

# **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, adapted from a past UFE, involves a company buying back the shares from a shareholder based on the shareholder's equity adjusted for certain special provision. The student must analyze various accounting issues including the valuation of an investment of 5% in another company.

#### **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** (20 min)

This problem compares the investment account balance, the net income and OCI for one reporting period for an 8% investment if it was classified as FVTPL or FVTOCI. Then, the student determines which method shows the most favourable current ratio, debt-to-equity ratio and return on shareholders' equity.

**Problem 2-7** (25 min)

This problem calculates the balance in the investment account and determines the total income to be reported for an investment in an associate over a four-year period. .

**Problem 2-8** (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 2-9** (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.

## SOLUTIONS TO REVIEW QUESTIONS

1. Over the past 12 years, there has been a move from using historical cost to using fair values for reporting investments in equity securities including investments in private companies.
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. 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.
4. 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.
5. 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.

6. 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.
7. 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.
8. 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 to make payments on behalf of Villa.
  - a) Assume that Ashton has constructive obligations on behalf of Villa because it has 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 to the share of losses not recognized (\$80,000 in this case).
9. 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.

10. 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.
11. 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.
12. 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 30,000 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	\$1,480,000 <sup>1</sup>	\$1,416,000 <sup>2</sup>
On comprehensive income statement		
In net income		
Dividend income	\$192,000 <sup>3</sup>	
Equity income		\$208,000 <sup>4</sup>
Unrealized gains	<u>80,000<sup>5</sup></u>	<u>          </u>
Total	<u>\$272,000</u>	<u>\$208,000</u>

**Notes:**

- 1) 40,000 shares x 37 = 1,480,000
- 2) 10,000 shares x 35 + 1,050,000 + equity income for Year 5 of 208,000<sup>4</sup> – dividends received in Year 5 of 192,000<sup>3</sup> = 1,416,000
- 3) 40% x 480,000 = 192,000
- 4) 40% x 520,000 = 208,000

5) 40,000 shares x (37 – 35) = 80,000	
Cost of investment (10,000 shares x 35 + 1,050,000)	\$1,400,000
Hil's share of net carrying amount of Ton's shareholders' equity (40% x [2,600,000+500,000-480,000])	<u>1,048,000</u>
Land	\$ <u>352,000</u>

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**

Memo to: Mr. Neely

From: CPA

Re: Bruin Car Parts Inc. (BCP)

BCP's two remaining shareholders must address the fact that BCP's third shareholder is exiting the business. Having the right to demand a buyout means there is a need to perform a share valuation in accordance with the Signed Shareholders' Agreement (SSA). You have mentioned to me that our valuation must take into consideration any accounting adjustments necessary to comply with the SSA requirements, so I addressed the accounting issues I identified in the information presented and calculated a revised shareholders' equity. As well, I have computed the current taxes payable as per the terms of the buyout valuation provisions of the SSA.

First of all, you asked me to look into the accounting adjustments that may be required to BCP's draft financial statements, since the statements are used as part of the buyout of shares, pursuant to the provisions of the SSA. The SSA requires financial statements that are prepared in accordance with Canadian generally accepted accounting principles. These principles have evolved over time. Currently BCP prepares its financial statements in accordance with ASPE, and we will consider those principles in our valuation.

## Accounts Receivable

We need to determine if the \$500,000 account receivable, booked from a client that Jean Perron brought in, is actually collectible. From what Richard Bergeron says, the amount has been outstanding for several months. There is, therefore, uncertainty about its collection. Perron is the only one who has had contact with this client, and there are questions surrounding not just the ability to collect, but even some basic knowledge of the client itself. We should ensure that the \$100,000 collected and brought in by Perron clears the bank in order to assess the amount to write down, if any, or before setting up an adequate allowance for doubtful accounts. With Perron leaving and the fact that there is no working phone number for the client, it is unlikely that the balance remaining will be collected (unless Perron is asked and able to track the company down and collect it himself on behalf of BCP).

