LEARNING OBJECTIVES

After studying this chapter, you should be able to:

L.O. 7-1. Explain what financial assets are, how they differ from other types of assets, and why there is a variety of measurement standards for different categories of financial assets.

L.O. 7-2. Evaluate the nature of a financial asset to classify it into one of seven categories: subsidiaries, joint operations, joint ventures, associates, fair value through profit or loss, fair value through OCI, and amortized cost.

L.O. 7-3. Identify the measurement approach appropriate to the seven categories of financial assets and explain the general nature of the various measurement approaches.

L.O. 7-4. Analyze historical cost and fair value information to determine the appropriate post-purchase balance sheet measurement and income recognition for three categories of financial assets: fair value through profit or loss, fair value through OCI, and amortized cost.

L.O. 7-5. Apply present value techniques to account for investments in debt instruments.

CPA competencies addressed in this chapter:

1.1.2 Evaluates the appropriateness of the basis of financial reporting (Level B)

b. Methods of measurement

1.2.1 Develops or evaluates appropriate accounting policies and procedures – Ethical professional judgment (Level B)

1.2.2 Evaluates treatment for routine transactions (Level A)

k. Financial instruments

l. Investments in associates/significant influence*

1.2.3 Evaluates treatment of non-routine transactions (Level B)

h. Consolidated financial statements subsequent to acquisition date*

1.3.2 Prepares routine financial statement note disclosure (Level B)

The Bank of Montreal, also known as BMO Financial Group (www.bmo.com, Toronto Stock Exchange ticker: BMO), is one of the six national chartered banks in Canada with a history dating back almost two centuries to 1817. Among the company’s $537 billion in assets reported on its balance sheet of October 31, 2013, are the following financial assets (in billions of dollars):

<table>
<thead>
<tr>
<th>Measurement basis</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fair value, with changes flowing through profit or loss</td>
<td>$75.2</td>
</tr>
<tr>
<td>Fair value, with changes flowing through OCI</td>
<td>53.1</td>
</tr>
<tr>
<td>Amortized cost</td>
<td>278.3</td>
</tr>
<tr>
<td>Consolidation (17 companies)†</td>
<td>—</td>
</tr>
<tr>
<td>Total</td>
<td>$406.6</td>
</tr>
</tbody>
</table>

†The amount for subsidiaries is not presented in this table because there is no single amount on the financial statements that would represent the investment in subsidiaries.

The items in this table raise a number of interesting questions. What is the meaning of the different measurement bases? What types of assets are in each category? Why is there such a variety of reporting methods?
A. INTRODUCTION

What are financial assets and how do they differ from other kinds of assets? In accounting, finance, and to a large extent in general usage, financial assets are those based on contractual agreements relating to future cash flows. Common examples of financial assets are investments in stocks and bonds; these investments entitle the holder to future dividends and interest, even if those future payments could be uncertain. An investment in equipment is not a financial asset—while the equipment could help generate future cash flows, there is no contract that identifies the potential cash flowing to the owner of the equipment. Items such as equipment, land, buildings, and inventory are typically called “real assets.”

Because financial assets are based on contracts, another way to think about the difference between financial and real assets is to consider whether there is a “counterparty.” An investment in shares has a counterparty who issued those shares and who is expected to pay dividends in the future. An investment in bonds has a counterparty who is obligated to repay interest and principal on the bonds. A financial asset appears on the left-hand side of the balance sheet of the investor.

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1. “Real assets” should not be confused with “real property,” which is a term originating from common law referring to land and buildings (i.e., real estate).
a similar item should be on the right-hand side of the balance sheet of the counterparty as a liability or equity. Thinking about it this way, it is clear that a piece of equipment is not a financial asset—there is no counterparty opposite the equipment owner, and the equipment does not appear on the right-hand side of anyone’s balance sheet.

From the above, we can see that one entity’s financial asset and the counterparty’s liability or equity are two sides of the same coin. That “coin” is a financial instrument, which is formally defined as follows in IAS 32 paragraph 11:

¶11 A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.2

This chapter will focus on the asset side of financial instruments; Chapters 11 through 14 discuss financial liabilities, equity, and more complex financial instruments.

The most important accounting issue for financial assets is the measurement basis for reporting their values on the balance sheet date. There is no single measurement basis that is suitable for all financial assets because the trade-off between the relevance and other qualitative characteristics of those measurements depends on management’s intent with respect to those investments. For instance, an enterprise investing in the common shares of another company can own anywhere from a small fraction up to 100% of the latter company. When the investment is relatively small, the market price (if available) is a relevant and verifiable measure of how much the company would be able to obtain from selling those shares. In the case where one company (the “parent”) owns a majority of the shares of another (the “subsidiary”), the market price is not particularly relevant because in such instances the parent does not intend to sell its holdings. In addition, the majority ownership implies a special economic relationship between the two companies—a relationship that would significantly change if the parent company were to sell its shares in the subsidiary. The parent also has inside information about the subsidiary not available to potential buyers. For all these reasons, the subsidiary’s share price (again, if available), which is based on publicly available information, is not necessarily a reliable indicator of value of the subsidiary to the parent.

The need for different measurement bases, however, does not imply that all measurement bases are possible for every kind of investment. Instead, accounting standards specify the criteria for different classifications of financial assets and the corresponding accounting treatment that is judged to be appropriate for that category. These standards have experienced significant changes over the last two decades, with this chapter reflecting the recent comprehensive overhaul in IFRS 9 issued in 2014 and effective beginning January 1, 2017.

The next section lays out a comprehensive system for classifying financial assets and provides an overview of the accounting method appropriate to each category. Sections C, D, and E will then look at the accounting for specific types of financial assets in more detail.

CHECKPOINT CP7-1
Why are accounts receivable financial assets and inventories not?
B. OVERVIEW OF FINANCIAL ASSET CLASSIFICATION

In general, people tend to think about financial instruments in terms of whether they have the nature of equity, a derivative, or debt. These three general groupings reflect the economic characteristics of the instruments themselves. An equity instrument is a contract that gives the holder the residual interest in an entity after deducting all of its liabilities; an example is common share (see IFRS—IAS 32). A derivative is a financial instrument with all three of the following characteristics: (i) its value changes according to a specified variable, such as an interest rate, stock price, and so on; (ii) it requires no initial net investment or a small investment relative to non-derivative contracts with similar exposure to the specified variable; and (iii) it is settled at a future date. An example of a derivative is a stock option, which entitles the holder of the option to buy (or sell) a certain number of shares at a particular price over a specified period of time. A debt instrument, while not specifically defined in IFRS, includes any financial instrument that is not an equity instrument or a derivative. A bond is a common example of a debt instrument.

While this three-way grouping is useful for describing the nature of the financial instruments, they are not sufficiently specific to reflect the reasons why enterprises invest in them, and those reasons are important factors in determining the appropriate accounting method. As a result, accounting standards separate financial assets into seven mutually exclusive categories:

1. subsidiaries
2. investments in joint operations
3. investments in joint ventures
4. investments in associated companies
5. measured at fair value through profit or loss (FVPL)
6. measured at fair value through other comprehensive income (FVOCI)
7. measured at amortized cost

These categories will be explained more fully below. At this point, it is useful to obtain an overview of how these seven categories arise, how they relate to the three-way grouping (equity, derivative, debt), and which accounting methods are appropriate for each. Exhibit 7-1 illustrates these relationships.

As this diagram shows, depending on the reason for the investment, an equity investment can be classified into one of five categories: a subsidiary, a joint operation, a joint venture, an associate, FVPL. In contrast, derivatives are always classified as FVPL. Investments in debt instruments can be classified as FVPL, FVOCI or amortized cost.

We now look at each of the seven categories of financial assets individually in the following two sections. Section C will look at the top four categories in Exhibit 7-1, which are known as strategic equity investments and usually held for the long term. Section D will look at the remaining categories, which are non-strategic in nature.

CHECKPOINT CP7-2
Why is it not sufficient to simply identify investments as equity, debt, or a derivative for accounting purposes?

1. Technically, cash is another category of financial assets. The accounting for cash is straightforward and previously addressed in Chapter 5, so it is not repeated here.
This section examines equity investments in other enterprises that are under the control, joint control, or significant influence of the investor enterprise. As these three labels suggest, enterprises hold these investments for strategic reasons—to access resources, extend their market reach, increase operational efficiency, and so on by directing or influencing the management decisions in the investee company. Furthermore, joint control can be exerted in two ways, resulting in four categories of strategic equity investments: subsidiaries, joint operations, joint ventures, or associates. The distinctions among these four categories depend on how much influence the investor is able to exert over the investee. In most circumstances, the determining factor will be the amount of voting power held by the investor.

This section does not look at all aspects of these types of investments, as the accounting issues are relatively complex and covered in textbooks at the advanced level. Instead, we will solely focus on the classification of financial assets into the four categories of subsidiaries, joint operations, joint ventures, and associates. Examples will serve to illustrate the overall consequence of these classifications without going into detail of the accounting procedures.

### 1. Subsidiaries

When one enterprise invests in the equity of another, that investment could be so substantial that it gives the investor control of the latter enterprise. **Control** in this

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### Exhibit 7-1

**Accounting classification of financial assets and the corresponding accounting treatment**

<table>
<thead>
<tr>
<th>General type of financial instrument</th>
<th>Business model</th>
<th>Specific accounting classification</th>
<th>Accounting treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity</td>
<td>Control</td>
<td>Subsidiary</td>
<td>Consolidation</td>
</tr>
<tr>
<td></td>
<td>Joint control of assets and liabilities</td>
<td>Joint operations</td>
<td>Proportionate consolidation</td>
</tr>
<tr>
<td></td>
<td>Joint control of net assets</td>
<td>Joint venture</td>
<td>Equity method</td>
</tr>
<tr>
<td></td>
<td>Significant influence</td>
<td>Associate</td>
<td></td>
</tr>
<tr>
<td>Debt</td>
<td>Realize changes in value</td>
<td>Fair value through profit or loss (FVPL)</td>
<td>Fair value, with changes recorded through net income</td>
</tr>
<tr>
<td></td>
<td>Sell financial assets and collect contractual cash flows</td>
<td>Fair value through OCI (FVOCI)</td>
<td>Fair value, with changes recorded through OCI</td>
</tr>
<tr>
<td></td>
<td>Collect contractual cash flows</td>
<td>Amortized cost</td>
<td>Amortized cost</td>
</tr>
<tr>
<td>Equity</td>
<td>Equity exception: Irrevocably designate as fair value through OCI</td>
<td>Accounting treatment: Fair value, with both unrealized and realized gains and losses recorded through OCI.</td>
<td></td>
</tr>
</tbody>
</table>

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**L.O. 7-3.** Identify the measurement approach appropriate to the seven categories of financial assets and explain the general nature of the various measurement approaches.

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4 References to investments in equity also apply to ownership of organizations other than a corporation, such as a partnership. For ease of language, we will generally refer to investments in corporations.
C. Strategic Equity Investments

context is the power to govern the financial and operating policies of an entity. When such control exists, the investor is the parent and the company that issued the shares is the subsidiary. Typically, we can presume that an investor company has control if it holds greater than 50% of the voting power of the investee, because such voting power allows the appointment of the board of directors, which sets the strategic direction of the investee. The presumption of control when an enterprise has more than 50% of the voting power can be rebutted with specific evidence to the contrary.

It is important to emphasize that it is the percentage of voting power that is important rather than the amount of investment. Some companies have more than one class of shares where the voting power is disproportionate to the amount of investment. For example, most preferred shares do not have voting rights. Another example is where one class of common shares has one vote per share and another class has a hundred votes per share (called super-voting shares).

ACCOUNTING TREATMENT—CONSOLIDATION When the extent of investment gives one company control of another, it is reasonable to treat both companies as one economic unit, since the management of the parent company can direct the subsidiary’s affairs as well as the parent’s. For this reason, we prepare consolidated financial statements that show the two legal entities as one economic unit. This presentation is a more complete presentation of the economic resources and claims of the enterprise, contributing to representational faithfulness. In essence, we add together the financial statements of the two companies, but with a number of adjustments. Consolidation is a relatively complex topic that is covered in advanced financial accounting.

EXAMPLE Princeton Powerboats holds all of the common shares of Sidney Sails, which has net assets of $100 million. Exhibit 7-3 shows condensed balance sheets for the two companies separately, and the consolidated balance sheet that combines the two entities.

As shown in this example, consolidated financial statements combine the amounts from the separate financial statements of the parent and subsidiary. The elimination column removes double counting that would result from simply adding the two columns of numbers together: Princeton’s $100 million investment in
2. Joint operations

As defined in IFRS 11, joint operations and joint ventures are two types of joint arrangements. A joint arrangement is a contractual arrangement whereby two or more parties undertake an economic activity that is subject to joint control by those parties. Joint control is a contractually agreed upon sharing of control over an economic activity; joint control exists only when the strategic decisions relating to the activity require the unanimous consent of the parties sharing control. Joint arrangements usually have a limited life and a defined set of objectives or activities. For example, companies in the oil and gas industry often enter joint arrangements for the purpose of exploration and production at a particular geographic location. A joint arrangement is distinct from a typical partnership because partnerships do not generally require unanimous consent of the partners. A partnership that has a partnership agreement that does require unanimous consent would be a joint arrangement for accounting purposes.

