; other representatives are quite passive and often do not attend meetings.
7. Austin owns 60% of the common shares of Info Capital Corporation. The remaining shares are held by the founder, Bill Capital. The six-member Board of Directors consists of four members appointed by Austin, and two appointed by Mr. Capital. All decisions must be unanimously agreed to by the Board members.

**Required:**

How should Austin account for each of the above investments? Be specific, and explain your reasoning.



**A11-4 Cost Method—Debt Investment:** The Shepard Hydrant Company purchased \$50,000 face amount of Beagle Bugler 9% bonds at a price of 98.5 on 1 January 20X5. The bonds mature on 31 December 20X7, and pay interest annually on 31 December. Shepard uses the straight-line method of amortizing any premium or discount on investments in bonds. At 31 December 20X5 and 20X6, the market value of the bonds is quoted at 98 and 99, respectively.

**Required:**

1. Show the entry to record the purchase of the bonds.
2. Show the entry(ies) to be made on 31 December 20X5.
3. Show the entry(ies) to be made on 31 December 20X6.
4. Show the income statement and balance sheet items and amounts related to the above investment that would be reported for 20X5 and 20X6.
5. Show any additional disclosure that would be required for this investment.



**A11-5 Cost Method—Debt Investment:** On 1 July 20X2, New Company purchased \$600,000 of Old Corporation 5.5% bonds to be held to maturity. The bonds pay semi-annual interest each 30 June and 31 December. The market interest rate was 5% on the date of purchase. The bonds mature on 30 June 20X5.

**Required:**

1. Calculate the price paid by New Company.
2. Construct a table that shows interest revenue reported by New, and the carrying value of the investment, for each interest period to maturity. Use the effective interest method.
3. Give entries for the first three interest periods based on your calculations in requirement 2.
4. Construct a table that shows interest revenue reported by New, and the carrying value of the maturity, for each interest period to maturity. Use the straight-line method.
5. Give entries for the first three interest periods based on your calculations in requirement 4.



**A11-6 Cost Method—Debt Investment:** On 1 May 20X3, Amazon Limited purchased \$5,000,000 of Price Limited 6.3% bonds to be held to maturity. The bonds pay semi-annual interest each 1 May and 1 November. The market interest rate was 8% on the date of purchase. The bonds mature on 1 November 20X7.

**Required:**

1. Calculate the price paid by Amazon Limited.
2. Construct a table that shows interest revenue reported by Amazon, and the carrying value of the investment, for each interest period to maturity. Use the effective interest method.
3. Give entries for 20X3 and 20X4 for Amazon Limited, including adjusting entries at the year-end, which is December 31.
4. Assume that Amazon sold the bonds on 1 February 20X5, for 99 plus accrued interest. Give the entry to record interest income to 1 February, and the entry for the sale.
5. What implications would the sale have on Amazon's ability to classify other bond investments as held-to-maturity investments? Explain.



**A11-7 Cost Method—Debt Investment:** On 1 July 20X4, Wyder Door Company acquired the following bonds, which Wyder intended to hold to maturity:

Bond	Price	Face Amount Purchased
Flakey Cement 10% bonds, maturity date 31 December 20X9	101.65	\$30,000
Green Lawn 8% bonds, maturity date, 31 December 20X6	97.0	20,000

Both bonds pay interest annually on 31 December. Premium and discount will be amortized on a straight-line basis.

**Required:**

1. Prepare the entry to record acquisition of the investments. Accrued interest was paid on the acquisition dates, as appropriate.
2. Prepare the entries to be made at 31 December 20X4.
3. Show the items and amounts that would be reported in the 20X4 income statement and balance sheet related to these investments.
4. Prepare the entries to be made on 31 December 20X5.
5. Show the items and amounts that would be reported in the 20X5 income statement and balance sheet related to these investments.



**A11-8 Cost Method—Debt Investment:** On 1 December 20X4, the Chemical Company bought two bond investments, to be held to maturity:

Security	Par Value	Interest Rate	Interest Payable	Maturity Date
A Corp. bonds	\$70,000	6%	1 Dec. 1 June	1 Dec. 20X7
B Corp. bonds	100,000	9%	1 Dec. (annual)	1 Dec. 20X12

Chemical's annual reporting period ends on 31 December. At 31 December 20X4, the A Corporation bonds were selling at 98.5 and the B Corporation bonds at 105.

**Required:**

1. Calculate the price that Chemical would pay for each bond, and record the acquisition. The market interest rate was 8% on 1 December 20X4.
2. Construct a table that shows interest revenue reported by Chemical, and the carrying value of the investment, each interest period to maturity. Use the effective interest method.
3. Show the items that would appear on the 20X5 income statement and balance sheet with respect to the investments.



