

# **Chapter 2**

## **Investments in Equity Securities**

A brief description of the major points covered in each case and problem.

## CASES

### **Case 2-1**

A company increases its equity investment from 10% to 25%. Management wants to compare the equity method and fair value method in order to understand the affect on the accounting and wants to know which method better reflects management's performance.

### **Case 2-2**

A company has acquired an investment in shares of another company and members of its accounting department have differing views about how to account for it.

### **Case 2-3**

This case focuses on the accounting for a long-term investment when the investee is hostile and refuses to co-operate with the investor.

### **Case 2-4**

This case, adapted from a past UFE, involves a parent company that is in financial difficulty. An investment in an associate has been written off and a subsidiary has been sued. The student must assess whether the company can continue to report on a going concern basis and determine what should be disclosed in the notes to the financial statements.

### **Case 2-5**

This case, adapted from a past UFE, gives an illustration of a company that has raised money for its operations in several ways (i.e. other than raising common equity) and asks the student to analyze the accounting issues for the various types of investments.

### **Case 2-6**

This case, adapted from a past UFE, involves a company that is considering the purchase of a 46.7% interest in another company in the scrap metal business. The student must write a memo to discuss 1) all relevant business considerations pertaining to the purchase and 2) how the purchaser should report its investment if it were to proceed with the purchase.

## PROBLEMS

### **Problem 2-1** (20 min.)

This problem involves the calculation of the balance in the investment account for an investment carried under the equity method over a two-year period. Then, journal entries are required to reclassify and account for the investment as FVTPL for the third year.

### **Problem 2-2** (20 min.)

This problem involves the preparation of journal entries for a FVTPL investment for one year. In year 2, journal entries are required to reclassify and account for the investment as a held-for-significant-influence investment.

### **Problem 2-3** (30 min.)

This problem involves the preparation of journal entries over a two-year period for an investment under two assumptions: (a) that it is a significant influence investment and (b) that it is accounted for using the cost method.

### **Problem 2-4** (40 min)

This problem requires journal entries, the calculation of the balance in the investment account and the preparation of the investor's income statement under both the equity method and cost method. The investee reports a loss from discontinued operations for the year.

### **Problem 2-5** (40 min)

This problem compares the investment account balance, the income per year, and the cumulative income for a three-year period for a 20% investment if it was classified as FVTPL, investment in associate and FVTOCI.

### **Problem 2-6** (30 min)

This problem requires the preparation of slides for a presentation to describe GAAP for publicly accountable enterprises for financial instruments as they relate to FVTPL, FVTOCI, held-for-significant-influence and held-for-control investments.

### **Problem 2-7** (30 min)

This problem requires the preparation of slides for a presentation to describe GAAP for private enterprises for financial instruments as they relate to FVTPL, FVTOCI, held-for-significant-influence and held-for-control investments.

## WEB-BASED PROBLEMS

### Web Problem 2-1

The student answers a series of questions based on the 2011 financial statements of Rogers Communications Inc., a Canadian company. The questions deal with ratio analysis and investments reported using cost method, equity method and fair-value method.

### Web Problem 2-2

The student answers a series of questions based on the 2011 financial statements of Goldcorp Inc., a Canadian company. The questions deal with ratio analysis and investments reported using cost method, equity method and fair-value method.

## SOLUTIONS TO REVIEW QUESTIONS

1. A business combination is a transaction or other event in which an acquirer obtains control of one or more businesses. Transactions sometimes referred to as 'true mergers' or 'mergers of equals' are also business combinations as that term is used in this IFRS. A parent–subsidiary relationship exists when, through an investment in shares or other means, the parent company has control over the subsidiary company. The key common element is the concept of control.
2. A FVTPL investment is reported at fair value with the fair value adjustment reported in net income whereas an investment in an associate is reported using the equity method.
3. A control investment exists if one entity has the power to determine another entity's key strategic policies and activities. Joint control exists when two or more companies have an agreement that establishes joint control such that no one of them can unilaterally determine the other entity's key strategic policies and activities.

4. The purpose of the *IFRS 8: Operating Segments* is to improve the information available to shareholders and investors about the lines of business and geographic areas in which the company does business. Some of this information is lost in the aggregation process of consolidation, and the disaggregation of segment reporting is valuable for detailed analysis.
5. The equity method should normally be used to report an investment when the investor has significant influence over or has joint control of the investee. The ability to exercise significant influence or joint control 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.
6. The equity method records the investor's share of changes in the investee's equity. The investee's equity is increased by income and decreased by dividends. Therefore the investor records an increase in its equity account balance when the investee earns income, and records a decrease when the investee pays dividends.
7. The Ralston Company could determine that it was inappropriate to use the equity method to report a 35% investment in Purina in two separate types of circumstances. For example, if another shareholder group owned up to 65% of Purina's voting shares, Ralston could argue that its ownership did not provide significant influence over Purina. In this case, Ralston would likely classify the investment as a FVTPL investment and report it at fair value. Alternatively, Ralston might argue that its 35% ownership established control over Purina. This would occur if, for example, Ralston also owned convertible preferred shares that, if converted, would increase its voting share ownership to greater than 50%. In this case, Ralston would argue that it should consolidate Purina.
8. The FVTPL would have been reported at fair value. The previous investment should be adjusted to fair value on the date of the change. The cost of the new shares is added to the fair value of the previously held shares. The sum of the two values becomes the total cost of shares when calculating the acquisition differential.
9. An investor should report its share of an investee's other comprehensive income in the same manner that it would report its own other comprehensive income. Thus, the investor's percentage of the investee's OCI should be reported on a separate line below operating profit, net of tax, and full disclosure should be provided. However, the investor's measure of

materiality should be used to determine whether or not the item is sufficiently material to warrant separate presentation.

**10.** In this case, Ashton's share of the loss of Villa (\$280,000) exceeds the cost of its investment in Villa (\$200,000). The extent of loss recognized by Ashton depends on whether it has legal or constructive obligations or made payments on behalf of Villa.

a) Assume that Ashton has constructive obligations on behalf of Villa because it may have guaranteed the liabilities of Villa such that if not paid by Villa Ashton would have to pay on their behalf. In this case, Ashton would record  $40\% \times \$700,000$  or \$280,000 as a reduction of the investment account and as a recognized loss on the statement of operations. The investment account will now have an \$80,000 credit balance, and should be reported as a liability.

b) However, if Ashton does not have constructive obligations with respect to the liabilities of Villa, losses would only be recognized to the extent of the investment account balance. That is, a \$200,000 loss would be recognized and the investment account balance would be reduced to zero. Ashton would resume recognizing its share of the profits of Villa only after its share of the profits equal the share of losses not recognized (\$80,000 in this case).

**11.** Able would reduce its investment account by the percentage that was sold, and record a gain or loss on disposition. It would then reevaluate its reporting method for the investment. If significant influence still exists, it should report using the equity method. If it no longer exists, Able should report using the fair value method and would measure any remaining interest in the investee at fair value.

**12.** The disclosure requirements for an investment in an associate are stated in IFRS 12. An entity shall disclose:

(a) for each associate that is material to the reporting entity:

- (i) the name of the associate.
- (ii) the nature of the entity's relationship with the associate (by, for example, describing the nature of the activities of the associate and whether they are strategic to the entity's activities).
- (iii) the principal place of business (and country of incorporation, if applicable and different from the principal place of business) of the associate.
- (iv) the proportion of ownership interest or participating share held by the entity and, if different, the proportion of voting rights held (if applicable).