If there is an indication that the receivable may be impaired, Section 3856 *Financial Instrument* states that the receivable should be written down to the highest of the following:

*(a) the present value of the cash flows expected to be generated by holding the asset, or group of assets, discounted using a current market rate of interest appropriate to the asset, or group of assets;*

*(b) the amount that could be realized by selling the asset, or group of assets, at the balance sheet date; and*

*(c) the amount the entity expects to realize by exercising its right to any collateral held to secure repayment of the asset, or group of assets, net of all costs necessary to exercise those rights. The carrying amount of the asset, or group of assets, shall be reduced directly or through the use of an allowance account. The amount of the reduction shall be recognized as an impairment loss in net income.*

Bergeron has strong doubts that the remaining \$400,000 receivable will ever be collected, which is supported by the amount of time it has been outstanding and the knowledge (or lack thereof) of the client. BCP has the option to either write off the receivable to bad debts or set up an allowance for doubtful accounts if BCP believes it might collect some of the balance. Given the facts presented, there is a strong argument that this receivable has nil realizable value and should be written down accordingly at year-end.

## Inventory

### Obsolete Inventory

It appears that there are valuation concerns regarding some inventory. There is about \$200,000 of parts inventory on the books that is no longer used in the market that BCP sells to, with the possible exception of the client to whom Perron claims he can sell the inventory at cost. Given the fact that Perron is about to cut ties with BCP and is the only one who has dealt with this client, this position is doubtful. Further to this, since some of BCP's other customers have stated they believe they are no longer allowed to purchase these parts due to new legislation, there is strong evidence that the parts have no value at all.

Since these parts are now obsolete, we should group them together by nature as per Section 3031.28 and write them down to their net realizable value as per Section 3031.27. Since the value of the inventory appears to be nil the entire \$200,000 should be written off. This will be included as an expense in the income statement in the period in which the write-down occurs, as per Section 3031.33, which would be in the November 30, Year 12 financial statements.

#### Storage Costs

The \$15,000 paid for storage costs as a result of a special order should not have been capitalized to inventory and should be included in cost of goods sold. These costs were not necessary to get the inventory ready for sale.

#### **Financial Instruments — Investment in Shares**

There are doubts about the long-term prospects of the company BCP has invested in due to some litigation. BCP is considering selling its investment in the very near future. Its value has dropped by two-thirds since its acquisition. This investment is considered to be a financial asset as per Section 3856 *Financial Instruments*. When there is some indication that the value has been impaired, we must consider Section 3856.16 and .17 as referred to above.

Bergeron is fairly certain that this company will not be able to continue for long; thus, there is strong evidence of impairment. BCP has an offer of \$30,000 for the investment (we aren't sure when this offer was received), and it is likely the shares will be sold next week. Therefore, under 3856.17(b), we will write the investment down to this value as at year-end and record the reduction as an impairment loss on the income statement.

#### **Research and Development Costs**

BCP has done some R&D work this year for the first time in several years. As a result, it has acquired new designs and made upgrades to its equipment. It is appropriate that these R&D costs be capitalized because BCP expects to obtain future economic benefits. Since BCP is

already selling the products related to the R&D expensed, is already receiving some benefits from the R&D efforts. (

#### Cost of Acquiring Design and Legal Fees

Since the costs of acquiring the design and the legal fees incurred to patent the design meet the criteria for intangible assets, they should be capitalized as such. Thus, the costs to acquire the design from an engineering firm (\$125,000) and the legal costs to have it patented (\$10,000) should be recorded on the balance sheet as an intangible asset.

Even though the patent provides legal protection for 17 years, Bergeron has mentioned that BCP usually has to do R&D work every five years, on average, to keep up with the market before a product becomes obsolete. It would seem logical, then, that any intangible asset should be amortized over this five-year period. There may be an argument that this could be done over 17 years, but this may be optimistic given what BCP has had to do in the past. Therefore, there appears to be a reliable way to measure the expense associated with this asset, and in accordance with Section 3064.61(e), we would amortize it over a period of five years.