**A11-9 Fair Value Method—Comprehension:** At the end of 20X8, CN Limited reported available-for-sale investments on the balance sheet as follows:

Temporary investments:	
First Co. common shares	\$456,700
Second Co. common shares	144,900
Shareholders' equity; other comprehensive income:	
First Co. shares, unrealized gain	\$ 50,100
Second Co. shares, unrealized loss	8,200

**Required:**

1. Why are the shares classified as temporary? Under what circumstances would they be classified as long term?
2. What criteria must be met for the shares to be classified as available for sale? Could they, in other circumstances, be classified as held to maturity? Under what circumstances would these shares be trading investments?
3. What price would originally have been paid for the First Co. shares? Second Co. shares?
4. If the decline in value of the Second Co. shares was classified as an impairment, what would change about balance sheet presentation at the end of 20X8?
5. Assume both shares are correctly classified as available for sale and the Second Co. loss was not an impairment. If the First Co. shares are sold for \$500,000, and the Second Co. shares are sold for \$145,000, what gain or loss is included in net income?



**A11-10 Fair Value Method:** On 1 November 20X2, Decker Company acquired the following available-for-sale investments:

- X Corporation—500 common shares at \$60 cash per share
- Y Corporation—300 preferred shares at \$20 cash per share

The annual reporting period ends 31 December.

Quoted market prices on 31 December 20X2 were as follows:

- X Corporation common, \$52
- Y Corporation preferred, \$24

The following information relates to 20X3:

- |             |   |
|-------------|---|
| 2 March     | Received cash dividends per share as follows:<br>X Corporation, \$1; and Y Corporation, \$0.50. |
| 1 October   | Sold 100 shares of Y Corporation preferred at \$25 per share.                                   |
| 31 December | Market values were as follows: X common, \$46, and Y preferred, \$26.                           |

**Required:**

1. Give the entry for Decker Company to record the purchase of the securities.
2. Give the adjusting entry needed at the end of 20X2.
3. Give the items and amounts that would be reported on the 20X2 income statement, a calculation of the change in other comprehensive income, and asset and equity amounts on the balance sheet.
4. Give all entries required in 20X3.
5. Give the items and amounts that would be reported on the 20X3 income statement, a calculation of the change in other comprehensive income, and asset and equity amounts on the balance sheet.
6. Repeat requirement 5, assuming that the investments are trading investments.



**A11-11 Fair Value Method:** At 31 December 20X4, the available-for-sale investments of Bertha Company were as follows:

Security	Shares	Unit Cost	Unit Market Price
Preferred shares, \$.80 dividend, Ping Corp.	900	\$50	\$47
Common shares, no-par value, Wilson Corp.	400	15	17

The fiscal year ends 31 December, and these securities were all purchased during 20X4. The transactions that follow all relate to the above equity investments and to those additional investments bought and sold during 20X5.

- 2 February—Received the annual cash dividend from Ping Corporation.
- 1 March—Sold 150 Wilson shares at \$22 per share.
- 1 May—Sold 400 Ping shares at \$49.50 per share.
- 1 June—Received a cash dividend on Wilson shares of \$3.50 per share.
- 1 August—Purchased 6,000 common shares of Dunlop Corporation at \$22 per share. This investment is classified as available for sale.

At 31 December 20X5, the quoted market prices were as follows: Ping preferred, \$48; Wilson common, \$28; and Dunlop common, \$24.

**Required:**

1. Give the entries that Bertha Company should make on 31 December 20X4, to adjust the investments to fair value.
2. Give the entries for all transactions in 20X5.
3. Give the entries required at 31 December 20X5 to adjust investments to fair value.
4. List the items and amounts that should be reported on Bertha's 20X5 income statement and balance sheet. Also calculate the change in other comprehensive income for the year.
5. Repeat part 4, assuming that the investments are trading investments.



**A11-12 Fair Value Method:** Testco has the following securities classified as available-for-sale investments on 31 December 20X6:

- 3,000 shares of Y Co. common shares, with a fair value of \$70,500 and a cumulative unrealized gain of \$12,000 in other comprehensive income;
- 10,000 shares of Q Co. common stock, which have a fair value of \$546,000 and a cumulative unrealized loss of \$34,000 in other comprehensive income; and

- T Co. 8% bonds, \$104,000 market value, purchased at par, with a \$4,000 cumulative unrealized gain in other comprehensive income.

In 20X7, the following transactions occurred:

- A dividend of \$2 per share was received on the Y Co. shares.
- 1,000 Y Co. shares were then sold for \$ 34,000, less \$2,000 in commissions.
- The annual interest was received on the T Co. bond. (\$3,500 of the amount received related to 20X6 and had been accrued at the end of 20X6 as interest receivable.)
- Purchased 4,000 shares of Z Co. for \$53.50 per share, including commission of \$1 per share.
- Late in the year, the T Co. bond was sold for \$102,500 plus \$3,000 of accrued interest. A \$500 commission was paid on the sale.

Market values at the end of the year: Y Co., \$15 per share; T Co., \$103,000; Q Co., \$59 per share; and Z Co., \$55 per share.