For accounting purposes, IFRS further classifies joint arrangements as joint operations or joint ventures, depending on the nature of the investor’s economic interests in the arrangement. A joint arrangement is a joint operation if the investor has rights to the assets and obligations for the liabilities of the arrangement. For example, a joint operation could involve a contractual arrangement that uses an unlimited liability partnership in which the partners share control of the assets and are exposed to the liabilities of the partnership. In contrast, a joint arrangement is a joint venture if the investor has rights to the net assets of the arrangement. For example, a joint venture could involve the sharing of control over a corporate entity that has limited liability.

ACCOUNTING TREATMENT—PROPORTIONATE CONSOLIDATION Because joint operations have the characteristic of joint control, and the control relates to the specific assets and liabilities of the investee, some form of consolidation makes sense, just as control of a subsidiary requires consolidation as discussed above. However,
full consolidation is inappropriate because more than one party shares control. Consequently, the appropriate accounting method is proportionate consolidation, which takes the investor's proportionate share of the joint operation's assets, liabilities, and income and adds it to the investor's accounts. For example, if Parson Petroleum is a 40% partner in a joint operation, then it includes 40% of the joint operation in its consolidated financial statements.

**EXAMPLE**  Suppose Princeton Powerboats has a 40% interest in Joy of Boating (JOB), a partnership. According to a contractual agreement, Princeton shares joint control of JOB with two other companies that together hold the remaining 60% ownership in JOB, and each party to the joint arrangement shares rights to JOB's assets and responsibilities for JOB's liabilities. Net assets of JOB total $250 million, so Princeton's 40% share equals $100 million. The separate and proportionately consolidated financial statements for Princeton and JOB are as shown in Exhibit 7-4.

<table>
<thead>
<tr>
<th>Exhibit 7-4</th>
<th>Separate and proportionately consolidated balance sheets and income statements for Princeton Powerboats and Joy of Boating (JOB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$ millions</td>
<td>100% of JOB (assumed)</td>
</tr>
<tr>
<td><strong>Balance sheets</strong></td>
<td></td>
</tr>
<tr>
<td>Investment in JOB</td>
<td>—</td>
</tr>
<tr>
<td>Other assets</td>
<td>750</td>
</tr>
<tr>
<td>Total assets</td>
<td>750</td>
</tr>
<tr>
<td>Liabilities</td>
<td>500</td>
</tr>
<tr>
<td>Common shares</td>
<td>150</td>
</tr>
<tr>
<td>Retained earnings</td>
<td>100</td>
</tr>
<tr>
<td>Total liab. and equity</td>
<td>750</td>
</tr>
<tr>
<td><strong>Income statements</strong></td>
<td></td>
</tr>
<tr>
<td>Income from JOB</td>
<td>—</td>
</tr>
<tr>
<td>Revenue</td>
<td>125</td>
</tr>
<tr>
<td>Expenses</td>
<td>—90</td>
</tr>
<tr>
<td>Net income</td>
<td>35</td>
</tr>
</tbody>
</table>

The numbers in this example have been chosen to make Exhibit 7-3 and Exhibit 7-4 easy to compare. In both cases, Princeton's investment is $100 million. This $100 million represents all of the net assets of the subsidiary (Sidney Sails), while it represents 40% of the net assets of a larger joint operation (JOB) with total net assets of $250 million (40% \times $250m = $100m). Comparing the two exhibits, you will note that there are essentially no differences between the results of full consolidation and proportionate consolidation when the amount of investment is the same.

### 3. Joint ventures

As just discussed, a joint venture is one type of joint arrangement in which the rights and responsibilities of the parties to the arrangement are limited to the net assets of the investee. That is, the joint ventures do not have direct control over the assets nor direct exposure to the liabilities of the venture.

**ACCOUNTING TREATMENT—EQUITY METHOD**  To reflect the exposure to the net assets of the venture, the appropriate accounting treatment is the equity method. The equity method can be thought of as a condensed consolidation that shows the financial
position and results of operations of the investee on a net basis on the balance sheet and income statement in one line (each). The balance sheet shows the value of the investment equal to the purchase cost adjusted by the investor’s share of the investee’s post-acquisition changes in net assets. The income statement shows the investor’s share of the investee’s net income. An example of the equity method will follow the discussion of associates, which also uses the equity method.

4. Associates

In some instances, an enterprise’s investment in another is not sufficient to give it control, but nevertheless it is able to affect the strategic direction of the latter company. In these situations, we say that the investor has significant influence, the power to participate in the financial and operating policy decisions of the investee (but not to the extent of control or joint control). When the investor company has significant influence, we call the investee an associate of the investor; sometimes, entities also use the term “affiliate.” We presume that significant influence exists if the investor holds between 20% and 50% (inclusive) of the voting power of the investee, and no significant influence otherwise. Similar to the determination of whether control exists, if the percentage voting power results in the presumption of significant influence, that presumption can be refuted with specific evidence to the contrary.

While it is clear that the upper limit of 50% makes sense in that any higher investment would confer control, why can we presume that there is significant influence for investments with 20%, 25%, or 45% voting power? Why do we presume that there is no significant influence below 20%?

There are two distinct reasons for this presumption. The first is that an investor often does not require more than 50% of votes to be in a position to appoint/elect members onto the investee’s board of directors, particularly for publicly traded firms with diffused ownership. Representation on the board of directors gives the investor influence, but not control, over the strategic direction of the investee.

The second reason is more subtle but perhaps more important. It is that the extent of the investment itself provides strong positive evidence, not just a presumption, that the investor does have significant influence. Why? It is because significant influence is the most likely reason for a level of ownership that is as high as 50%. Portfolio theory in finance concludes that investors can achieve better risk–return trade-offs by diversifying investments. Thus, if the only reason for an investment is to obtain the highest return at the lowest risk, an enterprise can do better by having a portfolio of many investments rather than one large, concentrated holding in one company. The fact that an enterprise does have a high level of investment in another indicates that it is willing to bear the additional risk of the concentrated investment in return for the ability to influence the direction of the investee. In other words, finance theory suggests that it is not rational for an enterprise to hold a large position in the equity of another company if it did not want, and is not able to exercise, significant influence.

The ability to exert significant influence is valuable to the investor because it helps reduce the two types of information asymmetry discussed in Chapter 1. Having representation on the board of directors and generally being able to participate in the governance of the investee alleviates the moral hazard inherent in the agency relationship between ownership and management. At the same time, an investor company with significant influence faces less adverse selection because it is able to obtain better (i.e., inside) information on the investee in comparison to other investors who do not have such influence.

If you reflect on these points about why significant influence confers advantages over portfolio investments—advantages that compensate for the additional risk of concentrated holdings—you should see that the same arguments apply to situations of full control or joint control discussed above. For this reason, the accounting treatment
for investments with significant influence has some of the features of consolidation. However, significant influence is not control, so the investor and investee cannot be considered one economic unit. Thus, we do not combine the financial statements of the two entities. The accounting method that produces results similar to consolidation but without actually consolidating the financial statements is called the equity method.

**ACCOUNTING TREATMENT—EQUITY METHOD** As noted above, the equity method can be thought of as a condensed consolidation that shows the investor's share of the net assets and net income of the investee. The following example uses an investment in an associate to illustrate the equity method. The effects are similar for a joint venture accounted for under the equity method.

**EXAMPLE** Princeton Powerboats has a third investment, a 20% interest in Asymmetric Spinnaker Company (ASC). Princeton has determined that it can and does exert significant influence over ASC.

As shown in Exhibit 7-5, ASC has total assets of $1,500m and liabilities of $1,000m, so net assets equal $500m. Princeton owns 20% of ASC, so it shows $100 million (20% × $500m = $100m) as “Investment in ASC” on the balance sheet. On its income statement, Princeton shows $14 million as “Income from ASC” for its 20% share of ASC’s net income of $70 million.

<table>
<thead>
<tr>
<th>$ millions</th>
<th>100% of ASC</th>
<th>20% of ASC</th>
<th>Princeton under equity method</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Balance sheets</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investment in ASC</td>
<td>—</td>
<td>—</td>
<td>100</td>
</tr>
<tr>
<td>Other assets</td>
<td>1,500</td>
<td>300</td>
<td>600</td>
</tr>
<tr>
<td>Total assets</td>
<td>1,500</td>
<td>300</td>
<td>700</td>
</tr>
<tr>
<td>Liabilities</td>
<td>1,000</td>
<td>200</td>
<td>400</td>
</tr>
<tr>
<td>Common shares</td>
<td>300</td>
<td>60</td>
<td>200</td>
</tr>
<tr>
<td>Retained earnings</td>
<td>200</td>
<td>40</td>
<td>100</td>
</tr>
<tr>
<td>Total liab. and equity</td>
<td>1,500</td>
<td>300</td>
<td>700</td>
</tr>
<tr>
<td><strong>Income statements</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income from ASC</td>
<td>—</td>
<td>—</td>
<td>14</td>
</tr>
<tr>
<td>Revenue</td>
<td>250</td>
<td>50</td>
<td>150</td>
</tr>
<tr>
<td>Expenses</td>
<td>-180</td>
<td>-36</td>
<td>-100</td>
</tr>
<tr>
<td>Net income</td>
<td>70</td>
<td>14</td>
<td>64</td>
</tr>
</tbody>
</table>

To compare and contrast consolidation, proportionate consolidation, and the equity method, let’s review the financial statements of Princeton in the three examples given above. Note that Princeton has an equal dollar amount of investment in each of the three companies ($100 million) so that the only difference is the accounting method.

As Exhibit 7-6 shows, the net asset positions for the three scenarios are identical ($300 million), as are the amounts of net income ($64 million). However, the equity method differs from consolidation and proportionate consolidation in the components of net assets and net income. Whereas the two consolidation methods include the individual line items (assets, liabilities, revenues, expenses) of the subsidiary, the equity method nets out liabilities against assets and expenses against revenue. Thus, the three methods are equivalent on a net basis, but they differ in terms of the individual line items.

Another important point to note is that for all four types of strategic investments, the value of the investment goes up and down with the income earned or losses incurred.
by the investee and any capital contributed to or withdrawn from the investee. In other words, for accounting purposes, the value of the investment does not have a direct connection to the market price of the shares in the investee (or other equity instrument). In contrast, the market price is much more important for non-strategic investments, which we discuss next.

As mentioned at the beginning of this section, the coverage here is to provide you with the ability to classify an investment according to the degree of influence that an investor company has over another, to identify the appropriate accounting method for each classification, and to generally understand the effect of the three methods. Consolidation, proportionate consolidation, and the equity method can be much more complex; we leave thorough coverage of these complexities to advanced financial accounting texts.

### D. NON-STRATEGIC INVESTMENTS

The four categories of financial assets discussed in the last section relate solely to equity investments, and only those equity instruments that have voting rights, which allows the investor to exert varying degrees of influence on the investee. We now turn our attention to three categories of financial assets that are not limited to equity investments. These three categories are those diagrammed on the bottom half of Exhibit 7-1, which is reproduced in Exhibit 7-7 for ease of reference. Note that the very bottom row shows an exception for equity; it is not associated with a particular business model, so it does not fit the overall classification framework. We will address this exception after the three categories determined by business models.
D. Non-Strategic Investments

1. Fair value through profit or loss (FVPL)

Aside from the strategic reasons for investing in the equity of other companies discussed in the previous section, firms also buy equity with the intent (i.e., business model) of benefiting from changes in the value. In other words, these are portfolio investments that management intends to trade with the expectation of profit. Reflecting this business model, IFRS requires such investments to be categorized as FVPL so that changes in investment values are recognized in net income (as opposed to OCI).

In addition, the nature of derivatives is that they involve a higher level of risk for a particular amount of investment in comparison to non-derivative investments (i.e., debt and equity), so they are considered to be speculative investments. Consequently, accounting standards classify derivatives as FVPL so that net income includes the effects of these investments.\(^5\)

Other than derivatives and equity held to earn profits, FVPL is also the default category for any financial assets not classified into one of the other categories. Importantly, the FVPL category includes investments in debt instruments not classified into one of the next two categories (FVOCI or amortized cost). Many companies do have short-term investments in bonds to earn a return that would otherwise be held as cash.

Fair value is the relevant measure of value because financial statement readers find it useful to know for how much these investments could be sold, since they are likely to be sold in the near future. Fair value is also assumed to be verifiable because there is likely to be an active market for these securities; if there were no active market, then companies would not buy these investments with a business model of profiting trading.

Changes in fair value are also called unrealized gains and losses, where “unrealized” refers to the fact that the investments have not yet been sold. The unrealized gains or losses of FVPL investments should flow through net income (profit or loss) because the intention to trade for a profit implies that the trading activity is part of the enterprise’s regular operating activities.