#### Costs for Modifying and Upgrading Equipment

The modifications and upgrade to the equipment were done in order to integrate the new design, which has already resulted in additional sales. BCP must decide whether the upgrade is a betterment or a maintenance expense.

Section 3061.14 provides that *“the cost incurred to enhance the service potential of an item of property, plant and equipment is a betterment,”* indicating that the service potential of a particular asset is enhanced when there is an increase in the previously assessed physical output or service capacity. The modifications to the equipment have definitely increased its service capacity, so the \$40,000 costs incurred should be added to the cost of the equipment.

The asset should then be amortized in a rational and systematic manner appropriate to its nature.

#### Market Research Costs

Section 3064.37 indicates that *“No intangible asset arising from research (or from the research phase of an internal project) shall be recognized. Expenditure on research (or on the research phase of an internal project) shall be recognized as an expense when it is incurred.”* Section 3064.39 provides examples of *“research activities”* which include *“the search for, evaluation, and final selection of applications of research findings or other knowledge.”*

As such, the costs incurred to ensure that the design will be accepted by the market and generate future sales should be expensed to salaries and selling and administration costs, respectively.

Therefore, the following adjustments should be made:

R&D expenses per draft statements	\$ 200,000
Less: Reclassify to property, plant and equipment	(40,000)
Reclassify to market research costs	<u>(25,000)</u>
Net deferred development costs (intangible asset)	\$ <u>135,000</u>

One year of amortization, or \$27,000, should be taken on this intangible since BCP is now about one year into its five-year cycle.

Therefore, the carrying amount of the intangible asset at year-end will be \$108,000.

As well, the net book value of the property, plant and equipment will be increased by a net amount of

\$20,800, made up of the following:

Costs of modifications	\$ 40,000
Less: Investment tax credit	(14,000)
Amortization (assumed 5 years of useful life)	<u>(5,200)</u>
Net adjustment to PP&E	\$ <u>20,800</u>

#### **Investment Tax Credits Related to R&D**

BCP expects to file a scientific research and experimental development (SR&ED) claim for its eligible R&D expenditures. We know that it expects to earn an investment tax credit (ITC) at the rate of 35% on its eligible expenditures. The costs incurred to improve the manufacturing equipment should qualify as eligible expenditures. At \$40,000, this results in an ITC of \$14,000.

The \$14,000 ITC should be netted against the PP&E recorded on the balance sheet and accrued as an ITC receivable. There would be no impact on net income or shareholders' equity.

#### **Restatement of Key Financial Statement Elements**

After the above factors have been taken into account, net income and shareholders' equity will be adjusted as follows:

	Income before Shareholders'	
	Income tax	Equity
Unadjusted amount per draft financial statements	\$696,000	\$3,330,000
Adjustments:		
1. Increase to bad debt expense	(400,000)	(400,000)
2. Inventory write-off through COGS	(215,000)	(215,000)
3. Marketing costs write-off	(25,000)	(25,000)

4. Amortization of capitalized development costs	(27,000)	(27,000)
5. Investment written down to fair value	(60,000)	(60,000)
6. Depreciation expense related to capitalized R&D equipment (40,000 – 14,000) / 5	<u>(5,200)</u>	<u>(5,200)</u>
Adjusted amounts	<u>\$(36,200)</u>	<u>\$2,597,800</u>

### Taxes Payable at End of Year 12

In order to calculate income tax payable or receivable at the end of Year 12, I calculated taxable income for Year 12 as follows:

Revised income (loss) before taxes	\$ (36,200)
Adjust for:	
Non-deductible penalties and interest	1,500
Depreciation expense (30,000 + 5,200)	35,200
Amortization of development costs	27,000
Impairment loss on investment	60,000
CCA	<u>(201,268)</u>
Taxable income (loss)	<u>\$(115,268)</u>

Given the loss, there is no current taxes payable for Year 12. However, BCP will be able to carry forward this loss to save income tax in future years.