**Required:**

- List the amounts that would appear on the income statement, and the change in other comprehensive income, in 20X7 as a result of these transactions and events.
- List the items that would appear on the balance sheet at the end of 20X7, including both the investments and the cumulative amount of other comprehensive income.
- Repeat parts 1 and 2, assuming that the investments are trading investments.



**A11-13 Fair Value Method:** On 31 December 20X2, Martello Company's portfolio of available-for-sale investments in equity securities was as follows (all purchased on 1 September 20X2):

Security	Shares	Unit Cost	Unit Market
Parker Corp., common shares	50	\$120	\$70
Monty Corp., \$2.40 preferred shares	200	30	32
Bekon Corp., common shares	400	70	73

Transactions relating to this portfolio during 20X3 were as follows:

- 25 January—Received a dividend cheque on the Monty shares.
- 15 April—Sold 30 Parker Corporation shares at \$62 per share.
- 25 July—Received a \$600 dividend cheque on the Parker shares.
- 31 July—Received a \$5 per share dividend on Bekon Corporation shares.
- 1 October—Sold the remaining shares of Parker Corporation at \$60 per share.
- 1 December—Purchased 100 Bisset Ltd. common shares at \$23 per share plus a \$300 brokerage fee. The fee is part of the cost of shares.
- 5 December—Purchased 400 Sanford Corporation common shares at \$15 per share.

On 31 December 20X3, the following unit market prices were available: Parker stock, \$55; Bekon Corp, \$61.25; Monty stock, \$38; Bisset stock, \$3; and Sanford stock, \$16. Martello has determined that the decline in value of the Bisset shares is a permanent impairment.

**Required:**

- Give the entries that Martello Company should make on (1) 1 September 20X2, and (2) 31 December 20X2.
- Give the investment items and amounts that should be reported on the 20X2 income statement, the change in other comprehensive income, and balance sheet accounts.
- Give the journal entries for 20X3 related to the investments.
- Give the investment items and amounts that should be reported on the 20X3 income statement, the change in other comprehensive income, and balance sheet accounts.





**E**  
**x**

**A11-14 Fair Value Method:** During 20X2, Morran Company purchased shares in two corporations and debt securities of a third. The investments are classified as available for sale. Morran is a public company. Transactions in 20X2 include:

- a. Purchased 3,000 of the 100,000 common shares outstanding of Front Corporation at \$31 per share plus a 4% brokerage fee. The fee is part of the share cost.
- b. Purchased 10,000 of 40,000 outstanding preferred shares (non-voting) of Ledrow Corporation at \$78 per share plus a 3% brokerage fee. The fee is part of the share cost.
- c. Purchased an additional 2,000 common shares of Front Corporation at \$35 per share plus a 4% brokerage fee. The fee is part of the share cost.
- d. Purchased \$400,000 par value of Container Corporation, 9% bonds at 100 plus accrued interest. The purchase is made on 1 November; interest is paid semi-annually on 31 January and 31 July. The bond matures on 31 July 20X7.
- e. Received \$4 per share cash dividend on the Ledrow Corporation shares.
- f. Interest is accrued at the end of 20X2.
- g. Fair values at 31 December 20X2: Front shares, \$34 per share; Ledrow, \$82 per shares; Container Corporation bonds, 98.

**Required:**

1. Give the entries in the accounts of Morran Company for each transaction.
2. Show how the income statement and balance sheet (including the other comprehensive income account) for Morran Company would report relevant data concerning these investments for 20X2.
3. Repeat requirements 1 and 2, assuming that the investments are trading investments.



**A11-15 Impairment:** Snelgrove Corporation purchased a \$567,800 investment in the common shares of Wood Corporation on 15 July 20X5. Snelgrove was speculating that the value of the Wood common shares might increase dramatically when a major contract bid was accepted. Unfortunately, the bid was rejected, and Wood shares declined in value to \$350,400 by the end of 20X5. Snelgrove continued to hold the investment throughout 20X6 and 20X7, waiting for positive developments that would increase share value. The aggregate market value at the end of 20X6 was \$360,500 and, for 20X7, \$367,100. The shares were finally sold in 20X8 for \$380,900.

**Required:**

1. Assume that the shares were available for sale, and the decline in value in 20X5 was considered an impairment. List the accounts and amounts that would appear on the income statement, the change in other comprehensive income, and account balances on the balance sheet for 20X5 to 20X8, inclusive.
2. Assume that the shares are trading investments, and list the accounts and amounts that would appear on the income statement and the balance sheet for 20X5 to 20X8, inclusive. Why is impairment not an issue for trading investments?
3. What criteria must be met for a decline in value of an available-for-sale investment to be considered permanent? What accounting treatment is given to an impairment?
4. When the market value of an investment, written down because of an impairment, subsequently increases, is the increase in value recorded? Explain.