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\(^5\) Technically, FVPL includes all derivatives other than those used for hedging. Hedging is a topic beyond the scope of this chapter. Chapter 14 will discuss hedges.
For example, suppose Holberg Enterprises had the following transactions relating to its equity portfolio (and had no other portfolio equity investments):

**Exhibit 7-8** Holberg Enterprises’ equity investments

<table>
<thead>
<tr>
<th>Date</th>
<th>Transaction</th>
<th>Company</th>
<th># Shares</th>
<th>Amount per share</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sept. 20</td>
<td>Bought</td>
<td>Royal Bank</td>
<td>400</td>
<td>$60.00</td>
<td>$24,000</td>
</tr>
<tr>
<td>Nov. 15</td>
<td>Bought</td>
<td>TELUS</td>
<td>500</td>
<td>40.00</td>
<td>20,000</td>
</tr>
<tr>
<td>Nov. 24</td>
<td>Dividends</td>
<td>Royal Bank</td>
<td>400</td>
<td>0.50</td>
<td>200</td>
</tr>
<tr>
<td>Dec. 31</td>
<td>Year-end closing price</td>
<td>Royal Bank</td>
<td>400</td>
<td>63.00</td>
<td>25,200</td>
</tr>
<tr>
<td>Dec. 31</td>
<td>Year-end closing price</td>
<td>TELUS</td>
<td>500</td>
<td>39.00</td>
<td>19,500</td>
</tr>
<tr>
<td>2018</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jan. 10</td>
<td>Sold</td>
<td>Royal Bank</td>
<td>400</td>
<td>62.50</td>
<td>25,000</td>
</tr>
</tbody>
</table>

If Holberg classifies these investments as FVPL, the company would record the following journal entries:

**Exhibit 7-9** Journal entries to record Holberg’s investments if classified as FVPL

<table>
<thead>
<tr>
<th>Date</th>
<th>Debit</th>
<th>Amount</th>
<th>Credit</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sept. 20</td>
<td>Dr. FVPL investments—Royal Bank</td>
<td>24,000</td>
<td>Cr. Cash</td>
<td>24,000</td>
</tr>
<tr>
<td>Nov. 15</td>
<td>Dr. FVPL investments—TELUS</td>
<td>20,000</td>
<td>Cr. Cash</td>
<td>20,000</td>
</tr>
<tr>
<td>Nov. 24</td>
<td>Dr. Cash</td>
<td>200</td>
<td>Cr. Dividend income</td>
<td>200</td>
</tr>
<tr>
<td>Dec. 31</td>
<td>Dr. FVPL investments—Royal Bank</td>
<td>1,200</td>
<td>Cr. Gain (loss) on FVPL investments ($25,200 – $24,000)</td>
<td>1,200</td>
</tr>
<tr>
<td>Dec. 31</td>
<td>Dr. Gain (loss) on FVPL investments ($19,500 – $20,000)</td>
<td>500</td>
<td>Cr. FVPL investments—TELUS</td>
<td>500</td>
</tr>
<tr>
<td>Jan. 10</td>
<td>Dr. Cash</td>
<td>25,000</td>
<td>Dr. Gain (loss) on FVPL investments</td>
<td>200</td>
</tr>
<tr>
<td></td>
<td>Cr. FVPL investments—Royal Bank</td>
<td></td>
<td></td>
<td>25,200</td>
</tr>
</tbody>
</table>

Notice that the year-end journal entries to adjust the investments to fair value result in gains or losses, which are unrealized, that flow through income. The write-up of the Royal Bank shares to $63/share at the year-end later results in a loss of $0.50/share, or $200 in total, when the shares are sold for $62.50. Through the entire holding period of these shares, Holberg recorded $1,200 – 200 = $1,000 of gains and $200 of dividend income.

Regarding the year-end journal entries for the re-measurement of the investments to fair value, the above shows the simplest way to represent the adjustment to the balance sheet (i.e., the debit to FVPL investments). In practice, enterprises will use a valuation account, such as “Valuation adjustments on FVPL investments.” This practice is similar to the use of a contra account for allowance for doubtful accounts. Doing so allows the records to reflect fair value adjustments while preserving cost information, which is required to compute gains or losses for tax purposes when the enterprise later sells the investments. However, it is important to note that the valuation account can be positive or negative, whereas
the allowance for doubtful accounts must always reduce the value of receivables (i.e., it must have a credit or zero balance).

2. Fair value through other comprehensive income (FVOCI)

The FVOCI category includes debt securities included in a business model with which the entity intends (i) to profit from changes in value and (ii) to collect cash flows to which the entity is entitled. Note that neither equity investments nor derivatives can be classified as FVOCI.

FVOCI means that the balance sheet reports these investments at fair value, while changes in value flow through OCI in the statement of comprehensive income (not through net income). Therefore, FVPL and FVOCI have the same reporting outcomes on the balance sheet, but they differ in the statement of comprehensive income. The effect of fair value changes flow through net income under FVPL, but through OCI under FVOCI. When an entity sells investments measured at FVOCI, the total gain or loss flows through income.

Since equity investments cannot be classified as FVOCI, Holberg’s investments in the shares of Royal Bank and TELUS cannot be used to illustrate the accounting for this category. Instead, we will defer briefly until Sub-section 6 a complete example illustrating the accounting for FVOCI.

Note that the difference in treatment between FVPL and FVOCI applies only to unrealized gains and losses. For both categories, realized gains and losses from actual disposals of the financial assets flow through net income, not OCI. In other words, OCI is recycled into net income.

CHECKPOINT CP7-4
What is the key difference between the accounting treatments for FVPL and FVOCI investments?

3. Amortized cost

Amortized cost is a category of financial investments that have fixed or determinable payments representing principal and interest, and the entity intends to collect these contractual cash flows. This category applies only to debt investments. Implementation of the amortized cost method requires discounted cash flow analysis, which we discuss in Section E.

4. Exception for equity investments with an irrevocable election

IFRS 9 provides for an exception to the treatment of equity investments that would otherwise be classified as FVPL. This exception allows an entity to elect to present changes in the fair value of an investment through OCI. This election must satisfy three conditions: it must be made when the entity initially acquires the investment; the investment must be in equity; and the election is irrevocable, meaning that the investment cannot be reclassified later into another category.

The results of designating a particular equity investment in this manner are not exactly the same as discussed above for the FVOCI category. While the entity holds the investment, any dividends received would be recorded in net income, while changes in fair value flow through OCI, just like for the FVOCI category. However, upon sale/derecognition, any gain or loss does not flow through net income, but continues to go into OCI. At this time, the accumulated other comprehensive income (AOCI) for this
Notice that (i) the year-end unrealized gains or losses as well as (ii) the realized gain on the sale of Royal Bank shares both go through OCI. The difference between the above and the FVPL journal entries in Exhibit 7-9 (other than account names) is that all of the gains and losses pass through OCI. For the investment in Royal Bank that was sold in 2018, the accumulated comprehensive income (AOCI) is $1,000 ($1,200 gain for the fair value adjustment in 2017 less $200 loss on sale in 2018; or equivalently, proceeds of $25,000 less cost of $24,000), so at the end of 2018, a closing entry will transfer $1,000 from AOCI to retained earnings.

One might question why IFRS 9 precludes the recycling of OCI generated by investments with this election, in contrast to the treatment of FVOCI investments, which do result in recycling. The reason has to do with earnings management. If the standards specified recycling of OCI, then management can pick the opportune time to sell financial assets with this election in order to transfer unrealized gains (or losses) out of AOCI and into profit or loss to boost (or reduce) net income. Without recycling, all of the accumulated gains and losses bypass the income statement and transfer directly into retained earnings, precluding the earnings management.

This rationale then raised another question: why does the FVOCI category specify that OCI needs to be recycled into income when the investments are sold? Wouldn’t that create the earnings management opportunities we just identified? It does. Indeed, an earlier version of IFRS 9 in 2012 did anticipate this problem and did not have the
FVOCI category at all. The category was later added in 2014 after considerable feedback and lobbying, particularly from financial institutions with large holdings of debt investments that would otherwise have been classified as either FVPL or amortized cost. Many commenters stated that they used a business model for their debt investments that was neither solely to trade for profit, nor solely to collect contractual cash flows, but was rather a combination of the two. The IASB agreed and added the FVOCI category to accommodate the hybrid business model.

5. Reclassifications from one category to another

The classification of financial assets into the different categories discussed above depends on business models selected by management rather than the characteristics inherent in the investments themselves. Consequently, changes in management intention can result in a change in classification. However, if there are no constraints on the ability of management to reclassify, then there could be significant opportunities for companies to manage earnings. For example, consider what would happen if a company were to reclassify an investment with unrealized gains from FVOCI to FVPL. Similarly, what if a company reclassifies an investment with unrealized losses from FVPL to FVOCI? These reclassifications would allow management to increase earnings by recognizing unrealized gains and deferring losses. To prevent this opportunistic activity from occurring, IFRS 9 provides specific guidance for these situations.

Note that derivatives can only be classified as FVPL (again, with the exception of derivatives used in hedging). Likewise, investments in equity can only be classified as FVPL, with the exception of those for which the entity has made an irrevocable election to measure at fair value through OCI. In all these cases, no reclassifications are possible. Thus, what remain are investments in debt.

As illustrated in Exhibit 7-1 and again in Exhibit 7-7, debt investments can be classified as FVPL, FVOCI, or amortized cost. Reclassifications out of and into these three categories produce six possible permutations, which are all addressed in IFRS 9, in paragraphs 5.6.2 to 5.6.7. The following table summarizes these six reclassification scenarios. Note that in all cases, the reclassification is treated prospectively, such that there are no restatements of prior results.

We can make some generalization from this table. First, with the exception of Case 4, when a reclassification occurs, the financial asset is re-measured to fair value.

<table>
<thead>
<tr>
<th>Case</th>
<th>From</th>
<th>To</th>
<th>IFRS 9 para.</th>
<th>Balance sheet value on reclassification</th>
<th>Changes in value up to reclassification date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>FVPL</td>
<td>FVOCI</td>
<td>5.6.6</td>
<td>Fair value</td>
<td>(Fair value – carrying value) recognized in income</td>
</tr>
<tr>
<td>2.</td>
<td>FVPL</td>
<td>Amortized cost</td>
<td>5.6.3</td>
<td>Fair value</td>
<td>(Fair value – carrying value) recognized in income</td>
</tr>
<tr>
<td>3.</td>
<td>FVOCI</td>
<td>FVPL</td>
<td>5.6.7</td>
<td>Fair value</td>
<td>OCI up to reclassification date recognized in income</td>
</tr>
<tr>
<td>4.</td>
<td>FVOCI</td>
<td>Amortized cost</td>
<td>5.6.5</td>
<td>Amortized cost computed using information from original purchase</td>
<td>OCI up to reclassification date offset against fair value</td>
</tr>
<tr>
<td>5.</td>
<td>Amortized cost</td>
<td>FVPL</td>
<td>5.6.2</td>
<td>Fair value</td>
<td>(Fair value – carrying value) recognized in income</td>
</tr>
<tr>
<td>6.</td>
<td>Amortized cost</td>
<td>FVOCI</td>
<td>5.6.4</td>
<td>Fair value</td>
<td>(Fair value – carrying value) recognized in OCI</td>
</tr>
</tbody>
</table>
Second, with the exception of Cases 4 and 6, changes in value up to the reclassification date flow through income. These two observations suggest that the treatment of reclassifications is as if there were a sale and then a repurchase of the same financial asset on the same date.

As for the exceptions of Cases 4 and 6, they involve reclassifications between FVOCI and amortized cost, in either direction. The end result of the exceptions is that the balance sheet outcome after reclassification is as if the investment had always been in the category into which the entity has reclassified it, and a one-time adjustment is made to OCI. In Case 4, where an entity reclassifies from FVOCI to amortized cost, it is as if the investment had always been carried at amortized cost. In Case 6, where an entity reclassifies from amortized cost to FVOCI, it is as if the investment had always been carried at FVOCI.

For example, suppose a debt investment purchased for $100 had increased in fair value to $120 at the reclassification date, but the amortized cost remained at $100. In Case 4, FVOCI accounting up to the reclassification date would require the investment to be valued at $120, and $20 would have been recorded in OCI. Upon reclassification, the investment is written back down to $100 by debiting OCI by $20 and crediting the investment by $20. Result: the investment is carried at the amortized cost of $100 and OCI is zero.

In Case 6, using the same facts, amortized cost accounting up to the date of reclassification would show the carrying amount at $100. Upon reclassification, the investment would be written up to the fair value of $120, with the increment of $20 recognized in OCI of the current period.

These two exceptions (Cases 4 and 6) would seem to present opportunities for management to improve the appearance of their financial position by reclassifying investments with losses out of FVOCI and into amortized cost, while reclassifying investments with gains out of amortized cost and into FVOCI. These opportunities are limited by paragraph 4.4.1, which states, “When, and only when, an entity changes its business model for managing financial assets it shall reclassify all affected financial assets. …” In other words, management is not allowed to “cherry pick” particular assets with gains or losses for reclassification; instead it must consider the overall business model for a portfolio of financial assets being managed, and reclassify the entire portfolio if the business model changes.

### CHECKPOINT CP7-5

Why is it important for accounting standards to specify rules concerning the reclassification of financial assets?

### 6. Example: A debt investment to illustrate the differences among FVPL, FVOCI, and amortized cost

On January 1, 2016, Terrace Co. pays $100,000 to purchase 100 Government of Canada bonds that have a maturity date of December 31, 2020 (five years later). Each bond has a face value of $1,000 and a coupon interest rate of 6%, payable annually. That is, the bonds will pay Terrace Co. interest of $6,000 (6% × 100 bonds × $1,000/bond) each year on December 31, and the face value of $100,000 (100 bonds × $1,000/bond) on December 31, 2020. Since the purchase price and the face value are both $1,000 per bond, Terrace purchased the bonds at par.

On Terrace Co.’s fiscal year-end of December 31, 2016, the bonds had a quoted price of $1,022 per bond. How should Terrace Co. report this investment on its
D. Non-Strategic Investments

December 31, 2016 balance sheet? How should the company report any changes in fair value? How much income or comprehensive income would be reported (ignoring income taxes)?