### Determining Buyout Value

To calculate the buyout value, we must first start with the revised shareholders' equity. Then, we back out the carrying amounts of the capital assets and investment, and adjust for the fair market values of these assets. It is important to note that the financial statements have been adjusted for some of Perron's questionable sales and inventory transactions. The value of the shares is based on the adjusted financial statements, which are assumed to be a true representation of the results. However, a question arises as to whether other transactions have been manipulated by Perron to achieve the "better" results. We also wonder if some of the business expenses incurred are legitimate. This may be difficult to prove, so, for now, we have left these expenses in the business. However, should more information come to light about Perron's activities being less than legitimate, then an adjustment to the financial statements, and to the valuation, may be required. In our opinion, it would be wise to consult with legal

counsel to see if an adjustment clause can be built into the buyout arrangements for any items not yet identified, that end up being uncollectible, or that affect the value assigned to the shares.

BCP will have to pay Perron about \$136,000 (ignoring any taxes) per year for the next 10 years as calculated below. This will end up adding to the debt that BCP has already started to accumulate. BCP may have trouble financing this in the long term if it continues to have losses, as it has had. However, if it can collect some of its receivables and continue to generate sales and tax refunds through its R&D work, it should be able to get by. We will need to discuss the matter with Chara and Bergeron to see what options there are.

**BCP**  
**DRAFT VALUATION**  
**As at November 30, 2012**

Shareholders' equity per revised draft statements	2,597,800	
Adjust for:		
Fair value of capital assets	2,385,000	
Carrying amount of capital assets (1,150 + 40 – 14 – 5.2)	(1,200,800)	
Fair value of investment	30,000	
Carrying amount of investment (90 - 60)	(30,000)	
Tax value of losses carried forward (Note 1)	<u>42,632</u>	
Value of BCP common shares	<u>3,854,632</u>	
Perron's share (one-third)	1,284,877	
Deduct: 10% discount per clause 3 (e)	(128,488)	
Add: Shareholder loan	<u>200,000</u>	
Net owing to Perron	<u>1,356,389</u>	
Amount to pay per year (spread over 10 yrs.)		135,639

Note 1: Apply tax rate to total of losses carried forward per tax information \$240,000 and current year's tax loss:  $(\$240,000 + \$115,268) \times 12\% = \$42,632$ .

**Other Matters**

Some of Perron's actions that occurred prior to triggering the SSA buyout appear to have resulted in an inflated balance sheet, which would have increased the amount being paid out to him if not adjusted for.

According to Bergeron, only Perron had access to some clients, and there seems to be some question as to whether these clients exist. For instance, Perron made a \$500,000 sale to a client this year. It is a brand new client, and \$500,000 is a significant amount of sales for this company. As mentioned earlier, it is even more questionable now that Perron has suddenly come up with a \$100,000 cheque from that particular client. With such a significant number, there should be some basic checks and balances to ensure others at BCP have contact with this client. Perhaps a policy should be put in place requiring that more than one shareholder meets with all major new clients, for both control purposes and business development reasons. Also, credit checks should be performed on new clients so that this kind of thing does not happen again.

Perron also seems to have been up to some other questionable activities this year. For instance, he was adamant that the \$200,000 of obsolete inventory could be sold. The higher inventory balance inflates the assets on the balance sheet.

We should consider legal options. The behaviour exhibited by Perron has been at times odd, especially his defense of the new client with the warehouse address in Saskatoon. It may be possible that this client does not exist at all, and that the merchandise has been misappropriated. Legal counsel should be contacted to act further on this situation, unless Perron commits to collecting the funds in short order or making some sort of allowance in the valuation of the shares.

