Large financial services entities such as **JP Morgan Chase** and **Citigroup** have used SPEs to securitize billions of dollars of mortgages.

- **Leasing:** A company creates an SPE to purchase long-term assets. Funding for the purchases is obtained primarily through loans. The SPE then leases the assets to the company, and uses the lease payments to pay the interest and principal on the debt. The terms of the lease usually allow the lessee to avoid reporting the leased asset and lease liability.
- **Joint ventures:** An SPE is formed by two or more companies for specialized projects, often requiring large amounts of specialized skill and financing. The SPE structure legally separates the project's risk from that of the sponsors, therefore allowing financing to be obtained at a lower cost. If the companies have licensing agreements requiring them to share new technology with competitors, technology developed by the SPE is legally sheltered from these agreements.

Although many SPEs have legitimate business purposes, they provide the opportunity to hide debt and losses from investors. Because the companies creating the SPEs typically do not have significant equity ownership, the consolidation requirements of *ASC paras. 810-10-15-8* and *10* do not apply.

Applying the concept of control to SPEs is particularly challenging. Equity holders control most entities by holding voting shares. With SPEs, the equity investors provide little of the funding, and do not absorb the majority of the risks and rewards of the entity. Losses absorbed by the equity holders are usually limited, and they also often have limited voting power. SPE debt may be guaranteed by parties that do not have equity ownership. Therefore non-equity holders control the SPE.

In the past, FASB standards for consolidating SPEs used simplistic "bright line" guidelines. For example, in 2001, consolidation could be avoided if the SPE's outside equity interest was at least 3 percent of its total assets. Companies, notably **Enron**, structured their SPEs to meet this standard and avoid consolidation. The collapse of Enron in 2001 highlighted the limitation of these "bright line" consolidation standards. Enron sponsored numerous legally separate "shadow entities," with limited purpose activities, that were not included in its consolidated financial statements. By not consolidating these entities, Enron understated its debt and overstated its income on "profitable" transactions with the SPEs. In one type of sham transaction, Enron issued its own stock to a nonconsolidated SPE that used the stock as collateral for a bank loan, paying Enron with the loan proceeds. When one views these transactions together, it is obvious that Enron increased its debt. However, because Enron did not consolidate the SPE, it reported the transaction as a stock issuance.

Consolidation Requirements A company often has a financial relationship with one or more special purpose entities that are legally separate and in which the company has little or no equity ownership. Following current U.S. GAAP, the company must evaluate each of these financial relationships to determine if consolidation is appropriate. The evaluation process consists of two steps, commonly known as the **variable interest model**:

(1) Determine if the entity's equity investors are likely not the controlling interest. These entities are termed **variable interest entities** (VIEs). If the entity is not a VIE, the voting interest model, discussed above, applies.

(2) If the entity is a VIE, determine if the company controls the VIE. The controlling company is termed the VIE's **primary beneficiary**. The primary beneficiary consolidates the VIE.

What is a Variable Interest Entity? *ASC Topic 810* defines a variable interest entity (VIE) as one having the following characteristics (*paraphrased from ASC para. 810-10-15-14*):

- The total equity investment at risk does not allow the entity to finance its activities without additional subordinated financial support provided by other parties.
- The equity investment at risk lacks any one of the following characteristics of a controlling financial interest: (1) the power through voting rights or similar rights to make decisions about an entity's activities that most significantly impact the entity's economic performance, (2) the obligation to absorb the expected losses of the entity, or (3) the right to receive the expected residual returns of the entity.

For the year ended December 31, 2019, Johnson reported net income of $85 million and declared and paid dividends of $20 million. Goodwill impairment for 2019 is $5 million. The developed technology is not impaired. George uses the complete equity method to account for its investment in Johnson on its own books.

Required

a. Calculate 2019 equity in net income of Johnson, reported on George's books.

b. Prepare journal entries to record George's acquisition of Johnson and subsequent entries to the investment account for 2019. What is the December 31, 2019, investment balance, reported on George's books?

Homework MBC LO 1 **E4.2** **Equity Method Accounting, Subsequent Years** PL Communications acquired all of the stock of SJ Telecom on January 1, 2019. It is now December 31, 2021, three years later. PL Communications uses the complete equity method to report its investment in SJ Telecom on its own books. Both companies have December 31 year-ends. The following information is available:

- PL Communications paid $400 million to acquire SJ Telecom.
- At the date of acquisition, the book values of all of SJ Telecom's reported assets and liabilities approximated fair value. Previously unreported limited-lived identifiable intangibles with a fair value of $20 million were recognized. These intangibles had an estimated life of 5 years, straight-line. There have been no impairment losses.
- Total goodwill impairment losses for 2019 and 2020 were $1 million. There is no goodwill impairment for 2021.
- The change in SJ Telecom's retained earnings from January 1, 2019, to December 31, 2020, was $12 million.
- In 2021, SJ Telecom reported net income of $6,500,000 and declared and paid dividends of $1,500,000.
- SJ Telecom does not report any other comprehensive income.