(b) for each associate that is material to the reporting entity:

(i) whether the investment in the associate is measured using the equity method or at fair value.

(ii) summarised financial information about the associate.

(iii) if the associate is accounted for using the equity method, the fair value of its investment in the associate, if there is a quoted market price for the investment.

(c) financial information about the entity's investments in associates that are not individually material

(d) the nature and extent of any significant restrictions (eg resulting from borrowing arrangements, regulatory requirements or contractual arrangements between investors with significant influence over an associate) on the ability of associates to transfer funds to the entity in the form of cash dividends, or to repay loans or advances made by the entity.

(e) when the financial statements of an associate used in applying the equity method are as of a date or for a period that is different from that of the entity:

(i) the date of the end of the reporting period of the financial statements of that associate; and

(ii) the reason for using a different date or period.

(c) the unrecognised share of losses of an associate, both for the reporting period and cumulatively, if the entity has stopped recognising its share of losses of the associate when applying the equity method.

**13.** The FVTPL reporting method would typically show the highest current ratio because a FVTPL investment is a short term trading investment, which must be shown as a current asset. For the other reporting methods, the investment could be classified as a non-current asset depending on management's intention for the investment.

**14.** Private enterprises may elect to account for investments in associates using either the equity method or the cost method. The method chosen must be applied consistently to all similar investments. When the shares of the associate are traded in an active market, the investor cannot use the cost method; it must use either the equity method or the fair value method.

**15.** IFRS 9 requires that all nonstrategic equity investments be measured at fair value including investments in private companies. However, an entity can elect on initial recognition to present the fair value changes on an equity investment that is not held for short-term trading in other comprehensive income (OCI). The gains or losses are cleared out of accumulated OCI and transferred directly to retained earnings and are never recycled through net income. Under IAS 39, investments that did not have a quoted market price in an active market and whose fair value could not be reliably measured were reported at cost. This provision no longer exists under IFRS 9.

# SOLUTIONS TO CASES

## Case 2-1

The investment in Ton was appropriately classified as FVTPL in Year 4 on the assumption that Hil did not have significant influence with a 10% interest.

The reporting of the investment at the end of Year 5 depends on whether Hil has significant influence. *IAS 28* states that 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. If the investor holds less than 20 percent 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 percent or more of the voting interest in the investee does not in itself confirm the ability to exercise significant influence. A substantial or majority ownership by another investor may, but would not automatically, preclude an investor from exercising significant influence.

If Hil does have significant influence as a result of owning greater than 20% of the voting shares, it would adopt the equity method as of January 1, Year 5. The change from the fair value method to the equity method would be accounted for prospectively due to the change in circumstance. The fair value method was appropriate in Year 4 when Hil did not have significant influence. The equity method is appropriate starting at the time of the additional investment.

The additional cost of the 15,000 shares will be added to the carrying amount of the investment as at January 1, Year 5 to arrive at the total cost of the investment under the equity method.

The following summarizes the financial presentation of the investment-related information in the financial statements for Year 5. In the first scenario, the fair value method is used assuming that the investment is classified as FVTPL. In the second scenario, the equity method is used assuming that the investment is classified as significant influence (SI):

**FVTPL**

**SI**



On balance sheet

Investment in Ton	\$925,000 <sup>1</sup>	\$885,000 <sup>2</sup>
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On comprehensive income statement

In net income

Dividend income	\$120,000 <sup>3</sup>	
Equity income		\$130,000 <sup>4</sup>
Unrealized gains	<u>50,000<sup>5</sup></u>	<u>          </u>
Total	<u>\$170,000</u>	<u>\$130,000</u>

**Notes:**

- 1) 25,000shares x 37 = 925,000
- 2) 10,000shares x 35 + 525,000 + equity income for Year 5 of 130,000<sup>4</sup> – dividends received in Year 5 of 120,000<sup>3</sup> = 885,000
- 3) 25% x 480,000 = 120,000
- 4) 25% x 520,000 = 130,000
- 5) 25,000shares x (37 – 35) = 50,000

Cost of investment (10,000shares x 35 + 525,000)	\$875,000
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Hil's share of net carrying amount of Ton's shareholders' equity

(25% x [2,600,000+500,000-480,000])	<u>655,000</u>
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Land	<u>\$220,000</u>
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No amortization of acquisition differential pertaining to land

The fair value method probably provides the best means of evaluating the return on the investment. The dividend income and the unrealized gains are reported in net income. The present bonus scheme considers net income. As such, the unrealized gains are considered when evaluating management's performance. This is appropriate since they represent part of the return earned by Hil during the year. Under the equity method, equity income would be reported in net income and would be considered when evaluating management. The unrealized gains are not reported in net income and would obviously not be considered in evaluating management's performance under the equity method.

## Case 2-2

*In this case, students are asked to, in effect, assume the role of a consultant and advise Cornwall Autobody Inc. (CAI) how it should report its investment representing 33% of the common shares of Floyd's Specialty Foods Inc. (FSFI).*

Accountant #1 suggests that the cost method is appropriate because it is really just a loan. This might have some validity because Floyd's friend Connelly certainly seems to have come to his rescue. However Connelly's company did buy shares, and there is no evidence that they can or will be redeemed by FSFI at some future date. An investment in shares is not a loan, which would have to be reported as some sort of receivable. While knowledge of the business or the ability to manage it such as might be seen in the exchange of management personnel or technology, might be indicators that significant influence exists and can be asserted, the absence of knowledge of the business and ability to manage do not necessarily mean that there cannot be significant influence. They are not requirements for the use of an alternative such as the cost method.

Accountant #2 feels that the equity method is the one to use simply because the ownership percentage is over 20%. This number is a quantitative guideline only and whether an investment provides the investee with significant influence over the investee or not depends on facts other than the ownership percentage. For significant influence, the ability to influence the strategic operating and investing policies has to be present. Representation on the board of directors would be evidence of such ability. There is no evidence of board membership.

Accountant # 3 also suggests the equity method saying that 33% ownership gives them the ability to exert significant influence. Whether they exert it or not doesn't matter. This part is correct; you do not have to actually exert it. However, owning 33% does not necessarily mean that you possess this ability. Mr. Floyd was the sole shareholder of FSFI before CAI's investment, and we have no knowledge that he has relinquished some of this control to Connelly in return for his bail out.

The circumstances would seem to rule out the three possibilities presented by the accountants. The investment should be reported at fair value. The only choice (and it is a choice) is whether to report the unrealized gains in net income or other comprehensive income. More information is needed to determine whether CAI has other similar investments and what its preference is with respect to the reporting of this type of investment.

## **Case 2-3**

- (a) This 28% investment has the possibility of being only a significant influence investment under IAS 28 (to be accounted for using the equity method) or a fair-value investment under IFRS 9. While the ownership is greater than 20%, the ability to influence the strategic operating and investing policies does not seem to be present. There is no board membership or significant intercompany transactions between the two companies. In fact Magno cannot even receive information other than that which is available to the market as a whole. Therefore it seems evident that this investment should be reported at fair value.
- (b) Management would like to use the equity method because it would result in Magno reporting 28% of Grille -To - Bumper's yearly earnings. Under the fair-value method, Magno would report its investment at fair value at each reporting date with unrealized gains reported either in net income or other comprehensive income. The fair-value method would be very expensive to apply because Grille -To - Bumper's shares are not traded in an active market. Some sort of business valuation would have to be performed every year to estimate the fair value of Grille -To - Bumper's shares. The cost involved may not justify the effort.
- (c) If Magno had representation on the board of directors, the investment would be considered to be a significant influence investment. With such membership Magno might be able to influence dividend policy. On the date that it became a significant influence investment, Magno would change to using the equity method on a prospective basis.