Intend to trade:
If Terrace Co. holds the bonds in a business model that sells bonds for a profit, it would classify this investment as FVPL. It would report the bonds on its balance sheet at fair value of $102,200 (100 bonds × $1,022/bond). On its income statement, Terrace Co. would report an unrealized gain of $2,200 ($102,200 − $100,000). The interest income is $6,000, so the net effect is $6,000 + $2,200 = $8,200 reported in income.

Intend to hold or trade:
If Terrace Co. holds the bonds in a business model that both holds the investments to collect contractual cash flows and sells them for profit, it would classify the bonds as FVOCI. It would report the bonds on its balance sheet at fair value of $102,200, the same as for the held-for-trading category. However, it would not report an unrealized gain of $2,200 on the income statement. Rather, Terrace Co. would report the unrealized gain in other comprehensive income. The $6,000 interest income would be reported in the income statement.

Intend to hold:
If Terrace Co. intends to hold the bonds until December 31, 2020, so as to collect all the cash flows from the bond, then it would classify them as held to maturity. In this case, its balance sheet would report the amortized cost of the bonds at $100,000. The income statement would report interest income of $6,000.

Exhibit 7-11 summarizes the accounting treatment for these bonds using the three methods:

<table>
<thead>
<tr>
<th>Financial asset category</th>
<th>Fair value through profit or loss</th>
<th>Fair value through OCI</th>
<th>Amortized cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dec. 31, 2016 Balance sheet</td>
<td>$102,200</td>
<td>$102,200</td>
<td>$100,000</td>
</tr>
<tr>
<td>Interest income</td>
<td>$ 6,000</td>
<td>$ 6,000</td>
<td>$ 6,000</td>
</tr>
<tr>
<td>Unrealized gain on income statement</td>
<td>2,200</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total recognized income</td>
<td>8,200</td>
<td>6,000</td>
<td>6,000</td>
</tr>
<tr>
<td>Unrealized gain in OCI</td>
<td>0</td>
<td>2,200</td>
<td>0</td>
</tr>
<tr>
<td>Total comprehensive income</td>
<td>$ 8,200</td>
<td>$ 8,200</td>
<td>$ 6,000</td>
</tr>
</tbody>
</table>

Notice that the balance sheet amounts for FVPL and FVOCI are the same because they both reflect fair value of $102,200. However, the amounts of income are different—whereas FVPL recognizes the fair value change of $2,200 through income (profit or loss), FVOCI shows this amount as other comprehensive income.

The following journal entries would be recorded for the three classifications:

To close this example, suppose Terrace sells 20 of the 100 bonds (20%) on June 30, 2017 for $1,050 per bond, giving total proceeds of $21,000. Of this amount, $600 represents accrued interest (20% × $100,000 × 6%/year × 0.5 year). The proceeds excluding accrued interest are thus $20,400 ($21,000 − $600), and the realized gain relative to purchase cost is $400 ($20,400 − $20,000). The following journal entries would be recorded under the three different classifications:
CHAPTER 7 Financial Assets

Exhibit 7-14  Journal entries to account for the sale of 20% of Terrace Co.’s bond investments

<table>
<thead>
<tr>
<th>Financial asset category</th>
<th>FVPL</th>
<th>FVOCI</th>
<th>Amortized cost</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dr.</td>
<td>Cr.</td>
<td>Dr.</td>
</tr>
<tr>
<td>Jan. 1, 2016 Purchase</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dr. FVPL investments</td>
<td>100,000</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Dr. FVOCI investments</td>
<td>—</td>
<td>100,000</td>
<td>—</td>
</tr>
<tr>
<td>Dr. Amortized cost invest.</td>
<td>—</td>
<td>—</td>
<td>100,000</td>
</tr>
<tr>
<td>Cr. Cash</td>
<td>100,000</td>
<td>100,000</td>
<td>100,000</td>
</tr>
<tr>
<td>Dec. 31, 2016</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recognition of interest income</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dr. Cash or interest receivable</td>
<td>6,000</td>
<td>6,000</td>
<td>6,000</td>
</tr>
<tr>
<td>Cr. Interest income</td>
<td>6,000</td>
<td>6,000</td>
<td>6,000</td>
</tr>
<tr>
<td>Dec. 31, 2016 Re-measurement</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dr. FVPL investments</td>
<td>2,200</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Cr. Gain on FVPL invest.</td>
<td>2,200</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Dr. FVOCI investments</td>
<td>—</td>
<td>2,200</td>
<td>—</td>
</tr>
<tr>
<td>Cr. OCI on FVOCI invest.</td>
<td>—</td>
<td>2,200</td>
<td>—</td>
</tr>
</tbody>
</table>

Several points are worth noting about the above journal entries.

1. Regardless of the investments’ categorization, the amount removed/credited from the balance sheet is proportionate to the amount recorded on the balance sheet account.
2. The entry to record the proceeds from sale needs to distinguish the interest component, if any. (For equity investments, any dividend income would be similarly separated.)
3. For FVPL investments, the gain or loss recognized through the income statement is the difference between (i) the proceeds net of interest income and (ii) the fair value on the balance sheet. In this case, the proceeds net of interest are $20,400, while the balance sheet fair value is $20,440, resulting in a loss of $40.

4. For FVOCI and amortized cost investments, the gain or loss equals the difference between (i) the proceeds net of interest income and (ii) the amortized cost of the investment. Thus the gain is equal to $20,400 − $20,000 = $400.

5. For FVOCI investments, OCI related to the investment needs to be reversed out of equity. In this case, $440 of OCI is debited out of equity.

The example of Terrace Co.'s investment is the simplest of examples, as the company purchased the bonds at par. In such cases, there is no amortization and the amortized cost method is just the cost method. In instances where a bond is purchased at a non-par amount, there will be amortization. Furthermore, this amortization is necessary not just for the amortized cost method, but also for FVOCI investments. We look at this issue in more detail in Section E.

E. AMORTIZATION OF DEBT INVESTMENTS

As you have learned in introductory accounting, enterprises can use a number of different methods to amortize (or depreciate) non-financial items such as property, plant, and equipment. In contrast, IFRS permits only one method to amortize debt instruments: the effective interest method. This method calculates the amortized cost of a financial asset at each reporting date as the present value of the asset’s cash flows discounted at the effective interest rate or yield. The yield is the discount rate that produces a present value equal to the purchase price of the financial asset. The yield is also called the internal rate of return (IRR) in finance. (For a review of present value techniques, refer to Appendix B at the end of this book.)

1. The effective interest method

To understand this method, consider the underlying substance of an investment in a debt instrument such as a bond. Suppose a bond has a $1,000 face value and a coupon interest rate of 6% per year. This bond promises to pay $60 (6% × $1,000) each year, plus $1,000 when the bond matures. (At this point, we do not yet need to be explicit about when this bond matures.)

- If the investors in the market for these bonds demand a higher yield, say 7%, then the bond price must be lower than $1,000 for investors to be willing to buy this bond, because the coupon rate of 6% is too low compared to the market yield. When the bond price is lower than the face value, we call it a discount bond.
- If investors demand a yield exactly equal to the coupon rate of 6%, then the bond price will exactly equal the $1,000 face value or par value. We call this a par bond.
- If investors demand a yield lower than 6%, say 5%, then the bond price must rise above $1,000 because the coupon rate exceeds the rate demanded by investors; the price increases to a point such that the bond’s price equals the present value at the 5% market rate. When the bond price is higher than face value, the bond is a premium bond.

### Exhibit 7-15 Summary of general bond pricing

<table>
<thead>
<tr>
<th>Coupon rate</th>
<th>Market yield</th>
<th>Bond price</th>
<th>Bond type</th>
</tr>
</thead>
<tbody>
<tr>
<td>6%</td>
<td>5%</td>
<td>&gt; $1000</td>
<td>Premium bond</td>
</tr>
<tr>
<td>6%</td>
<td>6%</td>
<td>= $1000</td>
<td>Par bond</td>
</tr>
<tr>
<td>6%</td>
<td>7%</td>
<td>&lt; $1000</td>
<td>Discount bond</td>
</tr>
</tbody>
</table>
Thus, depending on the prevailing yield at the time of investment, the purchase price can be higher or lower than the face value, while the value at maturity remains $1,000. The effective interest method produces the sequence of values between the purchase price and the maturity value. This sequence of values is the present value of the bond’s cash flows at a particular date discounted at the effective interest rate, which is the yield of the bond. While the exact figures depend on each circumstance, the patterns in general should look like the following:

While somewhat difficult to discern, the lines for premium and discount bonds are curved rather than linear. The slopes are flatter farther away from maturity and become steeper toward the maturity date.

So far, the discussion of the effective interest method has been qualitative to outline the general ideas. To apply the method quantitatively, we need to identify one additional fact in addition to the three pieces of information already identified: the maturity. Thus, we need four pieces of information in total:

- the maturity date (or length of time to maturity)
- the maturity value or face value
- the coupon payments (or rate) and frequency
- the market yield or effective interest rate

With these four pieces of information, we can compute the price of the bond.

For illustration purposes, we assume a short time to maturity of two years to keep the computations simple. We assume the facts in Exhibit 7-17 for three bonds purchased by Ucluelet Umbrellas at the beginning of Year 1.

Realistically, an investor will know the purchase price from the amount paid rather than having to value the bond. Using the price of the bond, the investor then computes the effective interest rate using a financial calculator or a spreadsheet.

Given the above facts and calculations, we can now prepare bond amortization schedules. The par bond needs no amortization, so we only need schedules for premium and discount bonds.
E. Amortization of Debt Investments

As the amortization schedules show, the amortized cost of the premium bond begins at $1,018.59, decreases to $1,009.52 by the end of Year 1, and ends at $1,000 at the end of Year 2, which is the maturity date. In contrast, the discount bond’s amortized cost begins at $981.92 and increases to $990.65 and finally ends at $1,000.

2. Using amortized cost in the accounting for financial assets

Bond amortization schedules like Exhibit 7-18, as you would expect, are useful for the amortized cost method. However, it may surprise you that these schedules are also necessary for debt investments classified as FVOCI.

### Exhibit 7-18 Amortization schedules for premium and discount bonds purchased by Ucluelet Umbrellas

<table>
<thead>
<tr>
<th>Premium bond (Bond A)</th>
<th>Discount bond (Bond C)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Beginning of year amortized cost</strong></td>
<td><strong>Amortized cost at beginning of year</strong></td>
</tr>
<tr>
<td><strong>Year 1</strong></td>
<td></td>
</tr>
<tr>
<td>$1,018.59</td>
<td>$981.92</td>
</tr>
<tr>
<td>+ $50.93 (Interest @ 5% yield)</td>
<td>+ $68.73 (Interest @ 7% yield)</td>
</tr>
<tr>
<td>$60.00</td>
<td>$60.00</td>
</tr>
<tr>
<td>$1,009.52</td>
<td>$990.65</td>
</tr>
<tr>
<td><strong>Year 2</strong></td>
<td></td>
</tr>
<tr>
<td>$1,009.52</td>
<td>$990.65</td>
</tr>
</tbody>
</table>

*Interest = Beginning of year amortized cost × Effective interest rate; for example, $1,018.59 × 5% = $50.93

### a. Debt instruments held at amortized cost

Once an enterprise has prepared the amortization schedule for an amortized cost investment, the accounting is relatively straightforward. Using the information from Exhibit 7-18, Ucluelet Umbrellas would record the following journal entries:
As shown in the journal entries at the end of Years 1 and 2, Ucluelet adjusts the investment account balance each year when the purchase price differs from the par/face/maturity value. The adjustments are the reason this method is called “amortized cost.” The adjustment is downward in the case of the premium bond (Bond A) and upward in the case of the discount bond (Bond C). In both cases, the adjustment brings the investment balance, the amortized cost, toward the par value of $1,000. In addition, the amount of the amortization increases over time (e.g., Bond A amortization: Year 1 $9.07, Year 2 $9.52), just as illustrated in the increasing steepness of the lines graphed in Exhibit 7-16.

b. Debt instruments held at FVOCI

If an enterprise has debt instruments classified as FVOCI, it needs to keep track of the investments’ amortized cost, and overlay the fair value through the OCI method. There are two distinct reasons for changes in the value of debt investments. The first is the predictable change in value according to the amortization schedule. The second is the unpredictable changes in value due to changes in demand for the debt instrument, which could result from change in market interest rates, changes in credit risk for the instrument, and so on.

To see this interaction, we will use Ucluelet’s investment in Bond A, which is a premium bond. Repeating the facts for ease of reference, Ucluelet purchased the $1,000 bond for $1,018.59, with two years to maturity, $60 per year annual coupon payments, and yield of 5%. To illustrate the fair value method, we now also assume that the price of the bond decreases to $987 at the end of Year 1. In addition, the amount of the amortization increases over time (e.g., Bond A amortization: Year 1 = $9.07, Year 2 = $9.52), just as illustrated in the increasing steepness of the lines graphed in Exhibit 7-16.

As shown in the journal entries at the end of Years 1 and 2, Ucluelet adjusts the investment account balance each year when the purchase price differs from the par/face/maturity value. The adjustments are the reason this method is called “amortized cost.” The adjustment is downward in the case of the premium bond (Bond A) and upward in the case of the discount bond (Bond C). In both cases, the adjustment brings the investment balance, the amortized cost, toward the par value of $1,000. In addition, the amount of the amortization increases over time (e.g., Bond A amortization: Year 1 = $9.07, Year 2 = $9.52), just as illustrated in the increasing steepness of the lines graphed in Exhibit 7-16.