Required

a. Calculate equity in net income for 2021, reported on the books of PL Communications.

b. Calculate the December 31, 2021 balance in Investment in SJ Telecom, reported on the books of PL Communications.

Homework MBC LO 1, 2, 4 **E4.3** **Equity Method and Eliminating Entries, First Year** On January 1, 2020, Playtel Inc. acquired all of the stock of San Jose Cable for $250 million in cash. At the date of acquisition, San Jose Cable's shareholders' equity accounts were as follows (*in thousands*):

Common stock, $1 par	$ 5,000
Additional paid-in capital	25,000
Retained deficit	(1,000)
Treasury stock	(800)
Total	$28,200

Both companies have a December 31 year-end. At the date of acquisition, San Jose's reported net assets had book values approximating fair value. However, it had previously unreported indefinite-life identifiable intangibles valued at $50 million, meeting *ASC Topic 805* requirements for capitalization. Impairment losses in 2020 for identifiable intangibles were $1 million. Goodwill from this acquisition was not impaired in 2020. San Jose reported net income of $4 million in 2020, and paid no dividends. Playtel uses the complete equity method to report its investment in San Jose on its own books.

Required

a. Calculate the original amount of goodwill for this acquisition.

b. Calculate equity in net income of San Jose, reported on Playtel's books in 2020.

c. Prepare eliminating entries (C), (E), (R) and (O), required to consolidate Playtel's trial balance accounts with those of San Jose on December 31, 2020.

Homework MBC LO 1, 2, 4 **E4.4** **Equity Method and Eliminating Entries, First Year** On July 1, 2019, Prestige Communications acquired all of the voting stock of Southern Light Technologies for $300 million in cash. At the date of acquisition, Southern Light's shareholders' equity accounts were as follows (*in millions*):

E5.7 **Goodwill, Equity Method, Eliminating Entries, First Year (see related E4.3)** On January 1, 2020, Playtel Inc. acquired 75 percent of the stock of San Jose Cable for $200 million in cash. At the date of acquisition, the fair value of the noncontrolling interest was $50 million, and San Jose Cable's shareholders' equity accounts were as follows (*in thousands*): **LO 2**

Common stock, $1 par	$ 5,000
Additional paid-in capital	25,000
Retained deficit	(1,000)
Treasury stock	(800)
Total	$28,200

Both companies have a December 31 year-end. At the date of acquisition, San Jose's reported net assets had book values approximating fair value. However, it had previously unreported indefinite-life identifiable intangibles valued at $50 million, meeting *ASC Topic 805* requirements for capitalization. Impairment losses in 2020 for identifiable intangibles were $1 million. Goodwill from this acquisition was not impaired in 2020. San Jose reported net income of $4 million in 2020, and paid no dividends. Playtel uses the complete equity method to report its investment in San Jose on its own books.

Required

a. Calculate the original amount of goodwill for this acquisition and its allocation to the controlling and noncontrolling interest.

b. Calculate equity in net income of San Jose, reported on Playtel's books in 2020, and noncontrolling interest in net income, reported on the consolidated income statement.

c. Prepare eliminating entries (C), (E), (R), (O) and (N), required to consolidate Playtel's trial balance accounts with those of San Jose on December 31, 2020.

E5.8 **Consolidation Eliminations Several Years After Acquisition** Paramount Corporation acquired its 75 percent investment in Sun Corporation in January 2015, for $2,910,000, and accounts for its investment internally using the complete equity method. At the acquisition date, total book value of Sun was $1,500,000, including $800,000 of retained earnings, and the estimated fair value of the 25 percent noncontrolling interest was $790,000. The fair values of Sun's assets and liabilities were equal to their carrying values, except for the following items: **LO 2**

	Fair value − Book value
Accounts receivable	$ (100,000)
Inventory	(125,000)
Equipment (10 years, straight-line)	(400,000)
Patents (5 years, straight-line)	200,000
Deferred tax liabilities (created as a result of the nontaxable acquisition)	75,000

The receivables were collected and the inventory sold during the first three years following the acquisition. Deferred tax liabilities of $60,000 were reversed during 2015–2020. An impairment test made at the end of 2020 indicates a remaining value of $2,000,000 for the goodwill recognized as a result of the acquisition. Sun's shareholders' equity is $2,500,000, including $1,800,000 of retained earnings, at the end of 2020.