## **Case 2-4**

Memo to: Partner

From: CA

Subject: Going concern status of Canadian Computer Systems Limited (CCS)

There are several factors that suggest that CCS may not be a going concern. However, many are limited to the impact of the investment in Sandra Investments Limited (SIL) on the cash flows and financial statements of CCS. Subsequent events regarding SIL suggest that CCS may be able to continue operations. Our conclusion on the going concern status of CCS will have implications with regard to disclosure and the content of our audit report.

### **Analysis of going concern status**

#### **General considerations**

Among other things, it will be important to consider the current environmental factors when

assessing the future of CCS. These include inflation projections, fluctuations in interest rates, US currency rates, economic recessions, competition in the industry, and inventory obsolescence. These factors may affect the prospects of CCS.

### **Impact of SIL on the financial results of CCS**

The poor financial results of CCS are for the most part a direct result of its accounting treatment for its investment in SIL. SIL was de-listed by a US stock exchange, because of perceived financial difficulties. As a result of SIL's continued losses, CCS decided to write off its investment in SIL. In addition, SIL liabilities that were guaranteed by CCS were also recorded in the accounts of CCS. The write-off and assumption of SIL's liabilities adversely affected CCS's income statement, while the increase in liabilities adversely affected CCS's working capital position.

However, after CCS's year-end, SIL was able to raise US\$40 million through a preferred share issue. SIL used the US\$40 million to pay off the liabilities guaranteed by CCS. In addition, SIL was relisted by the stock exchange. These events do much to allay any concerns that CCS may not be a going concern.

### **The cash flows of CCS**

Over the past two years, CCS has incurred substantial operating losses. In Year 11, losses totaled \$3.58 million (Year 10 - \$5.88 million). However, net income after discontinued operations was \$1.94 million in Year 11 and, more importantly, net cash outflows from operations were \$1.18 million. Therefore, net cash outflows from operations are substantially less than reported operating losses. Cash flows from operations are an important consideration in deciding whether CCS is a going concern.

The new equity issue being considered for the Year 12 fiscal year would help improve cash flows in the coming year, especially if any of the loans are called.

The management of CCS has partially lost control over the company's cash flows. Currently, the bank has full control over the cash flows of CCS, as it collects cash receipts and releases funds based on operating budgets. This practice is an indication that CCS is having difficulty in obtaining financing for its operations. On the other hand, interest rates charged are at 1% over prime, suggesting that the bank believes the security for the loan (accounts receivable and the floating charge debenture on all assets) is adequate. In any case, the bank's control over cash

flows does ensure that adequate cash flows for operations will be maintained through these demand loans.

### **Assessment of the balance sheet of CCS**

For the year ended September 30, Year 11, CCS has a negative shareholders' equity balance of \$74.6 million (Year 10 - \$76.7 million). However, this deficit was created largely by the write-off of the SIL loan guarantee of \$55.42 million in Year 10. In Year 11, a further \$2.83 million in interest charges was expensed. Without these expenses, shareholders' equity would have a deficit balance of only \$16.35 million.

In hindsight, the write-offs were not required. The success of SIL's preferred share issue does suggest that investors have confidence in the company and, more importantly, CCS no longer has any obligation for the loan, since it has now been paid off.

IAS 36 requires that an entity shall assess at the end of each reporting period whether there is any indication that an impairment loss recognized in prior periods for an asset other than goodwill may no longer exist or may have decreased. If any such indication exists, the entity shall estimate the recoverable amount of that asset. An impairment loss recognized in prior periods for an investment in an associate shall be reversed if, and only if, there has been a change in the estimates used to determine the asset's recoverable amount since the last impairment loss was recognized. If this is the case, the carrying amount of the asset shall be increased to its recoverable amount. That increase is a reversal of an impairment loss.

The increased carrying amount of the investment attributable to a reversal of an impairment loss shall not exceed the carrying amount that would have been determined had no impairment loss been recognized for the asset in prior years. The reversal of the impairment loss for the investment is recognized immediately in net income.

CCS's working capital deficiency of \$83.71 million (Year 10 - \$92.27 million) also points to a going concern problem. However, after the liabilities are reduced by the SIL loan and related interest accrued, the deficiency shrinks to \$22.2 million (Year 10 - \$26.37 million). A comparison of Year 10 to Year 11 results suggests that the working capital position of CCS is improving.

The mortgages payable balance of \$21.6 million could also reduce the working capital deficiency. This balance had been reclassified as a current liability because of the failure of CCS

to comply with debt service requirements and operating covenants. If the mortgage holder agrees to not demand payment of the mortgage and to put the mortgage loan back in good standing, then the amount should be classified as a long-term liability. The violation of the covenants could be the result of the method that was used to account for losses in SIL.

After all these deductions are made, the working capital deficiency in Year 11 would then be just \$600,000 (Year 10 - \$4.77 million).

The growing accounts payable of CCS (\$400,000) may indicate an inability on CCS's part to pay its creditors on time. The \$160,000 proceeds from the common shares issued during the year were used to satisfy liabilities owing to the company's directors and officers.

Management intends to sell property that is carried on the balance sheet at \$1.85 million. The proceeds from this sale could help improve cash flows and may also indicate that management is trying to rid CCS of unprofitable and inefficient assets.

In addition, no dividends have been paid on the common shares or the preferred shares in the last two years. The non-payment of dividends is probably due to the fact that CCS is not permitted to pay dividends without the bank's approval.

Another factor that should be considered in the going concern analysis is CCS's long-term loan of \$15 million, which has been in default since September 30, Year 11. This loan should be classified as a current liability unless the lender formally agrees to forgive the violation and not call the loan. In addition, any long-term debt that is payable on demand should be classified as a current liability since it can be called at any time. To avoid the classification as current liabilities, the lenders must formally agree to change the terms of the loans so that the loans are not callable on demand. The reclassification of any loans from long term to current will make the working capital situation worse and could negatively affect the CCS's ability to continue as a going concern.

### **Assessment of income statement**

There are signs that the company is controlling its costs. Operating expenses have decreased by 32% in Year 11 from the Year 10 amounts. In addition, it appears that CCS is discontinuing certain operations that had been contributing to its losses in prior years; these operations may also have adversely affected cash flows.

Sales fell 35% in Year 11 compared to Year 10. In addition, there is a large increase in CCS's accounts receivable balance from Year 10, which may indicate a problem with collections.

CCS has completed a new software development program that may help sales in the future. The actual impact of this new product on cash flows should be determined.

CCS may be able to borrow funds using its plant assets as collateral. These assets may have a much higher market value than those reflected on the balance sheet. There are also other bases of measurement that could be used to value the assets, such as replacement cost or fair value. These measurements provide a better reflection of the underlying value of the assets.

The pending lawsuit may result in judgments or cash awards. However, management believes that this claim is without merit, an opinion that needs to be confirmed by CCS's lawyers. Further, any amount that may be awarded pursuant to an action is recoverable under the company's insurance policies.