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To see this interaction, we will use Ucluelet’s investment in Bond A, which is a premium bond. Repeating the facts for ease of reference, Ucluelet purchased the $1,000 bond for $1,018.59, with two years to maturity, $60 per year annual coupon payments, and yield of 5%. To illustrate the fair value method, we now also assume that the price of the bond decreases to $987 at the end of Year 1. In addition, the amount of the amortization increases over time (e.g., Bond A amortization: Year 1 = $9.07, Year 2 = $9.52), just as illustrated in the increasing steepness of the lines graphed in Exhibit 7-16.

As shown in the journal entries at the end of Years 1 and 2, Ucluelet adjusts the investment account balance each year when the purchase price differs from the par/face/maturity value. The adjustments are the reason this method is called “amortized cost.” The adjustment is downward in the case of the premium bond (Bond A) and upward in the case of the discount bond (Bond C). In both cases, the adjustment brings the investment balance, the amortized cost, toward the par value of $1,000. In addition, the amount of the amortization increases over time (e.g., Bond A amortization: Year 1 = $9.07, Year 2 = $9.52), just as illustrated in the increasing steepness of the lines graphed in Exhibit 7-16.

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Notice that this schedule needs to refer to the amortization schedule previously prepared and shown in Exhibit 7-18. This is necessary because the amount of interest income depends on the amortized cost, which is not the carrying value; the carrying value on the balance sheet is fair value when the investment is classified as FVOCI.

Using this continuity schedule, Ucluelet would record the following journal entries:

**Exhibit 7-21** Journal entries for Ucluelet’s premium bond (Bond A) if classified as FVOCI

<table>
<thead>
<tr>
<th>Bond A classified as FVOCI</th>
<th>Bond A classified as amortized cost (AC) (from Exhibit 7-19, shown here for comparison)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Purchase</strong></td>
<td></td>
</tr>
<tr>
<td>Dr. FVOCI invest. (Bond A)</td>
<td>1,018.59</td>
</tr>
<tr>
<td>Cr. Cash</td>
<td>1,018.59</td>
</tr>
<tr>
<td>Dr. Cash</td>
<td>60.00</td>
</tr>
<tr>
<td>Cr. FVOCI invest. (Bond A)</td>
<td>9.07</td>
</tr>
<tr>
<td>Cr. Interest revenue</td>
<td>50.93</td>
</tr>
<tr>
<td>Dr. OCI—Unrealized gain (loss) on FVOCI investment</td>
<td>22.52</td>
</tr>
<tr>
<td>Cr. FVOCI investment (Bond A)</td>
<td>22.52</td>
</tr>
<tr>
<td><strong>End of year 1</strong></td>
<td></td>
</tr>
<tr>
<td>Dr. Cash</td>
<td>60.00</td>
</tr>
<tr>
<td>Cr. FVOCI invest. (Bond A)</td>
<td>9.52</td>
</tr>
<tr>
<td>Cr. Interest revenue</td>
<td>50.48</td>
</tr>
<tr>
<td>Dr. OCI—Unrealized gain (loss) on FVOCI investment</td>
<td>22.52</td>
</tr>
<tr>
<td>Cr. FVOCI investment (Bond A)</td>
<td>22.52</td>
</tr>
<tr>
<td><strong>End of year 2</strong></td>
<td></td>
</tr>
<tr>
<td>Dr. Cash</td>
<td>60.00</td>
</tr>
<tr>
<td>Cr. FVOCI invest. (Bond A)</td>
<td>9.52</td>
</tr>
<tr>
<td>Cr. Interest revenue</td>
<td>50.48</td>
</tr>
<tr>
<td>Dr. FVOCI invest. (Bond A)</td>
<td>22.52</td>
</tr>
<tr>
<td>Cr. OCI—Unrealized gain (loss) on FVOCI investment</td>
<td>22.52</td>
</tr>
<tr>
<td><strong>Maturity</strong></td>
<td></td>
</tr>
<tr>
<td>Dr. Cash</td>
<td>1,000.00</td>
</tr>
<tr>
<td>Cr. FVOCI invest. (Bond A)</td>
<td>1,000.00</td>
</tr>
</tbody>
</table>

The important point to note is that, even though Ucluelet carries the bond investment at fair value on the balance sheet, the interest income and the associated amortization rely on the bond amortization schedule. Furthermore, the computation of unrealized gain or loss partly depends on the amortization; the gain or loss equals fair value less the carrying value after amortization. Thus, when an enterprise invests in a debt investment, it needs to use an amortization schedule if it classifies the investment as amortized cost or FVOCI.

An astute reader may question why we require amortized cost calculations for debt investments classified as amortized cost or FVOCI, but not for those classified as FVPL. The reason is actually quite straightforward. Changes in fair value for FVPL investments are recorded through the income statement, as is interest income. Little information is lost by reporting a combined investment income figure, and reporting a single investment income number is consistent with the rationale for the category. In contrast, fair value changes for FVOCI investments go to other comprehensive income and do not impact the income statement until those gains or losses are realized upon disposal of the investments, so it is necessary to distinguish interest income from fair value changes.

**CHECKPOINT CP7-6**

An amortization schedule is necessary to apply the amortized cost method. Why is it also necessary to prepare an amortization schedule for debt investments classified as FVOCI?
F. IMPAIRMENT OF INVESTMENTS IN DEBT

In principle, the value of an investment is determined by both the expected cash flows and the discount rate that reflects the time value of money. Since a debt instrument specifies the sequence of contractual cash flows, then fluctuations in fair value derive primarily from changes in the discount rate. As you know, the discount rate reflects both the risk-free rate and a premium for the risk of the particular security. Key among the factors contributing to the overall risk of debt investments is the credit risk of the borrower. Consequently, IFRS 9 requires companies with investment in debt to evaluate whether the credit risk of those investments have deteriorated, and if so, to record impairment losses on such investments.

How one goes about determining the impairment for credit losses is complex. Even when fair values are observable via market prices, those prices reflect changes in credit quality, but they also reflect other factors. From the previous discussion, we know of two such factors: (i) the mechanical increase or decrease toward maturity value for debt purchased at a discount or premium, respectively; and (ii) changes in the market interest rate. The difficulty is in distinguishing changes in value due to these two factors apart from that due to credit risk, which is beyond the scope of this text.

The requirement to evaluate debt investments for impairment due to credit risk applies for debt held at amortized cost or FVOCI. While debt held at FVOCI is already reported at fair value on the balance sheet, the impairment requirement is necessary because any impairment in value due to credit deterioration needs to be reported in income rather than in OCI. For debt investments classified as FVPL, fair value changes all flow through income, so it is not necessary to conduct the impairment evaluation.

Note that accounts receivable do not fall under the scope of these impairment requirements, since the allowance for doubtful accounts already includes expected credit losses when estimated in the normal fashion (as discussed in Chapter 5).

G. SUBSTANTIVE DIFFERENCES BETWEEN RELEVANT IFRS AND ASPE

<table>
<thead>
<tr>
<th>Issue</th>
<th>IFRS</th>
<th>ASPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic investments—joint arrangements</td>
<td>IFRS distinguishes joint operations from joint ventures and requires proportionate consolidation for the first and the equity method for the second.</td>
<td>ASPE distinguishes “jointly controlled operations,” “jointly controlled assets,” and “jointly controlled enterprises.” The first two categories use proportional consolidation, while the third uses the equity or cost methods.</td>
</tr>
<tr>
<td>Non-strategic investments—classification</td>
<td>IFRS 9 classifies financial assets according to the business model used to manage the assets.</td>
<td>ASPE does not refer to trading intentions. Instead, investments are categorized by their nature: equity, debt, and derivatives.</td>
</tr>
<tr>
<td>Non-strategic investments—FVOCI</td>
<td>FVOCI investments should be carried at fair value, with unrealized gains or losses going through other comprehensive income.</td>
<td>There is no concept of “other comprehensive income” in ASPE, so there is no treatment similar to FVOCI in IFRS.</td>
</tr>
<tr>
<td>Non-strategic investments—measurement of equity investments</td>
<td>Portfolio equity investments should be reported at fair value and unrealized gains or losses flow through net income.</td>
<td>Enterprises should measure equity investments that are quoted in an active market at fair value, with gains and losses going through income. Equity not quoted in an active market should remain at cost, subject to any impairment.</td>
</tr>
<tr>
<td>Non-strategic investments—measurement of debt</td>
<td>Investments in debt may be classified as. Implementation of the amortized cost method uses the effective interest method.</td>
<td>Investments in debt should use the amortized cost method. ASPE does not state the amortization method required (i.e., either the effective interest or straight-line method may be used). Enterprises may irrevocably elect to measure a debt investment at fair value instead of amortized cost.</td>
</tr>
<tr>
<td>Non-strategic investments</td>
<td>—</td>
<td>An entity may elect to measure any financial asset at fair value despite the above.</td>
</tr>
</tbody>
</table>
L.O. 7-1. Explain what financial assets are, how they differ from other types of assets, and why there is a variety of measurement standards for different categories of financial assets.

- Financial assets are contractual agreements that entitle the holder to future cash flows. Being contractual, financial assets have counterparties who have promised to pay these future cash flows, although these cash flows can be uncertain in both amount and timing (e.g., dividends).
- Accounting standards provide different measurement standards according to the goals or intents that enterprises have for these investments.

L.O. 7-2. Evaluate the nature of a financial asset to classify it into one of seven categories: subsidiaries, joint operations, joint ventures, associates, FVPL, FVOCI, and amortized cost.

- When an enterprise has control or significant influence over another enterprise, it classifies that investment as a subsidiary or associate, respectively. When an enterprise has joint control over the assets and joint obligation for the liabilities of another, it classifies the arrangement as a joint operation, whereas if it has joint control of the net assets, it classifies the arrangement as a joint venture. These four categories are strategic investments in which the enterprise has substantial and concentrated holdings in the equity of other enterprises.
- FVPL financial assets are those that the enterprise intends to sell in the short term for a profit. Any type of financial asset (debt, equity, derivative) can be classified as FVPL.
- FVOCI financial assets are debt instruments held in a business model that aims to profit from both trading and collection of contractual cash flows.
- Amortized cost financial assets are debt instruments that an enterprise intends to hold in order to collect contractual cash flows.

L.O. 7-3. Identify the measurement approach appropriate to the seven categories of financial assets and explain the general nature of the various measurement approaches.

- Enterprises should use consolidation and proportionate consolidation to account for subsidiaries and joint operations, respectively. Enterprises should use the equity method for joint ventures and associates. These three methods share substantial similarities in that they reflect the economic ties among the entities.
- Enterprises should use fair values to report FVPL and FVOCI financial assets.

L.O. 7-4. Analyze historical cost and fair value information to determine the appropriate post-purchase balance sheet measurement and income recognition for three categories of financial assets: FVPL, FVOCI, and amortized cost.

- Unrealized gains or losses arising from changes in fair value flow through the income statement for FVPL financial assets, but through other comprehensive income for assets classified as FVOCI.
- Investments in debt instruments classified as FVOCI or amortized cost require the application of the effective interest method to determine amortized cost for the balance sheet and the amount of interest income to recognize on the income statement.

L.O. 7-5. Apply present value techniques to account for investments in debt instruments.

- Debt investments have five essential parameters: par/face/maturity value, maturity date, coupon rate and frequency, yield or effective interest rate, and purchase price. Any four of these parameters can be used to compute the fifth.
- A bond amortization schedule is useful for calculating the amount of interest and amortized cost through the duration of the investment.
I. ANSWERS TO CHECKPOINT QUESTIONS

CP7-1: Accounts receivable are financial assets because they represent contractual arrangements for future cash flows between the customers and the company that holds the receivables. Inventories are not financial assets even though they are expected to generate future cash flows because there are no contracts that define the payer of those cash flows.

CP7-2: Equity, debt, and derivative identify the nature of the financial instruments. These categorizations are not sufficient for classifying investments because they do not capture the reasons for the investment (e.g., whether to hold or to trade).

CP7-3: The four categories of strategic investments and their accounting methods under IFRS are as follows: subsidiary—consolidation; joint operation—proportionate consolidation; joint venture—equity method; associate—equity method.

CP7-4: The key difference between FVPL and FVOCI investments is the treatment of unrealized gains and losses. Such unrealized gains and losses flow through net income for FVPL investments, but they flow through OCI for FVOCI investments.

CP7-5: Rules concerning the reclassification of financial assets are important because, in the absence of such rules, enterprises may engage in earnings management by selectively reclassifying certain investments to increase or decrease income or assets.

CP7-6: An amortization schedule is necessary for debt investments classified as FVOCI because we need to distinguish two sources of change in value: the predictable change caused by the amortization of premium or discount, and the unpredictable changes due to changes in market interest rates, credit risk, and so on.