## **SSA**

It sounds like the SSA was written up and then never referred to again. There appear to be some weaknesses in the current SSA. I strongly recommend that a new SSA be drawn up to avoid a forced buyout from happening again with a new partner. Even though any redemption would be subject to the relevant solvency test applicable under the *Canada Business Corporations Act*, this puts some serious cash strains on BCP. You could continue to use the same SSA with just the two remaining partners, but we do not recommend doing so. We have noted some weaknesses in the current agreement that should be rectified.

You are going to have a hard time finding the cash needed to buy out Perron. This situation could have been avoided. Any clauses allowing for one shareholder to force the company to buy them out can put the entire company at risk of failure. They should either be removed completely or modified so that the company has more control, or at least so that the time to

repay can be adjusted based on the total amount of the redemption of the departing shareholder. As an example, if the amount exceeded \$1 million, the shares would be redeemed over 15 to 20 years, or based on a percentage of the earnings. A potential alternative option is to keep such a clause in, but to have it subject to unanimous approval by shareholders. Another possibility is that, if a shareholder needed to get out, a discount would be applied to the overall value so that the payout would be less, allowing for more capital to be retained in the company. This would reduce the attractiveness of the clause, while at the same time allowing for a shareholder to leave if necessary.

Another option to consider is a long-term buyout, which would reduce the annual payment amount by spreading it out over more years. A new agreement could also call for more notice to be given so that appropriate steps could be taken to arrange financing and audit the statements. Having more notice would allow for more time to make a proper decision, since hasty decisions can result in errors applied or other oversights. This type of clause should be added to the SSA for the future. Once a new agreement is drafted, all shareholders should be made aware of it and told where it is located.

Because the remaining shareholders of BCP anticipate cash-flow issues as a result of the buyout, they should consider negotiating immediately with Perron to try to avoid legal disputes.

With respect to the risk that Perron has tried to influence the financial results by inflating sales and asset values, this type of situation may be avoided by requiring an audit of the financial results as part of the SSA, as well as requiring the results to be subject to an “adjustment clause” if there is evidence of manipulation.

## **Case 2-4**

Memo to: Partner

From: CPA

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**

### **Memo**

To: Jules Bouchard  
From: CPA  
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
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
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><u>\$666,000</u></u>

### 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 and paid by Carter*

Cash (20,000 shares x 37)	740,000
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Investment in Carter	700,000
Gain on sale	40,000
<i>Sale of investment in Carter</i>	

## Problem 2-2

Year 5

Investment in Robbin	275,000
Cash	275,000
Cash (40,000 x 20%)	8,000
Dividend income	8,000
<i>Record dividend revenue declared and paid for Baskins Investment</i>	

Investment in Robbin (20,000 shares x 16 – 275,000)	45,000
Unrealized gain on FVTPL investment	45,000
<i>Record the revaluation of Investment</i>	

Year 6

Investment in Robbin (90,000 x 20%)	18,000
Equity method income	18,000
<i>Share of Robbin's income</i>	

Cash (40,000 x 20%)	8,000
Investment in Robbin	8,000
<i>Baskin's share of dividends declared by Robbin</i>	

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
<i>Sale of investment in Robbin</i>	

## Problem 2-3

(a)

January 1, Year 5

Investment in Stergis	1,850,000	
Cash		1, 850,000
To record purchase of 25% of Stergis.		

December 31, Year 5

Investment in Stergis	12,950	
Equity method income		12,950
To record 25% of Stergis's Year 5 net income.		
25% x \$51,800 = \$12,950		

Investment in Stergis	2,850	
OCI - Equity method income		2,850
To record 25% of Stergis's Year 5 OCI		
25% x \$11,400 = \$2,850		

Cash	18,500	
Investment in Stergis		18,500
To record 25% of Stergis's Year 5 dividends.		
25% x \$74,000 = \$18,500		

December 31, Year 6

Investment in Stergis	37,000	
Equity method income		37,000
To record 25% of Stergis's Year 6 net income.		
25% x \$148,000 = \$37,000		

Investment in Stergis	7,400	
OCI - Equity method income		7,400
To record 25% of Stergis's Year 6 OCI		
25% x \$29,600 = \$7,400		

Cash	18,500	
Investment in Stergis		18, 500
To record 25% of Stergis's Year 6 dividends.		
25% x \$74,000 = \$18,500		

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
- Equity method 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	1,850,000	
Cash		1, 850,000
To record purchase of 25% of Stergis.		