### **Other steps CCS could take**

My analysis of the financial position of CCS uncovered a number of cash planning opportunities that may enable CCS to improve its profitability. Currently, CCS has a large amount of debt outstanding, with interest payable at high interest rates. Management should discuss with the bank opportunities that may be available to restructure the debt. By providing cash flow statements and budgets, management may be able to convince the bank that the risk of lending CCS funds is lower than originally perceived. Further, a greater effort could be made to sell the property held for resale. Selling SIL would also generate cash flows. In addition, CCS could increase its efforts to collect the outstanding receivables; one alternative is to sell the receivables to a credit agency.

### **Implications of disclosing a going concern problem in the financial statements**

If it is concluded that a going concern problem exists, then we must determine the appropriate type of disclosure. The most conservative treatment that could be adopted is to use an alternative basis of measurement (e.g., liquidation value). In this case, not only will balance sheet values be changed, but the classification of assets and liabilities in the financial statements may also need to be adjusted.

We must consider whether there is adequate disclosure in the financial statements and whether

disclosure explicitly draws attention to the going concern problem. In evaluating the adequacy of disclosure, we would consider the content of financial statements, including the terminology used, the amount of detail given, the location of the disclosure, and its prominence in the financial statements.

If it is decided that the going concern problem is to be disclosed in a note, and the figures used in the financial statements will not be adjusted, then certain information should be included in the note. First, the note should state that there are adverse conditions and events, which indicate that the accounting principles used, are not applicable. The note should also provide details of management's plans, if any, for dealing with the adverse conditions and events and management's evaluation of their significance for operations, as well as any mitigating factors that may be present. The possible effects on operations should be explained if the problem is not resolved. Finally, the note should state the anticipated timing of the resolution of surrounding uncertainties.

Disclosure does not have to be limited to the financial statements. Going concern problems could be communicated in media announcements or in the management discussion and analysis in the annual report, or could be included with documents filed with the provincial securities commissions.

At a minimum, going concern matters should be disclosed in notes to the financial statements. There are legal implications if a going concern problem is not disclosed properly to auditors, directors, officers, and any company administrators.

## **Case 2-5**

(a)

### **Memorandum**

**To:** Partner

**From:** CA

**Subject:** Penguins in Paradise (PIP)

Many users will be relying on the financial statements. Most significantly, equity investors will be relying on the financial statements to calculate their participation payment. They will want accounting policies that maximize profit. In addition, they will want to ensure that PIP's



operations, particularly its costs, are being efficiently controlled. The bank will also be relying on the financial statements to ensure that the operations are under control. They will likely want to see statements that maximize income (minimize losses) and show positive cash flows. The promoter will be relying on the financial statements in calculating his participation payment. Like all the other investors, he will want profit to be high in order to maximize his own income.

In setting the accounting policies, the client must bear in mind that in this situation they will have a direct impact on PIP's cash flows. Cash flows will be very important in the first stages of the life of the play, a period in which expenses will exceed revenues. Early recognition of expenses will decrease profit, and the participation payments that are based on operating profits. I recommend that the accounting policies be set in accordance with accounting standards for private enterprises (ASPE). Future profits are uncertain. To be conservative, items should be expensed now and revenues should be recognized once production of the play commences.

#### *Limited partners*

The investor contributions to the limited partnership should be shown as "partners' capital" in the shareholders' equity section of the balance sheet. The investors are entitled to the residual interest of the entity after all debt holders have received the interest.

#### *Royalty rights*

Accounting for the royalty right payments to PIP is very important because of the impact this amount will have on the participation payments to investors.

First, it must be determined whether the amount paid to PIP for the royalty rights is an income item or a capital item. A royalty payment is very similar to a dividend. The investors will receive a royalty (or participation) payment that is based on their initial contribution. The payment that they receive could also be considered a return of their investment. Both of these facts imply that the payments to PIP by the investors are on account of capital.

On the other hand, in order for the investors to earn a royalty, the critical event that must take place is the production of the play. The cost of producing the play is the cost of earning the income. In addition, the original contributions will not be refunded to the investor.

If the amount paid to PIP by the investors is considered to be on account of income, it is important to determine the period in which the amount should be recognized. The critical event

here is the signing of the contract. Also, no future services have to be provided. These facts suggest that the amount should be recognized as income immediately.

However, if profit is earned and a royalty payment is made by PIP, it will be based on future profit. Expenses will be incurred in the future and therefore, the amount paid to PIP by investors should be matched to the period in which the expense is incurred. In addition, by recognizing the investors' payments to PIP as income in future periods, we would obtain a better matching of expenses since the production is in a future period. I recommend that the investor payments to PIP be treated as income and recognized in future years.

To help avoid interpretation problems in the future, "true operating expenses" must be defined. The definition will help clarify what types of expenses are deductible and what types of revenues must be included in income.

#### *Sale of reservation rights*

The timing of recognition of the fees earned from selling reservation rights must be determined. The amount relates to the future performance of the play, that being in Year 2. If the play is cancelled, the theatregoers will ask for a refund of their reservation fee. Therefore, there is a case for future recognition. Arguments favoring recognition in Year 1 include the fact that the critical event is selling the reservation rights, and that the amount is non-refundable. In addition, the amount paid cannot be applied against future ticket prices and no future services are to be rendered.

Since the play must run in a future year to avoid having to repay the reservation fee, the reservation fee should be recognized as revenue in Year 2. Doing so will reduce income for the current year and reduce the participation payment in the current year.

#### *Sales of movie rights*

The payment received for the sale of the movie rights can be taken into income in the current year because there is no direct tie to future expenses or events. Alternatively, the amount that was paid is based on the success of the play, and should be taken into income in future periods.

#### *Government grant*

We must determine whether the government grant is attributable to income or capital. The

treatment of this amount will affect the royalty payment. If the amount is taken into income immediately, the participation payments will increase. If the amount is offset against an asset that is depreciated, then the participation payments derived from the grant will be paid over time. If the grant is tied to hiring Canadians to perform in the play, then the amount should be credited against the related expense.

If the grant has to be spent on costumes and sets made in Canada, then the amount should be netted against the related assets. The grant should be recognized when it becomes payable, not when it is collected.

In order to decide how this amount should be recognized, we must determine what the 50% content rule pertains to – against what purchase should it be offset? We must also determine the length of time that the rules apply in case the amount has to be repaid at a later date.

#### *Bank Loan*

We must determine how to record the payment to the bank that is based on the play's success. The 5% that is payable as well as an accrual based on expected future profits could be expensed. Alternatively, just the 5% amount could be expensed because the remaining balance that would have to be paid is uncertain and difficult to determine.

#### *Salaries and miscellaneous costs*

Given that these costs are incurred in the start-up of the operations, the amounts can be expensed in either the current year or future years. Arguments can be made for either treatment. There is no certainty of the play succeeding and so, to be conservative, the amount should be expensed in the current period. On the other hand, the amounts do relate to production in future years, and in order to match expenses with revenues, the amounts should be expensed in future periods.

#### *Costumes and sets*

The costumes and sets can be expensed either in Year 1 or in future periods. Prudence would dictate that the amount should be expensed immediately because there is no certainty the play will succeed. However, the costumes and sets do relate to production in future years. Capitalizing the amount and recording depreciation in future years will provide a better matching of revenues and expenses.

### *Insurance*

The insurance premiums that are currently being paid can be either capitalized or expensed. The term insurance has no future value or any impact on revenues, and it should be expensed in the period incurred. An argument for capitalizing the costs is that the cost was incurred to secure financing which will benefit future production. Given the investors' objective of maximizing their initial losses, and maximizing future years' income, the amount should be expensed in the current period.