J. GLOSSARY

associate: An entity over which the investor has significant influence and that is neither a subsidiary nor an interest in a joint venture.

control: The power to govern the financial and operating policies of an entity.

debt instrument: Any financial instrument that is not an equity instrument or a derivative.

derivative: A financial instrument with all three of the following characteristics: (i) its value changes according to a specified variable, such as an interest rate or stock price; (ii) it requires no initial net investment or a small investment relative to non-derivative contracts with similar exposure to the specified variable; and (iii) it is settled at a future date.

effective interest method: Calculates the amortized cost of a financial asset at each reporting date as the present value of the asset’s cash flows discounted at the effective interest rate or yield.

effective interest rate (or yield): The discount rate that results in a present value equal to the purchase price of a financial asset. In finance, this is called the internal rate of return (IRR).

equity instrument: A contract, such as a common share, that gives the holder the residual interest in an entity after deducting all of its liabilities.

equity method: A method of accounting whereby the balance sheet value of the investment equals cost adjusted by the investor’s share of the investee’s post-acquisition changes in net assets, and the income recognized equals the investor’s share of the investee’s net income.

financial asset: An asset arising from contractual agreements on future cash flows.

financial instrument: Any contract that gives rise to (i) a financial asset for one entity and (ii) a financial liability or equity instrument for another entity.

joint arrangement: A contractual arrangement whereby two or more parties undertake an economic activity that is subject to joint control by those parties.

joint control: A contractually agreed upon sharing of control over an economic activity; joint control exists only when the strategic decisions relating to the activity require the unanimous consent of the parties sharing control.

joint operation: A joint arrangement in which the investor has rights to the assets and obligations for the liabilities of the arrangement.
joint venture: A joint arrangement in which the investor has rights to the net assets of the arrangement.

parent: An entity that controls another entity (the subsidiary).

significant influence: The power to participate in the financial and operating policy decisions of the investee (but not to the extent of control or joint control).

subsidiary: An entity that is controlled by another entity (known as the parent).

yield: See effective interest rate.

K. REFERENCES
Authoritative standards:

<table>
<thead>
<tr>
<th>IFRS</th>
<th>ASPE section</th>
</tr>
</thead>
<tbody>
<tr>
<td>IFRS 10—Consolidated financial statements</td>
<td>1601—Consolidated financial statements</td>
</tr>
<tr>
<td>IAS 28—Investment in associates and joint ventures</td>
<td>3051—Investments</td>
</tr>
<tr>
<td>IFRS 9—Financial instruments:</td>
<td>3856—Financial instruments</td>
</tr>
<tr>
<td>IFRS 11—Joint arrangements</td>
<td>3056—Interests in joint arrangements</td>
</tr>
</tbody>
</table>

MyAccountingLab
Make the grade with MyAccountingLab: The problems marked in red can be found on MyAccountingLab. You can practise them as often as you want, and most feature step-by-step guided instructions to help you find the right answer.

L. PROBLEMS

P7-1. The nature of financial assets (L.O. 7-1) (Easy – 3 minutes)
Identify whether each of the following items is a financial asset:
   a. Cash
   b. Account receivable
   c. Investment in property, plant, and equipment
   d. Investment in a derivative
   e. Investment in bonds

P7-2. The nature of financial assets (L.O. 7-1) (Easy – 3 minutes)
Identify whether each of the following items is a financial asset:
   a. Prepaid expense
   b. Inventory
   c. Investment in shares of another entity
   d. Investment in a joint venture
   e. Bond issued by the reporting entity

P7-3. The nature of financial assets (L.O. 7-1) (Medium – 5 minutes)
Briefly answer the following questions:
   a. Describe the single most important characteristic of a financial asset that distinguishes it from a real asset.
   b. Keeping in mind your answer to (a), does cash have this characteristic of a financial asset? Why is cash a financial asset?
P7-4. The nature of financial assets (L.O. 7-1) (Medium – 10 minutes)

Company X contributes $17 million while Company Y contributes management expertise toward the creation of a joint venture called Zed. Zed purchases a building and incurs a mortgage to finance the purchase. The joint venture renovates the building with the help of contractors, who are paid 15 days after they render their services. After completion of renovations, Zed operates the building as a hotel. It also sells some of the rooms to individual investors. As a part of the purchase of each room, an investor had rights to 60% of the revenue from the hotel room purchased, while Zed retained 40% to cover operating costs.

Required:

Identify all the financial assets involved in the above situation.

P7-5. The nature of financial assets (L.O. 7-1) (Medium – 10 minutes)

Alpha purchases a hotel with 100 similar rooms. To help finance this purchase, Alpha sells these rooms to individual investors for $200,000 each. An investor that owns a single room receives 55% of 1/100th of the revenue of the hotel (i.e., 0.55%), while the hotel retains the other 0.45%. An investor who wishes to liquidate his or her investment may sell the room back to Alpha for the original $200,000, but cannot otherwise sell the room to other parties.

Required:

Identify all the financial assets involved in the above situation.

P7-6. Classifying financial assets (L.O. 7-2) (Easy – 10 minutes)

For each of the following financial asset classifications shown in the left column, identify the combinations of (i) the type of financial instrument in the middle column that can be put into that classification and (ii) the trading intent that would lead to that classification.

Example: FVPL = (Equity, debt, or derivative) + To trade over short term

<table>
<thead>
<tr>
<th>Accounting classification</th>
<th>Type of financial instrument</th>
<th>Business model</th>
</tr>
</thead>
<tbody>
<tr>
<td>FVPL</td>
<td>Equity</td>
<td>Control</td>
</tr>
<tr>
<td>FVOCI</td>
<td>Amortized cost</td>
<td>Joint control of net assets</td>
</tr>
<tr>
<td></td>
<td>Associate</td>
<td>Significant influence</td>
</tr>
<tr>
<td></td>
<td>Joint venture</td>
<td>To realize changes in value</td>
</tr>
<tr>
<td></td>
<td>Joint operations</td>
<td>To collect contractual cash flows</td>
</tr>
<tr>
<td></td>
<td>Subsidiary</td>
<td>Joint control of assets and joint obligation for liabilities</td>
</tr>
<tr>
<td></td>
<td></td>
<td>To sell financial assets and collect contractual cash flows</td>
</tr>
</tbody>
</table>

P7-7. Classifying financial assets (L.O. 7-2) (Medium – 10 minutes)

Consider the following six investments:

a. Atlantic Company buys 5,000 common shares of a publicly traded company that has 200 million shares outstanding.

b. Beetlewedd buys $20,000 in bonds maturing in five years.

c. A bank lends $400,000 to a person to purchase a home.

d. An exporter enters into a currency swap (a derivative contract) to secure the Canadian dollar price of a sale.

e. Elite Cars buys 800,000 shares in Selective Autos.

f. Fanciful Gifts buys 3,000 preferred shares in another company. These shares have no voting rights.
Required:
Under IFRS 9, financial assets can be put into one of seven categories: subsidiaries, joint operations, joint ventures, associates, FVPL, FVOCl, and amortized cost. For each of the above investments, identify the possible categories into which it can be placed. More than one category is possible for some items.

P7-8. Classifying financial assets
Consider the six investments listed in the problem P7-7.

Required:
Under ASPE, financial assets can be put into one of six categories: subsidiaries, joint ventures, associates, portfolio equity investment, debt investment, and derivatives. For each of the above investments, identify the possible categories into which it can be placed. More than one category is possible for some items.

P7-9. Classifying financial assets
Consider the following eight investments.

a. Investment in 500 shares of Bank of Montreal. Management believes the shares are currently underpriced.
b. Investment in bonds maturing in two years. Management made the purchase to park idle cash until after two years, when it will make a major capital expenditure.
c. Investment in 800,000 shares of Calisto Corp., a public company with 2 million shares outstanding.
d. Purchase of 800 shares of Dupree Donuts, a private company with 1,000 shares outstanding.
e. Purchase of 1,000 shares of Epic Adventures, a public company with 10 million shares outstanding.
f. Investment in 60% of the outstanding shares of Fruitloops Fountains. An agreement with the company’s founder specifies that he retains the right to make all operating decisions for Fruitloops.
g. St. George Company buys 15% of the outstanding shares of Gigantic Gargoyles. After the purchase, St. George appoints its chief executive office to the board of directors of Gigantic Gargoyles.
h. Investment in bonds maturing in 30 years.

Required:
Using IFRS 9, classify each of the above items into one of the seven categories of financial assets relevant for financial reporting purposes. Select the category that best suits the situation given.

P7-10. Classifying financial assets
Consider the eight investments listed in problem P7-9.

Required:
Using ASPE, classify each of the above items into one of the six categories of financial assets relevant for financial reporting purposes. Select the category that best suits the situation given.

P7-11. Classifying financial assets
Foxtrot Ltd. made the following investments during its current fiscal year:

a. The company places $30,000 in a six-month term deposit with its bank.
b. The company purchases from its broker a call option on 1,000 shares of RBC Financial Group, a publicly traded company, for $3,500, in anticipation of an increase in the share price of RBC.
c. Foxtrot buys 25% of the outstanding shares of Quickstep Company. The purchase was made in anticipation of a bid by Tango Inc. to purchase all of the shares of Quickstep within the next nine months.
CHAPTER 7  Financial Assets

d. The company buys $15,000 of shares in Encana, a publicly traded corporation with a market capitalization of more than $20 billion.

**Required:**

Identify how Foxtrot should categorize the above financial assets under IFRS 9. Briefly explain the reason for the classification.

**P7-12. Classifying financial assets**  
**L.O. 7-2**  
(Medium – 10 minutes)

Refer to the information in the problem P7-11.

**Required:**

Using ASPE, identify how Foxtrot should categorize the above financial assets. Briefly explain the reason for the classification.

**P7-13. Initial recognition of financial assets**  
**L.O. 7-3**  
(Medium – 15 minutes)

On January 1, 2018, Investor’s Club Inc. (ICI) made a number of non-strategic investments detailed below:

a. The company acquired 100,000 ordinary shares in Norman Inc. for $5 cash per share plus a $10,000 transaction fee. ICI’s management did not make any specific election with respect to the classification of this investment.

b. ICI purchased 5,000, $25, 3.0% cumulative preferred shares in Bleay Inc. for $130,000 including transaction costs of $5,000. ICI irrevocably elected to present changes in fair value through OCI.

c. ICI paid $2,393,859 plus a $50,000 transaction fee for $2.5 million of 3.5% semi-annual bonds issued by Zoe Corp. that mature in five years. The effective rate of interest earned is 2.0% PER PERIOD. The objective of the company’s business model for this type of asset is to hold the investment for the purpose of collecting the contractual cash flows.

**Required:**

Record the journal entries necessary to reflect the foregoing transactions. Briefly justify your chosen treatment.

**P7-14. Subsequent measurement of financial assets**  
**L.O. 7-4**  
(Medium – 15 minutes)

Refer to the facts set out in P7-13 above and consider the following additional information:

a. On July 1, 2018, ICI received a $43,750 interest payment on the Zoe Corp. bonds. The next interest payment is due on January 1, 2019.

b. On September 30, 2018, ICI received a $3,750 dividend on the Bleay Inc. cumulative preferred shares.

c. On December 31, 2018, ICI received a $2,000 dividend on the Norman Inc. ordinary shares.

d. The market value of the Norman Inc. ordinary shares as at December 31, 2018, was $4.90 per share.

e. The market value of the Bleay Inc.’s cumulative preferred shares as at December 31, 2018, was $26.25 per share.

f. The market value of the investment in the Zoe Corp. bonds as at December 31, 2018, was $2,500,000.

ICI has a December 31 year-end. It does not prepare interim financial statements.

**Required:**

Prepare the necessary journal entries to record income earned on these assets in 2018 and the requisite fair value adjustments at December 31, 2018.

**P7-15. Post-purchase measurement of financial assets**  
**L.O. 7-3**  
(Easy – 10 minutes)

After the initial purchase, financial assets can be reported using one of six measurement bases under IFRS:
Required:
For each of the following financial assets, identify the appropriate measurement basis according to IFRS.

<table>
<thead>
<tr>
<th>Measurement basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>consolidation</td>
</tr>
<tr>
<td>proportionate consolidation</td>
</tr>
<tr>
<td>equity method</td>
</tr>
<tr>
<td>fair value with changes through income</td>
</tr>
<tr>
<td>fair value with changes through OCI*</td>
</tr>
<tr>
<td>amortized cost</td>
</tr>
</tbody>
</table>

P7-16. Post-purchase measurement of financial assets  (L.O. 7-3) (Medium – 15 minutes)

Accounting standards provide for a variety of different measurement bases for different types of financial assets. IFRS has six measurement bases:

<table>
<thead>
<tr>
<th>Measurement basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>consolidation</td>
</tr>
<tr>
<td>proportionate consolidation</td>
</tr>
<tr>
<td>equity method</td>
</tr>
<tr>
<td>fair value with changes through income</td>
</tr>
<tr>
<td>fair value with changes through OCI*</td>
</tr>
<tr>
<td>amortized cost</td>
</tr>
</tbody>
</table>

Required:

a. Explain why reporting entities should, on the one hand, use consolidation, proportionate consolidation, and the equity method for investments in subsidiaries, joint operations, joint ventures, and associates, but on the other hand use the fair value methods for equity investments that are held for trading profits.

b. Explain, for investments in debt securities, why the amortized cost method is more appropriate for held in a business model that collects contractual cash flows investments, but one of the fair value methods is more appropriate for other business models.

P7-17. Post-purchase measurement of financial assets  (L.O. 7-3) (Easy – 5 minutes)

On January 1, 2016, Arch Ltd. purchased 30% of the common shares of AP Inc. for $1,700,000. In 2016, AP reported net income of $880,000 and paid dividends of $600,000.