Required

a. Calculate the amount of goodwill initially recognized as a result of the acquisition, and its allocation to the controlling and noncontrolling interests.

b. Calculate the balance in the investment account, carried on Paramount's books, and the value of the noncontrolling interest, reported in the equity section of the consolidated balance sheet, as of the end of 2020.

c. Assume eliminating entry (C), to reverse Paramount's equity method entries for 2021, has been made. Prepare 2021 eliminating entries (E) and (R) to adjust Sun's assets to the correct values as of the beginning of 2021, eliminate the remainder of the investment, and recognize the beginning-of-2021 value of the noncontrolling interest.

of four years, and that goodwill impairment is €20,000 during 2019. Domestic's equity in net income is calculated as follows:

International's reported net income ($1.15 × 700,000)	$805,000
Less revaluation write-offs:	
Amortization expense [$1.15 × (400,000/4)]	(115,000)
Goodwill impairment loss ($1.15 × 20,000)	(23,000)
Equity in net income for 2019	$667,000

The investment account is reduced by dividends of $590,000 (= $1.18 × 500,000). ~~There is an addi-~~

Domestic also records its share of International's OCI for the year. In this example, International has no OCI items on its books, but it is exposed to translation gains from two sources: the net assets recorded on its books, and the net asset revaluations. OCI from book net asset exposure ($225,000) was calculated in Exhibit 7.7. OCI from revaluations is computed as follows:

	€	Rate	$
Revaluation (net assets), January 1, 2019	€1,900,000	$1.10	$2,090,000
Less revaluation write-offs:			
Amortization expense	(100,000)	1.15	(115,000)
Goodwill impairment loss	(20,000)	1.15	(23,000)
			1,952,000
Revaluation (net assets), December 31, 2019	€1,780,000	1.20	−2,136,000
Translation gain attributed to revaluations			$ (184,000)

~~therefore increases the investment account by another $225,000~~. Domestic's entries appear below.

Investment in International Company	1,076,000	
Equity in net income of International Company		667,000
Equity in OCI of International Company ($225,000 + $184,000)		409,000
To record equity in net income and other comprehensive income for 2019.		
Cash	590,000	
Investment in International Company		590,000
To record dividends received in 2019.		

Domestic's investment account now has a balance of $4,776,000 (= $4,290,000 + $1,076,000 − $590,000).

Working paper eliminations in journal entry format at December 31, 2019, are shown below, and the consolidation working paper is presented in Exhibit 7.12. Assets are translated at the current rate ($1.20), expenses are translated at the average rate ($1.15), and capital stock is translated at the acquisition date rate ($1.10).

(C)	Equity in net income of International Company	667,000	
	Equity in OCI of International Company	409,000	
	Dividends—International Company		590,000
	Investment in International Company		486,000
(E)	Capital stock—International Company	880,000	
	Retained earnings, January 1—International Company	1,320,000	
	Investment in International Company		2,200,000
(R)	Intangible assets (1)	480,000	
	Goodwill (2)	1,800,000	
	Investment in International Company (3)		2,090,000
	Other comprehensive income		190,000
(O)	Amortization expense (4)	115,000	
	Goodwill impairment loss (5)	23,000	
	Other comprehensive income	6,000	
	Intangible assets (6)		120,000
	Goodwill (7)		24,000

(1) $480,000 = €400,000 × $1.20
(2) $1,800,000 = €1,500,000 × $1.20
(3) $2,090,000 = Remaining Investment balance after eliminating entries (C) and (E).
(4) $115,000 = €100,000 × $1.15
(5) $23,000 = €20,000 × $1.15
(6) $120,000 = €100,000 × $1.20
(7) $24,000 = €20,000 × $1.20

EXHIBIT 7.12 Consolidation Working Paper, Domestic Corporation and International Company, December 31, 2019