### *Promoter's fees*

We must determine what amount, if any, should be accrued for the promoter's fees. At present, the payment is too uncertain; thus, the amount should be accounted for in the year that an amount becomes payable.

#### **(b)**

##### **(i) investor in Limited Partnership units**

The limited partnership units represent an equity interest in the business. In order to determine the appropriate accounting for the units, it is necessary to determine how the investment would be classified. The potential classifications are FVTPL, FVTOCI, significant influence, joint control, or control. In order to further determine the appropriate classification, it is necessary to determine the extent to which control or significant influence might exist over the strategic operating and financing policies of the partnership.

In a limited partnership, the general partner usually makes the key operating and financing decision; the other investors usually have very little say in the operating and financing policies of the entity. As such, the limited partners would not likely have control, joint control or significant influence. Since the units are not actively traded, determining the fair value will be difficult. The investor may prefer to report the investment as fair-value-through OCI so that profit is not affected by the subjective assessment of the fair value.

##### **(ii) investor in royalties**

The investments in royalties give the investors the right to participate in the operating profits of the plays. They would not enable the investor to have any influence or control over the operating and investing policies of the partnership and generally do not have any characteristics

of equity. On this basis, they would NOT be classified as held for trading, available for sale or significant influence, control, or joint control investments. The investment has the characteristics of an intangible asset. It is a right that enables participation in future profits. Further, the plays likely have a definite timeline over which they will be offered. Assuming that the amount paid for these royalties can reasonably be recovered, they would be capitalized as finite life intangible assets and amortized over the life of the play. They would also be analyzed for impairment on an annual basis.

(iii) investor in movie rights

The investments in movie rights give the investors the right to receive profits from the creation of motion pictures from the content of the plays. They would not enable the investor to have any influence or control over the operating and investing policies of the partnership and generally do not have any characteristics of equity. On this basis, they would NOT be classified as held for trading, available for sale or significant influence, control, or joint control investments. The investment has the characteristics of an intangible asset. It is a right that enables the holder to earn profit from the content of the plays at a future date. Further, the timeline over which the profits will be earned is not known since the movie must be produced and released before profit can be earned. On this basis the movie rights would generally be accounted for as an indefinite life intangible. It is important also to consider that the investment must be analyzed for impairment on an annual basis. This would be complicated by the difficulty in determining the extent and likelihood of potential future profits from the rights.

## **Case 2-6**

### **Memo**

To: Jules Bouchard  
From: CA  
Subject: LIL's Proposed Acquisition of MML

Attached are my comments regarding MML and its potential acquisition by LIL. Overall, I think that MML would be a risky investment for LIL, and I think that care must be exercised in undertaking it. However, given the right price and satisfactory terms, it could be worthwhile for LIL to invest.

### **Overview**

MML is a risky investment under the proposed terms of the agreement outlined in the information I received. Under these terms, LIL would acquire 46.67% immediately and the remainder over five years. As a result, the four cousins who currently own and manage MML would be the majority owners during the first year. The cousins could use this period to make deals that serve their own interests and not the interests of MML and LIL. If MML's current management undertook such activities, LIL would be locked into a deal to purchase the shares of a company with reduced value. This situation is especially of concern because there are questions, discussed below, about the integrity of MML's management. The current owners would also be in a position to control the accounting policies used in the financial statements, which are to be used to set the selling price of the remaining shares.

LIL could take steps to mitigate these problems. The purchase agreement could be revised so that LIL gets control of MML immediately. Covenants could be written into the agreement, to restrict bonuses to the existing owners and/or to require LIL's approval for certain types of transactions.

Another problem is that MML requires an infusion of cash to pay for the needed investment in equipment, renovation of the buildings, and purchase of a competitor. MML is at the limit of its bank line of credit so the bank is not a viable source of financing. However, if LIL decides to invest in MML, MML itself will receive the proceeds of the sale of the shares; thus, the investment by LIL will meet some or all of MML's cash needs. If the investment by LIL does not meet all the needs, then additional sources of cash will have to be found.

LIL should also consider what will happen to the business when the existing owners sell all their shares. Is the business dependent on the cousins' personal contacts for success, and if so will the cousins be able to compete with MML by setting up a new scrap business? If the answer is yes, a non-compete clause should be included in the agreement of purchase and sale. Alternatively, LIL might consider hiring some or all of the existing owners to manage the business.

Finally, LIL should be made aware that historical cost financial statements are of limited use for a purchase decision. While they may provide some benchmark information, future-oriented information and fair values of assets are more relevant. Many of the problems discussed below demonstrate the limitations of the historical cost statements.

## Bank loan

MML is heavily indebted. Its bank loan would typically be around \$13.49 million as it tends to

operate at its maximum line of credit. This amount is significant because MML's sales are about \$15.675 million and MML could be in serious difficulty if the bank called the loan. The bank currently requires MML's shareholders to give personal guarantees for the loans. If LIL becomes a shareholder, the bank could request guarantees from it, which would increase its risk. MML may already be over its bank loan if, as discussed below, inventory and/or accounts receivable are overstated. In these circumstances the bank may demand the difference from MML, which would create additional pressure for MML to raise cash. If LIL invests, however, some of its cash needs may be reduced because MML would receive the proceeds from the initial purchase of shares.

### Suspicious business practices

The auditors' suspicions that MML reduces the weight of scrap purchased before it calculates accounts payable suggest that MML's owners engage in unscrupulous business practices. The accounting implication of reducing the weight is to understate cost of goods sold. If MML were to pay the correct amount, the profit margin would be reduced and net income would be lower than is currently reported. In addition, MML's reputation could be damaged if such business practices came to light. If MML's suppliers discovered these practices, they could decide to sell their scrap elsewhere, which could have a disastrous effect on the performance of MML. These suppliers are crucial to the business since they provide the inputs. On the other hand, if the number of scrap dealers in the area is limited, or the business practices apparently used by MML are widespread, then the extent of the damage resulting from suppliers discovering these practices may be limited.

### Joint venture with GEL

The joint venture with GEL is 40% owned by MML and 60% owned by the spouses of the existing owners of MML. The close relationship poses some potential problems with regard to tax and financial-statement interpretation. Transactions between GEL and MML may be arranged to transfer funds to the spouses or to manipulate the financial statements of MML. If transfer pricing is not done at fair value, a tax liability may exist since the Income Tax Act requires that transactions between related parties take place at fair value. If MML pays above fair value for GEL's services, expenses for waste disposal are overstated and net income is understated. If MML pays GEL below fair value, then net income is overstated.

The existence of non-arm's length transactions makes the financial statements difficult to

interpret because the economic objectives of the owners will be achieved over the two entities rather than just MML. We need to determine the basis of transactions between MML and GEL so that we can make projections about the performance of MML if LIL purchases MML. We also need to find out whether there is a long-term contract between MML and GEL regarding the pricing of transactions between them since the terms will have an effect on the future performance of MML.