December 31, Year 5

Cash	18,500*	
Dividend income**		18,500

To record 25% of Stergis's Year 5 dividends\*

\*25% x \$74,000 = \$18,500

December 31, Year 6

Cash	18,500	
Dividend income		18,500

To record 25% 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	285,000
	Cash	285,000
	<i>To record 30% investment in Saltspring</i>	
	Cash (30% x 110,000)	33,000
	Investment in Saltspring	33,000
	<i>Dividends received</i>	
	Investment in Saltspring (30% x 306,000)	91,800
	Equity method loss – discontinued operations (30% x 33,000)	9,900
	Equity method income (30% x 339,000)	101,700
	<i>To record 30% of Saltspring's profit and discontinued operations</i>	
(ii)	Investment cost Jan. 1, Year 6	\$285,000
	Dividends received	(33,000)
	Share of income	<u>91,800</u>
	Investment account Dec. 31, Year 6	<u>\$343,800</u>

(iii)

Pender Corp

Statement of Operations

Year ended December 31, Year 6

Sales	\$990,000
Equity method income	<u>101,700</u>
	1,091,700
Operating expenses	<u>(110,000)</u>
Income before income tax	981,700
Income tax expense	<u>(352,000)</u>
Net income before discontinued operations	629,700
Disc. Operations – Equity method loss	<u>(9,900)</u>
Profit	<u>\$619,800</u>

Part (b) Cost method

(i) Investment in Saltspring	285,000	
Cash		285,000
<i>To record 30% investment in Saltspring</i>		

Cash	33,000	
Dividend income		33,000
<i>Dividends received</i>		

(ii) Investment account balance December 31, Year 6    \$285,000

(iii)

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

Sales	\$990,000
Dividend income	<u>33,000</u>
	1,023,000
Operating expenses	<u>(110,000)</u>
Income before income tax	913,000
Income tax expense	<u>(352,000)</u>
Profit	<u>\$561,000</u>

Part (c)

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 =  $\$33,000 / \$285,000 = 11.58\%$

Equity method return on investment =  $(\$101,700 - \$9,900) / \$285,000 = 32.21\%$

### Problem 2-5

(a)

(i)	22,000 shares x \$20		\$440,000
(ii)	Original cost	\$374,000	
	Share of income (20% x (220,000 + 247,500))	93,500	
	Less: share of dividends (20% x (165,000 + 176,000))	<u>(68,200)</u>	
		<u>\$399,300</u>	
(iii)	22,000 shares x \$20		\$440,000

(b)

(i)	Year 4	Year 5	Year 6	Total
Dividend income (1)	\$33,000	\$35,200	\$38,500	\$106,700
Unrealized gains (2)	22,000	44,000	0	66,000
Gain on sale (2)	<u>0</u>	<u>0</u>	<u>66,000</u>	<u>66,000</u>
Net income	<u>\$55,000</u>	<u>\$79,200</u>	<u>\$104,500</u>	<u>\$238,700</u>
Total OCI	<u><u>0</u></u>	<u><u>0</u></u>	<u><u>0</u></u>	<u><u>0</u></u>

(ii)

(ii)	Year 4	Year 5	Year 6	Total
Equity income (3)	\$44,000	\$49,500	\$52,800	\$146,300
Gain on sale (4)	<u>0</u>	<u>0</u>	<u>92,400</u>	<u>92,400</u>
Net income	<u>\$44,000</u>	<u>\$49,500</u>	<u>\$145,200</u>	<u>\$238,700</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)