**A11-16 Reclassification:** On 31 December 20X2, Woolfrey Company's investments were as follows:

	Carrying Value	Other Comprehensive Income (Cumulative)
Available-for-sale investments		
Logan Corp., common shares	\$120,000	\$ 44,700 gain
Norman Corp., \$5.00 preferred shares	316,000	5,000 gain
Luciano Corp., 8% bonds, \$275,000 par value	271,200	14,300 loss
Held-to-maturity investment		
Cashin Ltd. 9% bonds, \$500,000 par value	511,000	
Significant influence investment		
Curtis Commercial Ltd.	896,000	

Woolfrey makes formal entries for reclassification.

**Required:**

1. On this date, the Cashin Ltd. bonds, with a current market value of \$550,000, are reclassified as available-for-sale investments. Provide the entry for the reclassification. What are the ramifications of reclassification (and subsequent sale) of a held-to-maturity investment? Explain.
2. Woolfrey reclassifies the Luciano Corp. bonds as a held-to-maturity investment (assume that the transaction in requirement 1 has not taken place and this reclassification is permitted). Give the entry for the reclassification. What accounting is required for the other comprehensive income amount recognized to date?
3. Woolfrey reclassifies the Curtis Commercial Ltd. shares as available for sale. The market value of this investment is estimated to be \$1,150,000. Record the reclassification. What accounting is required for the unrealized holding gain?



**A11-17 Reclassification:** On 31 December 20X6, Kirwan Company's investments in equity securities were as follows:

	Carrying Value	Other Comprehensive Income (Cumulative)
Available-for-sale investments		
Goldhar Corp., common shares	\$920,000	\$ 34,700 loss
McKinley Corp., common shares	669,700	113,500 gain
Held-to-maturity investment		
Walsh Ltd. 7% bonds, \$300,000 par value	297,000	
Significant influence investment		
Orr Ltd.	\$1,456,000	

**Required:**

1. Explain what the carrying value for each investment represents.
2. What was the original cost of each of the available-for-sale investments?
3. Kirwan reclassified the held-to-maturity investment to available for sale on this date, when its market value was \$316,000. Explain how the reclassification will be reflected in the financial statements.
4. Kirwan reclassifies the Orr common shares as an available-for-sale investment when the market value is \$1,568,500. What accounting is required for this reclassification?



**A11-18 Basket Purchase of Securities:** On 1 December 20X4, Voss Company purchased stock in the three different companies listed below for a lump sum of \$114,000, including commissions. They will be held as long-term available-for-sale investments.

- N Corporation, common shares, 300 shares.
- O Corporation, preferred shares, 400 shares.
- P Corporation, common shares, 500 shares.

At the time of purchase, the shares were quoted on the local over-the-counter stock market at the following prices per share: N common, \$100; O preferred, \$120; and P common, \$84.

**Required:**

1. Give the entry to record the purchase of these investments. Record each stock in a separate account and show the cost per share.
2. How would your response to part 1 change if there was no market value available for the P Corporation common shares?



**A11-19 Investments and Foreign Currency:** On 14 June 20X4, Jackson Limited purchased 40,000 shares of Hardy Limited for U.S.\$2.15 per share, plus U.S.\$2,400 in commissions and fees. The shares were held as an available-for-sale investment. On this date, the exchange rate was U.S.\$1 = Cdn.\$1.34. The account was settled with the broker on 1 August 20X4, when U.S.\$1 = Cdn.\$1.29.

On 1 July 20X4, Jackson bought a U.S.\$100,000 five-year bond at face value, when the exchange rate was U.S.\$1 = Cdn.\$1.31. It paid cash on the acquisition date. There was no accrued interest. Management plans to hold this bond until maturity.

At 31 December 20X4, Hardy shares had a quoted market value of US\$3.04 per share, the bonds were still selling at par, and the exchange rate was U.S.\$1 = Cdn.\$1.28.

**Required:**

1. Provide journal entries to record the acquisition of the Hardy shares on 14 June, and payment to the broker in August. Brokerage fees are part of the investment cost.
2. Provide the journal entry to record purchase of the bond on 1 July.
3. Explain the 31 December 20X4 adjustment that must be made for the shares (for market value), and for bonds, because of the exchange rate change.



**A11-20 Equity Method:** On 1 January 20X4, JR Company purchased 400 of the 1,000 outstanding common shares of RV Corporation for \$30,000. The equity method will be used to account for the investment. At that date, the balance sheet of RV showed the following book values:

Assets not subject to depreciation	\$40,000 *
Assets subject to depreciation (net)	26,000 **
Liabilities	6,000 *
Common shares	50,000
Retained earnings	10,000

\* Book value is the same as market value.

\*\* Market value \$30,000; the assets have a 10-year remaining life (straight-line depreciation).

**Required:**

1. Give the entry by JR Company to record the acquisition.
2. Show the computation of goodwill purchased at acquisition.
3. Assume that at 31 December 20X4 (end of the accounting period), RV Corporation reported a net income of \$10,900, and paid dividends of \$5,000. Goodwill has not been impaired. Prepare the entries JR Company would record.
4. Repeat requirement 3, assuming that there was an unconfirmed profit on a sale from JR Company to RV Corporation in the amount of \$2,000.