#### Adjustments on sales invoices

Fifteen percent of MML's sales invoices have to be adjusted. On average the adjustments are downward by 20%. The direction of the pricing errors suggests that management attempts to overstate the amount of metal that is shipped to customers rather than that the errors are random. This finding casts additional doubt on management's integrity. Because the invoices have to be adjusted, accounts receivable and sales are probably overstated. The maximum balance-sheet adjustment is  $\$171,000 (25M + 32M)/2 \times 0.20 \times 0.20 \times 0.15$ . The overall maximum income statement effect of the reductions is  $\$470,250$  (average sales =  $(1.5+4 \text{ turnover}) / 2 \times 5.7$  million of average accounts receivable =  $\$15.675$  million, so the total adjustment =  $\$15.675 \text{ million} \times 0.15 \times 0.2 = \$470,250$ ). Some portion of the  $\$470,250$  should be accrued at year end as sales returns and allowances because, without adjustment, accounts receivable and sales will both be overstated. This situation also raises concerns that there may be additional unrecorded adjustments to receivables that have not come to light. This amount is clearly material to LIL. If accounts receivable and sales are misstated, the purchase price for MML is affected and should be revised.

#### Inventory

With a value of about  $\$19$  million, inventory is the most important item on the balance sheet. Control over inventory is very weak, thus, the amount on the balance sheet cannot be relied on. Examples of the control weaknesses include perpetual records that are estimates of amounts rather than actuals, the absence of costing records for inventory pricing, lack of numerical sequence for weight tickets and the need for adjustments after inventory counts. Without reliable records, it is not possible to determine the quantity and quality of the inventory on hand and therefore the inventory's current value. The value is an important determinant of the price that LIL should pay for MML.



There are some questions about the practices of borrowing and lending inventory. Is the practice used for legitimate business purposes or to increase inventory levels at year end? Increasing year-end inventory levels would help MML keep the bank loan at a high level, which is important given its weak cash position. Also, it is unclear how the borrowed inventory is accounted for. Is it included in inventory and counted (perhaps requiring an adjustment between the records and the count)? Is it treated as a purchase and included in inventory? Given the poor record-keeping, the financial statements could be misstated as a result of these transactions.

Similarly, information is required about how MML accounts for the inventory purchased conditionally. If a significant quantity of inventory has been received on a conditional basis but not yet graded, its inclusion in inventory before it has been accepted would result in inventory being overvalued. Also, since the amount due to the vendor is not determined until the inventory is graded, year-end payables could be understated.

Overall, the information about inventory is highly suspect. Inventory represents about two-thirds of total assets. If it is materially misstated, the entire financial statements are materially misstated. If the inventory is materially misstated, the purchase price is affected because the price is based on the statements.

#### Other issues

The nature of the business suggests that MML may be liable for any environmental damage caused by storage of scrap and by the business activities of GEL (a waste disposal company). This possibility imposes an additional, unknown risk on LIL if it decides to buy MML.

MML's record-keeping system is weak, indicating a lack of controls. Weight tickets for sales are not numbered sequentially, so sales could be understated, in which case reported net income could be understated. If so, the understatement could lead to a tax liability for unreported income.

The terms under which MML does business with the Japanese trading company should be investigated. A substantial quantity of MML's metal purchases is made from the Japanese company, and we should confirm that the source will continue to supply MML if it is purchased by LIL. Because of the attractive terms that the Japanese company offers MML (no payments for five to six months), we should find out whether there is a special relationship (perhaps non-arm's length) between the existing owners of MML and the Japanese company.

The existence (or non-existence) of unrecorded liabilities should be investigated. For example, if MML reduces the recorded weights of scrap it has purchased or if purchase tickets

are missing (because the tickets are not numbered), accounts payable may be understated.

### Conclusion on purchase decision

I conclude from my analysis that, MML's financial statements are likely materially misstated because of the problems with inventory and cost of goods sold. As a result, LIL may be misled if it relies on the financial statements for its assessment of MML. The material misstatement may affect the bank's restrictive covenant and the amounts paid to the managers in bonuses, and may render the statements useless to LIL for its purchase decision.

There are a number of problems with MML that make the decision to purchase it very risky. Certainly LIL's management should have concerns about the integrity of MML's managers as it appears that they are dishonest with their customers and suppliers. LIL might want to question whether it wants to be in business with the current owners. Many of the other problems identified earlier could be mitigated by altering the terms of the purchase and sale agreement to give control to LIL initially and/or to restrict the actions of the current owners. Given all the problems with MML, I do not think that it should be purchased by LIL. I would not dismiss completely the idea of purchasing MML, since at some price the acquisition would be attractive. However, I do advise LIL to proceed with extreme caution and to carefully consider the issues discussed in this memo.

### Accounting for Investment in MML

If LIL decides to proceed with its investment in MML, then it needs to determine how to report its interest in MML. It really depends on whether it has control, significant influence or neither. This depends on the terms of the purchase and sale agreement and how closely knit are the four other shareholders. A 46.67% interest would normally imply significant influence because LIL would become the biggest individual shareholder. Although it does not have a majority interest, it only requires support from one of the other shareholders to control the majority of the votes. It likely will get some representation on the board of directors due to its large holding. It could even obtain control by insisting on control through the purchase and sale agreement. At the other extreme, it could have neither control nor significant influence if the cousins work together as a unit and do not agree to representation on the board or any loss of control through the purchase and sale agreement.

If LIL has control, it would report its interest in MML by consolidating MML in its

consolidated financial statements. If it has significant influence, it would use the equity method to report its investment. If it has neither control nor significant influence, it would report its investment at fair value and choose to report the unrealized gains in net income or OCI.

## SOLUTIONS TO PROBLEMS

### Problem 2-1

#### Part A

##### Investment Account

January 1, Year 5		\$650,000
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Plus:

Carter's Year 5 profit	\$95,000	
Anderson's percentage ownership	20%	19,000

Less:

Dividends	\$60,000	
	20%	<u>(12,000)</u>

December 31, Year 5		657,000
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Plus:

Carter's Year 6 profit	\$105,000	
Anderson's percentage ownership	20%	21,000

Less:

Dividends	\$60,000	
	20%	<u>(12,000)</u>

December 31, Year 6		<u>\$666,000</u>
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#### Part B

(a) Investment in Carter		34,000
Unrealized gain on FVTPL investment		34,000
(20,000 shares x 35 – 666,000)		

(b) Cash (50,000 x 20%)	10,000	
Dividend income		10,000

*Record dividend revenue for Anderson's share of dividends declared by Carter*

Cash (20,000 shares x 37)	740,000	
Investment in Carter		700,000
Gain on sale		40,000

*Sale of investment in Carter*

## Problem 2-2

Year 5

Investment in Robbin	275,000	
Cash		275,000

Cash (40,000 x 20%)	8,000	
Dividend income		8,000

Investment in Robbin (20,000 shares x 16 – 275,000)	45,000	
Unrealized gain on FVTPL investment		45,000

Year 6

Investment in Robbin (90,000 x 20%)	18,000	
Investment income		18,000

*Share of Robbin's income*

Cash (40,000 x 20%)	8,000	
Investment in Robbin		8,000

*Baskin's share of dividends declared by Robbin*

Cash (20,000 x 17)	340,000	
Investment in Robbin (275,000 + 45,000 + 18,000 - 8,000)		330,000
Gain on sale		10,000

*Sale of investment in Robbin*

## Problem 2-3

(a)

January 1, Year 5

Investment in Stergis	1,500,000	
Cash		1,500,000
To record purchase of 30% of Stergis.		