(iii)	Year 4	Year 5	Year 6	Total
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Dividend income (1)	\$33,000	\$35,200	\$38,500	\$106,700
Gain on sale	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Net income	<u>\$33,000</u>	<u>\$35,200</u>	<u>\$38,500</u>	<u>\$106,700</u>
Other comprehensive income				
Unrealized gain (2)	\$22,000	\$44,000		\$66,000
Gain on sale (5)	<u>0</u>	<u>0</u>	<u>\$66,000</u>	<u>66,000</u>
Total other comprehensive income	<u>22,000</u>	<u>44,000</u>	<u>66,000</u>	<u>132,000</u>
Comprehensive income	<u>\$55,000</u>	<u>\$79,200</u>	<u>\$104,500</u>	<u>\$238,700</u>

**Notes:**

- 20% x Dividends paid during year
- 22,000 Shares x change in share price during year
- 20% x Net income for the year
- $\$506,000 - [\$374,000 + (\$44,000 + \$49,500 + \$52,800) - (\$33,000 + \$35,200 + \$38,500)] = \$92,400$
- $22,000 \text{ Shares} \times \$23 - 22,000 \text{ shares} \times \$20 = \$66,000$

(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 \$238,700 calculated as follows:

**Cash received**

Proceeds from sale	\$506,000
Dividends received (33,000 + 35,200 + 38,500)	<u>106,700</u>
Total proceeds	612,700

**Cash disbursed**

Cost of investment	<u>374,000</u>
Change in cash	<u>\$238,700</u>

**Problem 2-6**

(a)	<b>FVTPL</b>	<b>FVTOCI</b>
Investment in UP Inc. (20,000 x 11.50)	\$230,000	\$230,000

Net income		
Dividend income (20,000 x 0.5)	10,000	10,000
Unrealized gains (20,000 x [11.50 – 10.00])	<u>30,000</u>	<u>0</u>
Total reported in net income	<u>40,000</u>	<u>10,000</u>
Reported in OCI (20,000 x [11.50 – 10.00])		30,000

(b)

The FVTPL will report the most favourable current ratio because the investment in UP will be reported as a current asset because it is likely to be sold within a year. Under the FVTOCI, the investment in UP will likely be reported as a non-current asset. The debt-to-equity ratio will be the same under both methods because both net income and OCI end up in shareholder's equity. The FVTPL will report the most favourable return on equity because the numerator will be net income and will not include OCI. Net income is higher under FVTPL than net income under FVTOCI.

## Problem 2-7

(a) (in 000s)	Year 11	Year 12	Year 13	Year 14
Investment, beginning of year	0	285	150	50
Cost	250	-	-	-
Equity method income (25%)	50	(75)	(100)	(50) <sup>3</sup>
Dividends received (25%)	(15)	(15)	-	-
Impairment loss	=	<u>(45)</u>		=
Investment, end of year	<u>285</u>	<u>150</u> <sup>1</sup>	<u>50</u> <sup>2</sup>	<u>0</u>

(b)

Equity method income (25%)	50	(75)	(100)	(50) <sup>3</sup>
Impairment loss	=	<u>(45)</u>		=
Total income	<u>50</u>	<u>(120)</u>	<u>(100)</u>	<u>(50)</u>

### Notes:

- 1) Investment written down to recoverable amount of 25,000 x 6 = 150,000
- 2) Investment written down to recoverable amount of 25,000 x 2 = 50,000
- 3) Since Right has no legal obligation to pay any of ON's liabilities and has not committed to contribute any more funds to ON, it should not bring the balance in the investment account to less than zero.

## Problem 2-8

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

### Other Investments

Type	Reporting Method
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 2-9

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

### Slide #1

#### Strategic Investments

Type	Options
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

#### Rationale for Flexibility

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

#### Rationale for Fair Value Information

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