**EX**

**A11-21 Long-Term Equity Investment, Cost and Equity Methods Compared, Entries:** On 3 January 20X4, TA Company purchased 2,000 shares of the 10,000 outstanding shares of common stock of UK Corporation for \$14,600 cash. TA has significant influence as a result of this acquisition. At that date, the balance sheet of UK Corporation reflected the following:

- Nondepreciable assets, \$50,000 (book value is the same as market value);
- Depreciable assets (net), \$30,000 (market value, \$33,000);
- Total liabilities, \$20,000 (book value equals market value); and
- Shareholders' equity, \$60,000.

Assume a 10-year remaining life (straight-line method) for the depreciable assets. Goodwill is not been impaired over the time period in question.

**Required:**

1. Give the entries, if any are required, for TA's books for each item (a) through (d) below assuming that the cost method is appropriate.
  - a. Entry at date of acquisition.
  - b. Goodwill purchased—computation only.
  - c. Entry on 31 December 20X4 to record \$15,000 net income reported by UK.
  - d. Entry on 31 March 20X5 for a cash dividend of \$1 per share declared and paid by UK.
2. Repeat requirement 1 above, assuming that the equity method is appropriate.
3. Why might TA use the cost method if it has significant influence?



**A11-22 Equity Method:** ABC Company bought 40,000 of the available 100,000 voting common shares of Tiny Corporation. This acquisition provided ABC with significant influence. ABC paid \$1,450,000 cash for the investment. At the time of acquisition, Tiny had assets of \$3,000,000, and liabilities of \$1,700,000. Asset values reflected fair market value, except for capital assets that had a net book value of \$400,000 and a fair value of \$625,000. These assets had a remaining useful life of five years. After 12 months of ownership, Tiny reported net income of \$526,000 and paid cash dividends of \$75,000.

**Required:**

1. At the end of the first year of ownership, what would appear on the (1) income statement and (2) balance sheet of ABC? Show supporting calculations, including a calculation of goodwill.
2. Repeat part 1, assuming that the cost method was used. Under what circumstances would this level of share ownership be accounted for under the cost method?



**A11-23 Equity Method:** On 1 January 20X8, Father Limited purchased 40% of the common shares of Son Incorporated for \$120,000. On the date of acquisition, net assets were \$170,000, and shareholders' equity for Son comprised the following:

Common shares	\$100,000
Retained earnings	70,000
Total	<u>\$170,000</u>

All of Son's assets and liabilities had a fair value equal to book value, except for land, which had a fair value in excess of book value of \$20,000. During 20X8, Son reported net income of \$72,500 and paid dividends of \$60,000. Son sold goods to Father at a gain of \$5,000 late in 20X8. Father has not yet resold the goods.

**Required:**

1. What criterion must be met in order to account for this investment using the equity method?
2. Calculate the amount of goodwill purchased by Father as part of its investment in Son.

3. Prepare the journal entry under the equity method for Father to record investment income, assuming that goodwill has not been impaired.
4. Determine the balance in the Investment in Son account at the end of 20X8, using the equity method.

(CGA-Canada, adapted)



**A11-24 Equity Investment, Entries and Reporting:** On 1 January 20X5, Redmond Company purchased 3,000 of the 15,000 outstanding common shares of Decca Computer (DC) Corporation for \$80,000 cash. Redmond had significant influence as a result of the investment, and will use the equity method to account for the investment.

On 1 January 20X5, the balance sheet of DC showed the following book values (summarized):

Assets not subject to depreciation	\$140,000 *
Assets subject to depreciation (net)	100,000 **
Liabilities	40,000
Common shares	150,000
Retained earnings	50,000

\* Market value, \$150,000; difference relates to land held for sale, which is sold in 20X5.

\*\* Market value, \$140,000, estimated remaining life, 10 years. Use straight-line depreciation with no residual value.

Assume there is no impairment of goodwill.

Additional subsequent data on DC:

	20X5	20X6
Net income	\$25,000	\$31,000
Cash dividends declared and paid	10,000	12,000
Market value per share	25	26

**Required:**

1. Provide the investor's entries or give the required information for
  - a. Entry at date of acquisition.
  - b. Amount of goodwill purchased.
  - c. Entries at 31 Dec. 20X5 to recognize investment revenue and dividends.
  - d. Entries at 31 Dec. 20X6 to recognize investment revenue and dividends.
2. Are any entries needed to recognize a writedown to fair value at the end of 20X5 or 20X6? Explain.
3. Reconstruct the investment account, showing the opening and closing balance and all changes in the account.
4. How much investment revenue would be reported each year if the cost method was used? What would be the balance in the investment account?