December 31, Year 5

Investment in Stergis	12,600	
Investment Income		12,600
To record 30% of Stergis's Year 5 net income.		
$30\% \times 42,000 = 12,600$		

Investment in Stergis	3,000	
OCI - Investment income		3,000
To record 30% of Stergis's Year 5 OCI		
$30\% \times 10,000 = 3,000$		

Cash	18,000	
Investment in Stergis		18,000
To record 30% of Stergis's Year 5 dividends.		
$30\% \times 60,000 = 18,000$		

December 31, Year 6

Investment in Stergis	36,000	
Investment income		36,000
To record 30% of Stergis's Year 6 net income.		
$30\% \times 120,000 = 36,000$		

Investment in Stergis	7,500	
OCI - Investment income		7,500

To record 30% of Stergis's Year 6 OCI

$$30\% \times 25,000 = 7,500$$

Cash	18,000	
Investment in Stergis		18,000

To record 30% of Stergis's Year 6 dividends.

$$30\% \times 60,000 = 18,000$$

Blake should disclose the following with respect to its investment in Stergis:

- The name and principal place of business of the associate
- The method used to report the investment in the associate
- Investment income from Blake's investment in Stergis should be reported separately on the income statement and the carrying amount of this investment should be reported separately on the balance sheet
- The nature of its relationship with Stergis and its percentage ownership
- summarized financial information for Stergis, including the aggregated amounts of assets, liabilities, revenues, and net income
- nature and extent of any significant restrictions on the ability of Stergis to transfer funds to Blake in the form of cash dividends, or to repay loans or advances made by the entity; and
- contingent liabilities incurred relating to its interests in associates

(b)

January 1, Year 5

Investment in Stergis	1,500,000	
Cash		1,500,000

*To record purchase of 30% of Stergis.*

December 31, Year 5

Cash	18,000*	
Dividend revenue**		18,000

To record 30% of Stergis's Year 5 dividends\*

$$*30\% \times 60,000 = 18,000$$

December 31, Year 6

Cash	18,000
Dividend income	18,000
To record 30% of Stergis's Year 6 dividends.	

\*\* Note that under the guidance of the Section 3051, when applying the cost method, all dividends are recorded as revenue when received or receivable regardless of whether they represent liquidating dividends.

(c)

Blake would prefer to use the equity method. Since Stergis' comprehensive income for Years 5 and 6 is greater than dividends paid for Year 5 and 6, Blake's comprehensive income would be higher under the equity method. In turn, shareholders' equity will be higher and total debt will remain the same. Therefore, the debt-to-equity ratio will be lowest under the equity method.

## Problem 2-4

Part a Equity method

(i)	Investment in Saltspring	234,000
	Cash	234,000
	<i>To record 30% investment in Saltspring</i>	
	Cash (30% x 100,000)	30,000
	Investment in Saltspring	30,000
	<i>Dividends received</i>	
	Investment in Saltspring (30% x 258,000)	77,400
	Investment loss – discontinued operations (30% x 30,000)	9,000
	Investment income (30% x 288,000 / .6)	86,400
	<i>To record 30% of Saltspring's profit and discontinued operations</i>	
(ii)	Investment cost Jan. 1, Year 6	\$234,000
	Dividends received	(30,000)
	Share of income	<u>77,400</u>
	Investment account Dec. 31, Year 6	<u>\$281,400</u>

(iii)

Pender Corp  
Statement of Operations  
Year ended December 31, Year 6

Sales	\$900,000
Investment income	<u>86,400</u>
	986,400
Operating expenses	<u>(400,000)</u>
Income before income tax	586,400
Income tax expense	<u>(200,000)</u>
Net income before discontinued operations	386,400
Disc. Operations - Investment loss	<u>(9,000)</u>
Profit	<u>\$377,400</u>

Part b Cost method

(i)	Investment in Saltspring	234,000	
	Cash		234,000
	<i>To record 30% investment in Saltspring</i>		
	Cash	30,000	
	Dividend income		30,000
	<i>Dividends received</i>		

(ii) Investment account balance December 31, Year 6 234,000

(iii) Pender Corp  
Statement of Operations  
Year ended December 31, Year 6

Sales	\$900,000
Investment income	<u>30,000</u>
	930,000
Operating expenses	<u>(600,000)</u>



Profit

\$330,000

Part b

Pender would want to use the equity method if its bias were to show the highest return on investment since the equity method takes into account the full increase in value of the investee (i.e. recognizes proportion of income earned for the year) whereas the cost method only recognizes income to the extent of dividends received.

Cost method return on investment =  $30,000 / 234,000 = 12.8\%$

Equity method return on investment =  $(86,400 - 9,000) / 234,000 = 33.1\%$

### Problem 2-5

(a)

(i)	20,000 shares x 20		\$400,000
(ii)	Original cost	\$340,000	
	share of income (20% x (200,000 + 225,000))	85,000	
	less: share of dividends (20% x (150,000 + 160,000))	<u>(62,000)</u>	
		<u>\$363,000</u>	
(iii)	20,000 shares x 20		\$400,000

(b)

(i)	<b>Year 4</b>	<b>Year 5</b>	<b>Year 6</b>	<b>Total</b>
Dividend income (1)	\$30,000	\$32,000	\$35,000	\$97,000
Unrealized gains (2)	20,000	40,000	0	60,000
Gain on sale (2)	<u>0</u>	<u>0</u>	<u>60,000</u>	<u>60,000</u>
Net income	<u>\$50,000</u>	<u>\$72,000</u>	<u>\$95,000</u>	<u>\$217,000</u>
Total OCI	<u><u>0</u></u>	<u><u>0</u></u>	<u><u>0</u></u>	<u><u>0</u></u>

(ii)	<b>Year 4</b>	<b>Year 5</b>	<b>Year 6</b>	<b>Total</b>
Equity income (3)	\$40,000	\$45,000	\$48,000	\$133,000
Gain on sale (4)	<u>0</u>	<u>0</u>	<u>84,000</u>	<u>84,000</u>
Net income	<u>\$40,000</u>	<u>\$45,000</u>	<u>\$132,000</u>	<u>\$217,000</u>
Total OCI (4)	<u><u>0</u></u>	<u><u>0</u></u>	<u><u>0</u></u>	<u><u>0</u></u>

(iii)	Year 4	Year 5	Year 6	Total
Dividend income (1)	\$30,000	\$32,000	\$35,000	\$97,000
Gain on sale (5)	<u>0</u>	<u>0</u>	<u>0</u>	<u>60,000</u>
Net income	<u>\$30,000</u>	<u>\$32,000</u>	<u>\$35,000</u>	<u>\$157,000</u>
Other comprehensive income				
Unrealized gain (2)	<u>\$20,000</u>	<u>\$40,000</u>	<u>60,000</u>	<u>\$60,000</u>
Comprehensive income	\$50,000	\$72,000	\$95,000	\$217,000

**Notes:**

1. 20% x dividends paid during year
2. 20,000 shares x change in share price during year
3. 20% x net income for the year
4.  $460,000 - [340,000 + (40,000 + 45,000 + 48,000) - (30,000 + 32,000 + 35,000)] = 84,000$
5.  $20,000 \text{ shares} \times 23 - 20,000 \text{ shares} \times 20 = 60,000$

(c) The total comprehensive income over the three-year period in total is the same for all three situations. However, the split between net income and OCI is not the same in total for the three situations. This is not unusual in accounting. Although the different methods report different income each year, in the long run, the total income is the same under all methods. The total income is usually equal to the difference between cash received and cash paid over the life of the investment which is \$217,000 calculated as follows:

**Cash received**

Proceeds from sale	\$460,000
Dividends received (30,000 + 32,000 + 35,000)	<u>97,000</u>
Total proceeds	557,000

**Cash disbursed**

Cost of investment	<u>340,000</u>
Change in cash	<u>\$217,000</u>

## Problem 2-6

The following slides are presented as a sample answer for this question.