Required:

a. Which of the following conditions must be met for Arch to use the equity method to report its investment in AP?
   i. Arch owns at least 20% of the voting shares of AP.
   ii. Arch has control over AP.
   iii. Arch has a significant interest in AP.
   iv. Arch is able to exercise significant influence over AP.

b. How much income would be reported by Arch in 2016 for its investment in AP under the equity method?

---

6 Adapted from CGA-Canada FA2 examination, June 2009.
P7-18. The equity method

On January 1, 2017, Sunshine Ltd. acquired 30% of the outstanding ordinary shares of Moonbeam Inc. for $270,000 and now has significant influence over the investee. The fair value of Moonbeam’s net identifiable assets at acquisition date was $900,000. Pertinent information follows:

<table>
<thead>
<tr>
<th>Moonbeam Inc.</th>
<th>Year ended Dec. 31, 2017</th>
<th>Year ended Dec. 31, 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net income</td>
<td>$300,000</td>
<td>($80,000)</td>
</tr>
<tr>
<td>Dividends declared and paid</td>
<td>50,000</td>
<td>30,000</td>
</tr>
<tr>
<td>Market value of investment</td>
<td>370,000</td>
<td>320,000</td>
</tr>
</tbody>
</table>

Required:

a. Prepare Sunshine Ltd.’s journal entries related to its investment in Moonbeam Inc. for the years ending December 31, 2017, and December 31, 2018, including the journal entry to record the acquisition.
b. Determine the balance in the investment account as at December 31, 2018.

P7-19. Post-purchase measurement of financial assets

On January 25, 2017, Douglas Ltd. purchased 1,000 common shares of BMO (Bank of Montreal) for $65 each. During the remainder of 2017, Douglas received $2.80/share in dividends and BMO’s earnings per share were $5.30. The closing price of the shares on the fiscal year-end date of December 31, 2017, was $69.

Required:

Assume that Douglas classified the investment as FVPL.

a. At what value should the company report the BMO shares on its December 31, 2017, balance sheet?
b. How much income should the company report in relation to these shares?
c. How much OCI should Douglas report in relation to these shares?

P7-20. Post-purchase measurement of financial assets

Refer to the facts presented in problem P7-19.

Required:

Assume that Douglas made the irrevocable election to measure the investment at fair value through OCI.

a. At what value should Douglas report the BMO shares on its December 31, 2017, balance sheet?
b. How much income should Douglas report in relation to these shares?
c. How much OCI should Douglas report in relation to these shares?

P7-21. Post-purchase measurement of financial assets

On January 1, 2016, Ganges Marine Supplies purchased a Government of Canada bond at par for $5,000. The bond has an interest rate of 4% and matures in three years. By December 31, 2016, market interest rates had increased such that the fair value of the bond decreased to $4,900. The fair value of the bond decreased further to $4,700 on December 31, 2017 (two years after purchase).

Required:

Assume that Ganges classified the investment as amortized cost.

a. At what value should Ganges report the bonds on its December 31, 2016, balance sheet?
b. How much income or loss should Ganges report in relation to this bond?
c. How much OCI should Ganges report in relation to this bond?
P7-22. Post-purchase measurement of financial assets  (L.O. 7-4) (Easy – 10 minutes)

Refer to the facts in problem P7-21.

Required:

Assume that Ganges classified the investment as FVOCI.

a. At what value should Ganges report the bonds on its December 31, 2016, balance sheet?
b. How much income or loss should Ganges report in 2013 in relation to this bond?
c. How much OCI should Ganges report for 2016 in relation to this bond?
d. How much OCI should Ganges report for 2017 in relation to this bond?
e. How much is accumulated OCI on the balance sheet at December 31, 2017?

P7-23. Post-purchase measurement of financial assets  (L.O. 7-3, L.O. 7-4) (Medium – 15 minutes)

On January 1, 2017, LL Company acquired 20,000 shares, representing 20% of the outstanding shares of TT Limited at a price of $15 per share. On July 31, 2017, TT declared and paid a dividend of $1 per share. TT’s net income for 2014 was $250,000. On December 31, 2017, the shares of TT were trading on the Toronto Stock Exchange at $18 per share.

Required:

LL is not sure how to report its investment in TT shares. Using the following format, indicate the amounts that would appear on the balance sheet and the statement of comprehensive income for 2017 if the investment (a) has been irrevocably elected to be measured at fair value through OCI, (b) is classified as FVPL, or (c) is an associate.

<table>
<thead>
<tr>
<th>Fair value through OCI election</th>
<th>FVPL</th>
<th>Associate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Balance sheet</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investment in TT shares</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Statement of comprehensive income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dividend income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other income (specify types)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>—</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subtotal (= effect on net income)</td>
<td>$80,000</td>
<td>$80,000</td>
</tr>
<tr>
<td><strong>Other comprehensive income</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total (= effect on comprehensive income)</td>
<td>$80,000</td>
<td>$80,000</td>
</tr>
</tbody>
</table>

P7-24. Post-purchase measurement of financial assets  (L.O. 7-3) (Medium – 5 minutes)

Refer to the facts provided in the problem P7-23. Provide the journal entries assuming that LL classifies TT as an associate.

P7-25. Post-purchase measurement of financial assets  (L.O. 7-3, L.O. 7-4) (Medium – 10 minutes)

Reversiflex Inc. purchased three equity investments during the current fiscal year ended December 31.

<table>
<thead>
<tr>
<th>Investment A</th>
<th>Investment B</th>
<th>Investment C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance sheet value, Dec. 31</td>
<td>$120,000</td>
<td>$63,000</td>
</tr>
<tr>
<td>Dividends received</td>
<td>1,500</td>
<td>2,000</td>
</tr>
<tr>
<td>Dividend income</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Total income (loss) recognized on the investment</td>
<td>7,000</td>
<td>2,000</td>
</tr>
<tr>
<td>Balance sheet reserve for cumulative OCI on unrealized gains (losses)*</td>
<td>—</td>
<td>3,000 Cr.</td>
</tr>
</tbody>
</table>

* Adapted from CGA-Canada FA2 examination, December 2008.
CHAPTER 7  Financial Assets

Required:

a. Based on the available information, how did Reversiflex classify each financial asset?

b. Determine the cost of each of the three investments. If it is not possible to do so with the available information, indicate what additional information would be needed.

P7-26. Post-purchase measurement of financial assets

True Worth Hardware operates a chain of hardware stores. Recent operations have been stable and profitable, resulting in a significant amount of cash inflows. During the past fiscal year ended December 31, the company made a number of investments, described below.

a. True Worth bought 20,000 shares of MasterTrade, a supplier of equipment for construction and renovation. With in-depth knowledge of the hardware retailing business, True Worth’s management believes that MasterTrade’s shares are undervalued and that the company could make a quick profit selling the shares within the next 12 months. True Worth purchased the shares at a price of $42 each, and received $0.50 per share of dividends during the year. The shares traded at $46 at the fiscal year-end.

b. The company purchased 6,000 units of a mutual fund that cost $22 each. The mutual fund invests primarily in shares. At the end of the year, the units had a quoted market value of $21.

c. At the beginning of the year, True Worth bought 25% of the common shares in Unique Tools, one of its smaller suppliers, for $3 million. These shares had a fair value of $3.2 million at the end of the year. During the year, Unique Tools had profits of $800,000 and paid dividends of $160,000.

Required:

Determine how True Worth should report the above investments in its financial statements. Include effects both on the balance sheet and the statement of comprehensive income.

P7-27. Post-purchase measurement of financial assets

Refer to the facts presented in problem P7-26.

Required:

Determine how True Worth should report the above investments in its financial statements if the company applies ASPE. Include effects both on the balance sheet and the income statement.

P7-28. Post-purchase measurement of financial assets

Refer to the facts in problem P7-26. Record the journal entries appropriate for True Worth’s three investments beginning with the initial purchase.

P7-29. Post-purchase measurement of non-strategic financial assets

Birch Corp. is a real estate developer with headquarters in Burlington, Ontario. As a result of recent increases in land prices, Birch has accumulated a substantial amount of excess cash. It is looking to invest in a building supply company, but has not yet found a suitable company. To earn a reasonable return and to minimize risk, Birch invests its excess cash in common shares of large, stable corporations. The following describes the events surrounding one of Birch’s investments:

a. On January 1, 2016, Birch paid $1,000,000 to purchase 100,000 common shares of Poplar Inc.

b. On December 27, 2016, Poplar declared and paid a dividend of $0.50 per common share.

Adapted from CGA-Canada FA2 examination, June 2009.
c. On December 31, 2016, the market value of the common shares was $1,030,000.
d. On June 30, 2017, Birch sold the common shares for $1,045,000.

**Required:**

Using the following table, indicate the amounts to be reported on the balance sheet, through profit or loss, and through other comprehensive income for 2016 and 2017 under two scenarios:

- Birch makes the irrevocable election to measure at fair value through OCI.
- Birch does not make the irrevocable election to measure at fair value through OCI.

<table>
<thead>
<tr>
<th></th>
<th>With election</th>
<th></th>
<th>Without election</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2016</td>
<td>2017</td>
<td>2016</td>
<td>2017</td>
</tr>
<tr>
<td>Balance sheet</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amount through profit or loss</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other comprehensive income</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**P7-30. Post-purchase measurement of non-strategic financial assets**

(L.O. 7-4) (Medium – 10 minutes)

Laurel Ltd. has a December 31 fiscal year-end. During 2017, the company purchased 15,000 shares of Pinegreen Company for $4.40 per share ($66,000 total), and sold these shares in 2020 for $5.60 per share. Pinegreen declared and paid dividends of $0.10, $0.20, and $0.30 per share at the end of 2017, 2018, and 2019, respectively. Pinegreen’s shares closed at $4.80, $4.20, and $5.20 at the end of 2017, 2018, and 2019, respectively.

**Required:**

Assume that Laurel classifies this investment in Pinegreen as FVPL. Determine the amounts to be reported on Laurel’s balance sheet and statement of comprehensive income with respect to the company’s investment in Pinegreen Company for the four years 2017 to 2020.

**P7-31. Post-purchase measurement of non-strategic financial assets (IFRS 9)**

(L.O. 7-4) (Medium – 10 minutes)

Refer to the facts presented in problem P7-30.

**Required:**

Assume that Laurel irrevocably elects to record changes in the fair value of Pinegreen in OCI. Determine the amounts to be reported on Laurel’s balance sheet and statement of comprehensive income with respect to the company’s investment in Pinegreen Company for the four years 2017 to 2020.

**P7-32. Post-purchase measurement of non-strategic financial assets**

(L.O. 7-4) (Medium – 15 minutes)

During 2016, Heather Ltd. purchased 6,000 shares of Oaktree Corp. for $31 per share ($186,000 total). Heather held these shares until September 2018, when it sold them for $36 per share. During these three years, Oaktree paid dividends of $1 per share on July 31. On Heather’s fiscal year-end (December 31), shares of Oaktree closed at $34, $29, and $38 in 2016, 2017, and 2018, respectively.

**Required:**

Assume that the company designated half of the Oaktree shares as FVPL and the other half irrevocably elected to record fair value changes through OCI. Determine the amounts to be reported on Heather’s balance sheet and statement of comprehensive income with respect to the company’s investment in Oaktree Corp. What do you observe about the total amount of retained earnings for the three years combined?
P7-33. Post-purchase measurement of non-strategic financial assets

(L.O. 7-4) (Medium – 20 minutes)\(^9\)

Lion had the following transactions relating to its investments during the current fiscal year. Lion uses the effective interest method of amortization of premiums or discounts when applicable.

a. On July 1, Lion acquired a $200,000, 6%, eight-year government bond with interest paid semi-annually on January 1 and July 1. Because the market rate of interest was 4% on that date, Lion paid $227,156 for the bond. The bonds were classified as amortized cost by Lion and had a fair value of $210,000 plus accrued interest on December 31.

b. On July 1, Lion acquired 6,000 shares of Zebra at a price of $25 per share. On December 31, dividends of $1.50 per share were declared with an expected date of payment 15 days later. On December 31, the fair value of the Zebra shares had increased to $28 per share. The shares are classified as fair value through profit or loss by Lion.

c. On July 1, Lion acquired 30,000 shares (30%) of the outstanding shares of Giraffe at a price of $11 per share, giving it significant influence over Giraffe. Giraffe had net income of $400,000 for the six months ended December 31, and declared and paid dividends of $220,000 to its shareholders on December 31. On December 31, Giraffe's shares had a fair value of $13 per share.

**Required:**

Provide all required journal entries relating to these investments on July 1, and December 31, including any required journal entries relating to the change in fair value for the year (if no journal entry is required relating to the change in fair value, state so).

P7-34. Applying present value techniques to debt instruments

(L.O. 7-5) (Easy – 5 minutes)

A bond has a maturity value of $100,000 payable in 10 years. These bonds have a 5% coupon rate payable annually, and the market yield was 6% when the bonds were purchased.

**Required:**

a. Is this a discount bond or a premium bond?

b. Compute the amount required to purchase this bond at the beginning of the 10-year period.

P7-35. Applying present value techniques to debt instruments

(L.O. 7-5) (Easy – 5 minutes)

A bond has a maturity value of $10,000 payable in 10 years. These bonds have a 7% per year coupon rate payable semi-annually, and the market yield was 6% per year when the bonds were purchased.