**A11-25 Consolidation—Explanation:** In 20X1, Pepper Company bought 75% of S Company's common shares, establishing control over the Board of Directors. Pepper Company used the cost method to account for its investment in S during the year, but prepared consolidated financial statements at the end of the fiscal year, which are shown in summary form:

	P Co.	S Co.	Consolidated
Cash	\$ 11,000	\$ 12,000	\$ 23,000
Accounts receivable	22,000	19,000	37,000
Inventory	14,200	9,200	22,400
Capital assets	83,000	64,300	152,300
Investment in S Co.	74,000	—	—
Intangible assets	—	—	3,725
	<u>\$204,200</u>	<u>\$104,500</u>	<u>\$238,425</u>
Current liabilities	\$ 30,000	\$ 9,000	\$ 35,000
Long-term liabilities	4,000	2,500	6,500
Non-controlling interest	—	—	23,000
Common shares	100,000	60,000	100,000
Retained earnings	70,200	33,000	73,925
	<u>\$204,200</u>	<u>\$104,500</u>	<u>\$238,425</u>
Sales and other revenue	\$ 96,000	\$ 63,000	\$ 146,750
Cost of sales	80,500	49,000	120,500
Operating expenses	2,500	4,900	7,500
Non-controlling interest	—	—	2,025
Net income	\$ 13,000	\$ 9,100	\$ 16,725
Opening retained earnings	67,200	26,900	67,200
Dividends	10,000	3,000	10,000
Closing retained earnings	<u>\$ 70,200</u>	<u>\$ 33,000</u>	<u>\$ 73,925</u>

**Required:**

1. Why does the parent company use the cost method during the year?
2. Identify the accounts on the consolidated balance sheet that do not appear on either of the unconsolidated balance sheets. Explain their meaning.
3. Identify the accounts or amounts that appear on the unconsolidated financial statements that do not appear on the consolidated statements. Explain why they have been eliminated.
4. What is the most likely reason that the unconsolidated accounts receivables and current liabilities do not add to the balance shown on the consolidated balance sheet?



**A11-26 Reporting a Subsidiary:** Cohen Corporation, a public company, is contemplating investing in a supplier company, Abbott Metals Limited, in order to ensure a reliable source of supply. The controlling shareholder, who owns 147,000 shares, is willing to sell to Cohen for a price of \$50 per share. Summarized financial statements and additional information related to Abbott, follow:

### ABBOTT METALS BALANCE SHEET

At 30 June 20X5	Book Value	Fair Value
Cash	\$ 120,000	\$ 120,000
Accounts receivable (\$419,000 from Cohen)	849,000	800,000
Inventory	1,310,000	1,800,000
Capital assets	1,492,000	700,000
Mining properties	6,701,000	11,400,000
	<u>\$10,472,000</u>	<u>\$14,820,000</u>

Accounts payable	\$ 1,375,000	\$ 1,375,000
Long-term debt	4,990,000	5,219,000
Common shares (250,000 shares)	2,700,000	
Retained earnings	1,407,000	
	<u>\$10,472,000</u>	

**Required:**

Assume Cohen buys 147,000 shares of Abbott at \$50 per share. Describe the resulting reporting requirements, and describe the effect on the annual financial statements of Cohen. Include a calculation of goodwill in your response.



**A11-27 Comprehensive Investments:** Reston Suppliers is a public company. It reported the following at the end of 20X5:

Available-for-sale investments		
S Co., 20,000 shares	\$448,000	
R Co., \$50,000 par value, 10% bond, due 31 December 20X7	<u>52,000</u>	\$ 500,000
Held-to-maturity investments		
T Co. bonds, \$100,000 par value, 9% bond, due 30 June 20X8 (straight-line amortization of the discount)		\$ 96,750
V Ltd., 45,000 shares, equity method		\$2,578,900
Other comprehensive income		
Unrealized holding gains (\$2,000 related to R Co. bonds and \$13,000 related to S Co.)		\$ 15,000

The following transactions and events took place in 20X6:

- Dividends received, S Co., \$1 per share, V Ltd., \$3 per share.
- Semi-annual interest was received on both bonds on 30 June.
- Early in July, the S Co. shares were sold for \$32 per share, less \$3,000 in commissions.
- 1,000 W Ltd. shares were acquired for a total of \$67,000, including \$500 of commissions. This is an available-for-sale investment.
- Reston owns 30% of the voting shares of V Ltd. V Ltd. reported earnings of \$450,000 for 20X6. There was \$216,000 of goodwill inherent in the original purchase price, but no other fair value allocations that require adjustment. There were no intercompany transactions requiring adjustment. A goodwill impairment of \$10,800 must be recorded in 20X6.
- The R Co. bond was sold for \$51,400 plus accrued interest on 1 October 20X6.
- X Co. shares were acquired as an available-for-sale investment, 300,000 shares for a cost of \$138,000, including \$3,800 of commissions.
- Semi-annual interest was received on the T Co. bond at the end of December.
- W Co. paid a dividend of \$0.40 per share.
- Market values on 31 December 20X6: W Ltd., \$25 per share; X Co., \$0.65 per share; V Ltd., \$62 per share; T Co., 95. The W Ltd. decline in value is considered to be an impairment.