**Slide #1**

<b>New Carrying amounts</b>		
<i>Type</i>	<i>Measurement</i>	<i>Unrealized Gains</i>
FVTPL	Fair value	Net income
FVTOCI	Fair value	Other comprehensive income
- Either method can be used		

#### Slide #2

<b>Rationale for Fair Value</b>
Fair value is more relevant to most users:
<ul style="list-style-type: none"> <li>• Provides clearer picture of financial situation</li> <li>• Improves accountability to users</li> <li>• Reduces opportunities to manage earnings</li> </ul>

#### Slide #3

<b>Determining Classification of Investment</b>
<ul style="list-style-type: none"> <li>• Management chooses the classification based on: <ul style="list-style-type: none"> <li>- whether the investment is held for short-term trading or not</li> <li>- how the manager and entity should be evaluated</li> </ul> </li> </ul>

#### Slide #4

<b>Rationale for Reporting Unrealized Gains</b>
<ul style="list-style-type: none"> <li>• Report in net income <ul style="list-style-type: none"> <li>- When trading in investments is part of short-term operating strategy of firm</li> <li>- Management should be evaluated on performance</li> </ul> </li> <li>• Report in other comprehensive income <ul style="list-style-type: none"> <li>- To avoid short-term fluctuations in net income</li> <li>- Management should not be evaluated on investments, which are not actively traded</li> </ul> </li> </ul>

#### Slide #5

<b>Other Investments</b>	
<b>Type</b>	<b>Reporting Method</b>
Investment in associate	Equity method
Investment in subsidiary	Consolidation

The cost method is used for internal purposes. Investments should not be reported at cost for external reporting purposes.

## Problem 2-7

The following slides are presented as a sample answer for this question.

### Slide #1

<b>Strategic Investments</b>	
<b>Type</b>	<b>Options</b>
Investment in subsidiary	Consolidation, cost method or equity method
Held for significant influence	Equity method or cost method
* Must use same method for all investments in the class	
* When shares traded in active market	
- must report at fair value if planned to use cost method	
- unrealized gains reported in net income	

### Slide #2

<b>Rationale for Flexibility</b>
Cost – benefit considerations
• users may not require or understand the more complex reporting
• cost involved in generating the information may be excessive
• when shares are actively traded, cost of obtaining fair value information is minimal

### Slide #3

<b>Rationale for Fair Value Information</b>
Fair value is more relevant to most users:
• Provides clearer picture of financial situation
• Improves accountability to users
• Reduces opportunities to manage earnings

### Slide #4

### Not-strategic Investments

- Report at cost when shares not actively traded
- Report at fair value when shares are actively traded
  - unrealized gains reported in net income

Slide #5

### Rationale for Reporting Unrealized Gains

- Keep it simple
- Same as rationale above for fair value information
- OCI does not exist under ASPE

## SOLUTIONS TO WEB-BASED PROBLEMS

### Web Problem 2-1

- (a) Investments in associates and joint ventures as a percentage of total assets 2011 =  $221 / 18,362 = 1.2\%$ . Investments in associates and joint ventures is found in note 14 to the financial statements and total assets is found on the consolidated statement of financial position.
- (b) Rate of return on investments in associates and joint ventures =  $7 / 221 = 3.2\%$ . This is calculated by taking the company's share of results in associates and joint ventures (found on consolidated statement of income) divided by the investments in associates and joint ventures (found in note 14 to the financial statements).
- (c) (i) current ratio =  $1,912 / 2,549 = .75:1$ . If the company had used the cost method, it would not have had an impact on the current ratio as neither current assets nor current liabilities would be affected.
- (ii) debt-to-equity ratio =  $(14,790 / 3,572 = 4.14:1$ . If the company had used the cost method, total equity would decrease given that the cumulative addition to net income would only be 75% of what it would be under the equity method given that dividends are only 75% of the net income earned by the associates and joint ventures. Debt would be unchanged, and therefore the debt-to-equity ratio would increase if the cost method were used.

(iii) return on equity =  $1,563 / (3,572 + 3,760)/2 = 42.6\%$ . If the company had used the cost method, both the numerator and denominator of this equation would decrease by the excess of net income over dividends of the associates and joint ventures (the company's share of them). The equity number would decrease by more as it includes the cumulative amount of income recognized to date. Thus, the return on equity would decrease if the cost method were used.

- (d) In 2011, earned income from available-for-sale investments was \$174 before tax (\$152 after tax) as per the consolidated statements of comprehensive income.
- (e) Unrealized gains on available-for-sale investments represents  $433 / 3,572 = 12.1\%$  of total equity as per the statements of changes in shareholders' equity.
- (f) If available-for-sale investments had been accounted for as FVTPL since the beginning, there would be no change to the investment account balances as, in both cases, investments are adjusted to fair value at each reporting date. Certain equity accounts would change but the total amount of shareholders' equity would not change. The cumulative unrealized gains for the available-for-sale investments are reported in a reserve account within shareholders' equity whereas the cumulative unrealized gains are included in retained earnings for the FVTPL investments.

## Web Problem 2-2

- (a) Investments accounted for using the equity method as a percentage of total assets 2011 =  $1,536 / 29,374 = 5.2\%$ . This information is found on consolidated balance sheets and note 16 to the financial statements.
- (b) Rate of return on investments in associates =  $-98 / 1,536 = -6.4\%$  as per the consolidated statements of income and consolidated balance sheets.
- (c) (i) current ratio =  $2,950 / 771 = 3.83:1$ . If the company had used the cost method, it would not have had an impact on the current ratio as neither current assets nor current liabilities would be affected.
- (ii) debt-to-equity ratio =  $7,889 / 21,485 = 0.37:1$ . If the company had used the cost method, total equity would increase compared to that resulting from use of the equity method given that there would be no cumulative reduction to net income (and therefore equity) as a result of the losses generated by the associates. Also, note that since the

earnings from associates are negative, no dividends would be paid. If the associates' accumulated income exceeded accumulated dividends since the date of acquisition, total equity would decrease under the cost method. Debt would be unchanged, and therefore the debt-to-equity ratio would increase if the cost method were used.

(iii) return on equity =  $1,881 / (19,766 + 21,485)/2 = 9.1\%$ . If the company had used the cost method, the numerator for 2011 would increase because there would be no loss from the investments in associates. The denominator of this equation would likely decrease by the excess of cumulative net income over cumulative dividends of the associates (the company's share of them). Thus, the return on equity would likely increase for 2011. If the associates are usually generating a positive net income, then the return on investment would usually decrease if the cost method were used.

- (d) In 2011, the company incurred an after-tax loss of \$417 from available-for-sale investments as per note 26b.
- (e) Unrealized gains on available-for-sale investments represents  $-43 / 21,485 = -0.2\%$  of total equity as per the statements of changes in equity.
- (f) If available-for-sale investments had been accounted for as FVTPL since the beginning, there would be no change to the investment account balances as, in both cases, investments are adjusted to fair value at each reporting date. Certain equity accounts would change but the total amount of shareholders' equity would not change. The cumulative unrealized gains for the available-for-sale investments are reported in a reserve account within shareholders' equity whereas the cumulative unrealized gains are included in retained earnings for the FVTPL investments.