**Required:**

a. Is this a discount bond or a premium bond?

b. Compute the amount required to purchase this bond at the beginning of the 10-year period.

P7-36. Post-purchase measurement of investments in debt instruments

(L.O. 7-5) (Easy – 10 minutes)

Armstrong Corp. purchased a bond with a maturity value of $10,000 payable in five years. These bonds have a 6% coupon rate payable annually. Armstrong paid $10,890 for these bonds, giving a yield of 4%.

**Required:**

Prepare an amortization schedule that shows the amortized cost of this bond at the end of each of five years and the amount of interest income for each of those five years.

---

\(^9\) Adapted from CGA-Canada FA2 examination, March 2009.
P7-37. Post-purchase measurement of investments in debt instruments

Refer to the facts in problem P7-36.

Required:
Using the straight-line alternative permitted under ASPE, prepare an amortization schedule that shows the amortized cost of this bond at the end of each of five years and the amount of interest income for each of those five years.

P7-38. Post-purchase measurement of investments in debt instruments

On January 1, 2013, Bamfield Company purchased bonds with a maturity value of $10,000 for $9,147. These bonds have a 4% per year coupon rate payable semi-annually on June 30 and December 31. The bond matures on December 31, 2017. On January 1, 2013, the market yield for bonds of equivalent risk and maturity was 6% per year.

Required:
Prepare an amortization schedule that shows the amortized cost of this bond at the end of each of five years and the amount of interest income for each of those five years.

P7-39. Post-purchase measurement of investments in debt instruments

Refer to the facts in problem P7-38.

Required:
Using the straight-line alternative permitted under ASPE, prepare an amortization schedule that shows the amortized cost of this bond at the end of each of five years and the amount of interest income for each of those five years.

P7-40. Determining the effective interest rate

On January 1, 2018, Dudas Inc. paid $917,783 plus a $5,000 transaction fee to acquire $1,000,000 in bonds that mature in 10 years. The bonds pay interest annually at 4.0% per annum on December 31. Dudas Inc. classifies its investment as a financial asset at amortized cost, which is in keeping with the objective of its business model and the contractual cash flow characteristics of the investment.

Dudas Inc. has a December 31 year-end. It does not accrue interest income during the year.

Required:
a. Determine the effective interest rate that Dudas is earning on its investment. Use a financial calculator or spreadsheet.
b. Prepare the journal entry to record the acquisition of the investment.
c. Prepare the journal entry to record the receipt of interest on December 31, 2018.
d. Prepare the journal entry to record the receipt of interest on December 31, 2019.

P7-41. Post-purchase measurement of investments in debt instruments

The Argyle Company acquired a $10 million face value bond that has an 8% coupon rate (pays interest annually on December 31) on January 1, 2017. The bond matures on December 31, 2022. On January 1, 2017, the market yield for bonds of equivalent risk and maturity was 6%.
**Required:**

a. How much did Argyle pay for this bond on January 1, 2017?

b. On December 31, 2017, the market yield for bonds of equivalent risk and maturity is 7%. What would be the market value of this bond on December 31, immediately after the coupon payment on that date?

c. On December 31, 2018, the market yield for bonds of equivalent risk and maturity is 8%. What would be the market value of this bond on December 31, immediately after the coupon payment on that date?

d. Assume one of three scenarios: the bond is to be (i) amortized cost, (ii) FVOCI, or (iii) FVPL:

- How much would the balance sheet value of this bond be on December 31, 2017, and December 31, 2018?
- How much income would be reported in 2017 and 2018 for this bond?
- How much would OCI and accumulated OCI be for fiscal years 2017 and 2018?

---

**P7-42. Post-purchase measurement of investments in debt instruments**

Adobe Financial specializes in providing financing for commercial real estate purchases. The company’s main source of income is the interest charged on these loans. At the end of 2018, the company had approximately $700 million of mortgages outstanding. To facilitate financial reporting, the company groups these mortgages according to the time to maturity (up to one year, one to three years, and three to five years). The following table provides further information on these mortgages as at the year-end of December 31, 2018:

<table>
<thead>
<tr>
<th></th>
<th>Up to one year</th>
<th>1–3 years</th>
<th>3–5 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average maturity</td>
<td>6 months</td>
<td>2 years</td>
<td>4 years</td>
</tr>
<tr>
<td>Scheduled semi-annual payments</td>
<td>$4m</td>
<td>$5m</td>
<td>$20m</td>
</tr>
<tr>
<td>Average yield on loans at inception</td>
<td>6%/a</td>
<td>6%/a</td>
<td>8%/a</td>
</tr>
<tr>
<td>Principal amount outstanding as at Dec. 31, 2018</td>
<td>$100m</td>
<td>$200m</td>
<td>$400m</td>
</tr>
<tr>
<td>Estimated market value, Dec. 31, 2018</td>
<td>$101m</td>
<td>$203m</td>
<td>$420m</td>
</tr>
</tbody>
</table>

Adobe’s standard policy for all mortgages is semi-annual payments of interest, which is compounded semi-annually, plus payment of principal upon maturity.

**Required:**

a. How should Adobe account for these mortgage receivables?

b. At what value should Adobe report its mortgage receivables at the end of 2018?

c. Considering only the mortgage receivables outstanding at the end of 2018, project the value of mortgage receivables that should be reported at the end of 2019 and 2020. For purposes of this projection, you can use the average maturity and ignore the fact that there is a range of maturities that form this average.

---

**P7-43. Post-purchase measurement of investments in debt instruments**

Gander Corp. is a small public company with a December 31 fiscal year-end. At the end of 2013, the company had $3 million of excess cash. The board of directors decided that the company should hold the funds until the right business opportunity appeared, rather than pay out the funds to its shareholders and then have to issue shares to obtain the financing later. The board directed management to invest the funds in a diversified portfolio of debt instruments. As a result, on January 1, 2014, management purchased $1 million of short-term government bonds, $1 million of medium-term government bonds, and $1 million of high-quality corporate bonds. (The amounts are face values, not investment cost.) The following table provides additional information about these investments:
<table>
<thead>
<tr>
<th></th>
<th>Short-term government bonds</th>
<th>Medium-term government bonds</th>
<th>Corporate bonds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Face value</td>
<td>$1,000,000</td>
<td>$1,000,000</td>
<td>$1,000,000</td>
</tr>
<tr>
<td>Coupon rate</td>
<td>3%</td>
<td>5%</td>
<td>6%</td>
</tr>
<tr>
<td>Yield</td>
<td>3%</td>
<td>4%</td>
<td>8%</td>
</tr>
<tr>
<td>Interest frequency</td>
<td>Annual</td>
<td>Annual</td>
<td>Annual</td>
</tr>
<tr>
<td>Accounting classification</td>
<td>Amortized cost</td>
<td>FVOCI</td>
<td>FVOCI</td>
</tr>
<tr>
<td>Investment cost</td>
<td>?</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Market value, Dec. 31, 2014</td>
<td>$985,000</td>
<td>$1,040,000</td>
<td>$950,000</td>
</tr>
<tr>
<td>Market value, Dec. 31, 2015</td>
<td>$1,000,000</td>
<td>$1,028,000</td>
<td>$970,000</td>
</tr>
<tr>
<td>Market value, Dec. 31, 2016</td>
<td>—</td>
<td>$1,020,000</td>
<td>$1,050,000</td>
</tr>
<tr>
<td>Market value, Dec. 31, 2017</td>
<td>—</td>
<td>$1,010,000</td>
<td>$1,010,000</td>
</tr>
<tr>
<td>Market value, Dec. 31, 2018</td>
<td>—</td>
<td>$1,000,000</td>
<td>$1,000,000</td>
</tr>
</tbody>
</table>

**Required:**

a. Determine the investment cost of the three investments on January 1, 2014.
b. Prepare amortization schedules for the medium-term government bonds and the corporate bonds. Use a computer spreadsheet to help you do your calculations.
c. For each of the three investments, determine the following amounts for each fiscal year:
   - balance sheet asset
   - income
   - other comprehensive income
   - accumulated other comprehensive income component of equity
d. Had Gander classified the medium-term government bonds and the corporate bonds as amortized cost financial assets, how much would have been the total amount of income over the five years for each of the bonds?
e. Had Gander classified the medium-term government bonds and the corporate bonds as FVPL financial assets, how much would have been the total amount of income over the five years for each of the bonds? What would be different under this scenario?
M. MINI-CASES

CASE 1
Good Fortune Co.
(30 minutes)

Good Fortune Co. is a small public company that operates a chain of furniture stores throughout Canada. The company was founded by Kate Homewood, who still owns 25% of the outstanding shares and who remains the CEO. The company has been successful through its three decades of operations largely due to Kate’s ability to accurately gauge customers’ taste for home furnishings. With successful operations, significant additional funding from its initial public offering, and little reliance on debt financing, Good Fortune has been able to expand to 15 locations across the country despite the ups and downs of the business cycle.

Prior to the latest recession, the company had plans to open three more stores in Halifax, St. John’s, and Regina. The expansion would have been funded by internal cash flows from existing operations. However, top management decided to shelve the expansion plans in light of the deep recession and to reconsider these expansion plans when the economy improves again.

With expansion plans on hold, Kate has been wondering what to do with the $30 million of cash that had been set aside for the three new locations. While adept at marketing and operations, Kate has no particular financial training. She has asked you, the chief financial officer, to draft a short report outlining the options she and the board of directors should consider. She mentioned that she would like to know what types of investments would be suitable, what the effects might be on the financial statements, and how investors might react.

Required:
As the CFO of Good Fortune, prepare the report requested by CEO Kate Homewood.

CASE 2
Tightrope Limited
(45 minutes)

Tightrope Limited (TRL) is a large public company with diversified operations in five different industries. Over the past decade, the company has generated significant cash flows from its operations. However, the company has paid out only a small portion of this cash flow to shareholders. Management and the board of directors believe in retaining significant financial assets so that the company has funds available to make strategic investments and so that it can survive through tough economic times. For the years ended 2016, 2017, and 2018, the company reported before-tax profits of $400, $450, and $380 million, respectively.

At the fiscal year-end of December 31, 2018, the company had the following investments:

<table>
<thead>
<tr>
<th>Investment (in $millions)</th>
<th>Cost</th>
<th>Market value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash and cash equivalents</td>
<td>$ 50</td>
<td>$ 50</td>
</tr>
<tr>
<td>Affiliates under significant influence</td>
<td>450</td>
<td>750</td>
</tr>
<tr>
<td>Equity investments carried at fair value through profit or loss</td>
<td>200</td>
<td>300</td>
</tr>
<tr>
<td>Debt investments carried at fair value through other comprehensive income</td>
<td>350</td>
<td>300</td>
</tr>
<tr>
<td>Amortized cost debt instruments, purchased at par with average yield of 6%, five years remaining to maturity</td>
<td>800</td>
<td>500</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$1,850</strong></td>
<td><strong>$1,900</strong></td>
</tr>
</tbody>
</table>

TRL also has non-financial assets with carrying value of $2.0 billion on the balance sheet. As of the end of 2018, the company had bonds outstanding in the amount of $1.5 billion with an interest rate of 8%. Of this amount, $300 million will need to be repaid on March 30,
2019. Other liabilities (accounts payable, etc.) total $400 million; these liabilities do not bear interest. This long-term bond includes the following two covenants:

i. TRL must maintain a debt-to-asset ratio under 50%, calculated at the end of each fiscal quarter. (For this ratio, the numerator includes all liabilities reported on the balance sheet, while the denominator equals total assets.)

ii. TRL must maintain an interest coverage ratio of 3:1, calculated at the end of each fiscal year. (For this ratio, the numerator is income before interest and taxes, while the denominator is interest expense.)

Should TRL violate either covenant, bondholders have the right to require the immediate repayment of the debt.

**Required:**

a. It is early March, 2019 and you are TRL’s chief financial officer. Discuss alternatives and provide a recommendation to the CEO on how you would fund the debt repayment on March 30, 2019.

b. Evaluate TRL’s current investment and financing policy and propose changes that would improve the company’s financial position.

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Luca Merchandising Inc. (LMI) is a privately held import and export company located in Montreal considering going public in the next fiscal year. The company decided to purchase shares in two companies, Terra Nova Inc. (TNI) and McBeal Ltd. (ML). Information related to these investments is as follows:

**Terra Nova Inc.:**
- Acquired 100,000 shares of the company, accounting for 22% of total shares outstanding.
- Paid $20/share in 2018.
- Shares traded at $25/share at the end of 2018 and $28/share at the end of 2019.
- LMI does not have a seat on the board of directors.
- LMI and TNI do not engage in any trade activities.
- LMI accounts for its investment in TNI using the equity method.

**McBeal Ltd.:**
- Acquired 50,000 shares of the company, accounting for 10% of total shares outstanding.
- Shares traded at $43/share at the end of 2018 and $40/share at the end of 2019.
- LMI accounts for its investment using FVPL.

**Balance sheet amounts at December 31, 2019:**
- Investment in TNI $1,900,000
- Investment in ML $2,000,000

**Required:**

a. Suppose LMI hired you as an advisor. Discuss the accounting method(s) you would recommend for the investment in TNI.

b. Discuss the alternative accounting methods available for the investment in ML. Which one of the methods would provide the best financial picture for LMI and why?

c. Now suppose that both TNI and ML are small-cap stocks that are not frequently traded in the market. What are the reporting issues related to these securities and how should firms account for these types of investments?