**Required:**

- List the accounts and amounts that would appear on the income statement. Also calculate the change in other comprehensive income for the year ended 31 December 20X6.
- List the accounts and amounts that would appear on the balance sheet for the year ended 31 December 20X6. Available-for-sale investments are temporary investments.



**A11-28 Comprehensive Investments:** Fetch Company, a public company, had the following transactions in securities during 20X6:

- a. Purchased \$700,000 par value of 10% NS Power Ltd. bonds for 102.5 plus accrued interest, on 1 June 20X7. The bonds will mature on 31 December 20X11, and pay interest on 1 February and 1 August. The bonds will be held to maturity.
- b. Purchased 300,000 common shares of Talcon Ltd., a publicly traded company, as an available-for-sale investment on 16 June. The price per share was \$0.75, plus a \$4,500 broker commission.
- c. Received the semi-annual interest on the NS Power bonds on 1 August. Premium amortization is also recorded. Use straight-line amortization.
- d. On 1 October, invested \$3,000,000 in Ball Ltd., a customer that was experiencing financial difficulty but had great potential. Fetch received 25% of the common shares of Ball, and was given representation on the Board of Directors. Fetch felt that it had significant influence with Ball. On the date of acquisition, Ball had tangible assets with a book value of \$14,700,000. Liabilities were \$9,600,000. All book values represented fair values, except plant and equipment with a 10-year life. For plant and equipment, book value was \$6,750,000 and fair values were \$7,980,000. Goodwill was not impaired in 20X6.
- e. Purchased \$200,000 par value of 8% Ontario Electric Ltd. bonds for 100 plus accrued interest on 1 November 20X7. The bonds will mature on 31 December 20X9, and pay interest on 1 March and 1 September. The bonds are held as an available-for-sale investment.
- f. Talcon Ltd. paid a cash dividend of \$0.05 per share on 1 November.
- g. Ball did not declare or pay any dividends in 20X6 but reported a loss, earned evenly over the year, of \$475,000.
- h. Interest was accrued on 31 December on bonds, and premium/discount amortized, as appropriate.
- i. Market values on 31 December: NS Power bonds, 101.5; Talcon, \$0.62 per share; Ball Ltd., undeterminable; Ontario Electric bonds, 98.5.

Fetch Company had the following transactions in 20X7 related to its investments:

- a. Received the semi-annual interest on the NS Power bonds on 1 February. Premium amortization is also recorded.
- b. Received the semi-annual interest on the Ontario Electric bonds on 1 March.
- c. Sold the Talcon shares for \$1.20 per share, less brokerage fees of \$7,900.
- d. Received the semi-annual interest on the NS Power bonds on 1 August. Premium amortization is also recorded.
- e. Sold the Ontario Electric bonds for 99, plus accrued interest, on 1 August. There was a commission of \$565 on the transaction.
- f. On 1 November, purchased 16,000 shares of Vulture Corp for \$5.50 per share, plus commissions of \$1,650. The shares are being held as an available-for-sale investment.
- g. Ball did not declare or pay any dividends in 20X7 but reported net income, earned evenly over the year, of \$79,200. Goodwill was impaired in the amount of \$200,000.
- h. Interest was accrued on 31 December on bonds, as appropriate. Premium amortization is also recorded.
- i. Market values on 31 December: NS Power bonds, 102; Talcon, \$1.15 per share; Ball Ltd., undeterminable; Ontario Electric bonds, 98; Vulture Corp, \$7 per share.

**Required:**

Provide entries for all transactions and adjustments related to investments. Broker commissions are included in original cost, and netted with the proceeds of disposition. Include a calculation of acquired goodwill on the acquisition of Ball.





**A11-29 Cash Flow Statement:** For each of the following transactions, identify the item(s) that would appear on the cash flow statement. Identify the appropriate section (i.e., operating, investing, financing) and whether the item is an inflow or an outflow, or an add-back or deduction in operating. Assume that the indirect method of presentation is used in the operating section.

1. ABC Company reported a held-to-maturity investment of \$46,000, a \$50,000, 10-year bond bought at a discount in previous years. The bond pays annual interest of 7%, and \$1,000 of discount amortization had been recorded in the current year.
2. Common shares were purchased for \$36,000, an available-for-sale investment.
3. The common shares in part 2 were revalued to \$50,000 fair value at year-end, and \$14,000 of other comprehensive income was recognized.
4. The common shares in parts 2 and 3 were sold for \$60,000. A gain of \$24,000 was recognized, and other comprehensive income was reduced by \$14,000.
5. T-bills were purchased for \$350,000, an available-for-sale investment that is considered a cash equivalent.
6. The T-bills in part 4 were sold for \$365,000. A gain of \$15,000 was recorded.
7. The company owns 460,000 shares of Therion Co., over which it has significant influence. In the current year, investment revenue of \$57,000 was recorded, and cash dividends of \$36,000 were received.



**A11-30 Cash Flow Statement:** The following comparative data is available from the 20X4 balance sheet of Investcorp:

	20X4	20X3
Available-for-sale investments	\$ 2,950,000	\$1,216,000
Long-term investments		
Investment in Tandor Ltd., at equity	1,071,200	950,000
Held-to-maturity investment in Byron bonds, at amortized cost	615,000	609,300
Shareholders' equity:		
Other comprehensive income		
Unrealized holding gains	75,900	52,100

In 20X4, the following transactions took place, and are properly reflected in the balance sheet accounts, above.

1. Dividends of \$140,000 were received from Tandor Ltd. No shares of Tandor were bought or sold during the year.
2. Available-for-sale investments, with a carrying value of \$56,200 and cumulative unrealized holding gains of \$21,000, were sold for \$87,500.
3. Available-for-sale investments were increased to fair value at year-end.

Other "typical" transactions and entries also occurred in 20X4 that are reflected in the balance sheet accounts. (You may find it helpful to reconstruct the transactions.)

**Required:**

What items would appear on the 20X4 cash flow statement? Assume the operating section is presented using the indirect method of presentation.



**A11-31 Consolidation (Appendix):** At the beginning of the current fiscal year, Poppa Company bought 90% of the common shares of Son Limited for \$7,350,000 cash. At that time, the book value of Son's assets reflected fair value except for land, which was undervalued on the books by \$1,200,000. Son reported \$500,000 of common stock and \$5,500,000 of retained earnings on this date. Financial results at the end of the current fiscal year (in thousands):

	<b>Poppa</b>	<b>Son</b>
Cash	\$ 1,610	\$ 480
Accounts receivable	8,920	1,410
Inventory	12,100	1,400
Capital assets	10,520	1,310
Investment in Son Co.	7,350	0
Mining properties	0	6,050
	<u>\$ 40,500</u>	<u>\$ 10,650</u>
Current liabilities	\$ 8,060	\$ 1,400
Long-term debt	20,900	3,102
Common shares	8,600	500
Retained earnings	2,940	5,648
	<u>\$ 40,500</u>	<u>\$ 10,650</u>
Sales	\$ 49,700	\$ 12,900
Cost of sales	36,200	8,100
Other expenses	12,925	4,552
Other revenues	665	0
Net income	\$ 1,240	\$ 248
Opening retained earnings	2,100	5,500
Dividends	400	100
Closing retained earnings	<u>\$ 2,940</u>	<u>\$ 5,648</u>

During the year, Poppa bought \$1,000,000 of goods from Son. Three-quarters had been resold at year-end. Son had recorded a \$120,000 gross profit on these sales. Poppa still owed Son \$800,000 at year-end. Goodwill was not impaired during the year.

**Required:**

Prepare a consolidated balance sheet, income statement, and retained earnings statement for the current fiscal year. Round calculations to the nearest thousand.



**A11-32 Consolidation (Appendix):** P Company bought 90% of the voting shares of S Company on 1 January 20X2 for \$19,500,000. On that date, S Company had shareholders' equity of \$15,900,000, including \$6,000,000 of common shares. On that date, fair values of net assets approximated market values, except land that was undervalued on the books in the amount of \$500,000, and depreciable capital assets that were undervalued by \$1,400,000. Goodwill was not impaired in 20X2; amortizable capital assets are to be amortized over 15 years.

During 20X2, P Company sold goods to S Company in the amount of \$600,000. All these goods were resold by S Company by the end of 20X2. S Company sold \$400,000 of products to P Company; one quarter had been resold by the end of the year. S Company had recorded a \$220,000 profit on the sale. P Company still owed S Company \$375,000 at year-end.

Unconsolidated financial statements follow:

Year Ended 31 December 20X2	P Co.	S Co.
Cash	\$ 1,450,000	\$ 213,000
Accounts receivable	16,300,000	3,415,000
Inventory	28,900,000	5,900,000
Capital assets	114,300,000	11,100,000
Investment in S Co.	19,500,000	—
Intangible assets	7,916,000	—
	<u>\$ 188,366,000</u>	<u>\$ 20,628,000</u>
Current liabilities	\$ 39,000,000	\$ 2,100,000
Long-term debt	80,000,000	500,000
Future (deferred) income tax	10,195,000	1,400,000
Common shares	17,900,000	6,000,000
Retained earnings	41,271,000	10,628,000
	<u>\$ 188,366,000</u>	<u>\$ 20,628,000</u>
Sales	\$ 240,350,000	\$ 30,600,000
Cost of sales	170,700,000	18,900,000
Other expenses	42,900,000	10,522,000
Other revenue	405,000	—
Net income	\$ 27,155,000	\$ 1,178,000
Opening retained earnings	30,316,000	9,900,000
Dividends	16,200,000	450,000
Closing retained earnings	<u>\$ 41,271,000</u>	<u>\$ 10,628,000</u>

**Required:**

1. Prepare consolidated financial statements as of 31 December 20X2.
2. Under what circumstances would P Co. not have to consolidate its subsidiary?
3. In what way are the consolidated financial statements superior to unconsolidated statements? Why do some people believe that consolidated statements are inferior?