	Domestic Corporation Dr (Cr)	International Company Dr (Cr)	Eliminations Dr	Eliminations Cr	Consolidated Balances Dr (Cr)
Cash	$ 1,000,000	$ 720,000			$ 1,720,000
Receivables	3,208,000	720,000			3,928,000
Inventory	5,000,000	960,000			5,960,000
Plant assets, net	9,000,000	2,760,000			11,760,000
Investment in International Company	4,776,000	—		$ 486,000 (C) 2,200,000 (E) 2,090,000 (R)	—
Identifiable intangible assets	—	—	(R) $ 480,000	120,000 (O)	360,000
Goodwill	—	—	(R) 1,800,000	24,000 (O)	1,776,000
Accounts payable	(700,000)	(1,008,000)			(1,708,000)
Long-term debt	(2,690,000)	(1,512,000)			(4,202,000)
Capital stock	(8,000,000)	(880,000)	(E) 880,000		(8,000,000)
Retained earnings, January 1	(7,900,000)	(1,320,000)	(E) 1,320,000		(7,900,000)
Dividends	—	590,000		590,000 (C)	—
Sales	(25,000,000)	(5,750,000)			(30,750,000)
Equity in net income–International Company	(667,000)	—	(C) 667,000		—
Equity in OCI—International Company	(409,000)	—	(C) 409,000		—
Cost of sales	15,000,000	2,587,500			17,587,500
Depreciation expense	—	402,500			402,500
Goodwill impairment loss	—	—	(O) 23,000		23,000
Other operating expenses	7,382,000	1,955,000	(O) 115,000		9,452,000
Translation gain (OCI)	—	(225,000)	(O) 6,000	190,000 (R)	(409,000)
Totals	$ 0	$ 0	$5,700,000	$5,700,000	$ 0

The adjustments to OCI in eliminating entries (R) and (O) are caused by additional exposure to translation gains and losses through the consolidation process. The translation adjustment reflects exposure of the net asset position to changes in the exchange rate. When the net assets of International Company are *revalued and written off* in the eliminating entries, its *net asset position changes*, creating *additional translation gains or losses*. As can be seen from eliminating entries (R) and (O), the net translation gain caused by recognizing and writing off the revaluations is $184,000 (= $190,000 − $6,000), and, in the year following acquisition, can be independently as calculated above.

The International illustration demonstrates that consolidation of international subsidiaries changes exposure to translation gains and losses. The resulting additional translation adjustments are reported in OCI.

LO 3 **P7.14** **Consolidating an International Subsidiary, Year of Acquisition** On February 1, 2019, Pathway Inc., a U.S. company, acquired all of the outstanding shares of Superbarn Supermarkets, an Australian chain, for A$150 million in cash. Superbarn's assets and liabilities were reported at amounts approximating fair value, but it had previously unrecorded intangible assets (5-year life, straight-line) valued at A$10 million. Superbarn's functional currency is the Australian dollar (A$). Pathway uses the complete equity method to record its investment in Superbarn on its own books. The January 31, 2020 trial balances of the two companies are below.

(in thousands)	Pathway Dr (Cr)	Superbarn Dr (Cr)
Cash and receivables	$ 15,000	A$ 5,000
Inventories	90,000	30,000
Plant and equipment, net	776,500	355,000
Investment in Superbarn	110,600	—
Liabilities	(874,000)	(345,000)
Capital stock	(25,000)	(10,000)
Retained earnings, February 1	(85,000)	(20,000)
Dividends	2,000	—
Sales revenue	(1,500,000)	(500,000)
Equity in net income of Superbarn	(6,000)	—
Equity in other comprehensive loss of Superbarn	10,900	—
Cost of goods sold	1,000,000	400,000
Operating expenses	485,000	85,000
	$ 0	A$ 0

Exchange rates:

February 1, 2019	$0.77/A$
Average for fiscal 2020	0.75/A$
January 31, 2020	0.70/A$

Goodwill arising from the acquisition of Superbarn was impaired by A$5 million in fiscal 2020.

Required

a. Prepare a working paper to consolidate the trial balances of Pathway and Superbarn for fiscal 2020.

b. Present the consolidated balance sheet and statement of comprehensive income for fiscal 2020, in good form.

LO 3 **P7.15** **Consolidating an International Subsidiary, Second Year Following Acquisition (see related P7.14)** Refer to the information in P7.14. It is now January 31, 2021, the end of the second year following Pathway's acquisition of Superbarn. The January 31, 2021 trial balances of the two companies are below.

(in thousands)	Pathway Dr (Cr)	Superbarn Dr (Cr)
Cash and receivables	$ 18,000	A$ 6,000
Inventories	95,000	40,000
Plant and equipment, net	906,500	410,000
Investment in Superbarn	100,800	—
Liabilities	(990,500)	(399,000)
Capital stock	(30,000)	(10,000)
Retained earnings, February 1	(114,000)	(35,000)
Accumulated other comprehensive loss, February 1	10,900	—
Dividends	1,500	—
Sales revenue	(1,700,000)	(700,000)
Equity in net income of Superbarn	(6,500)	—
Equity in other comprehensive loss of Superbarn	16,300	—
Cost of goods sold	1,200,000	600,000
Operating expenses	492,000	88,000
	$ 0	A$ 0

Exchange rates:

February 1, 2020	$0.70/A$
Average for fiscal 2021	0.65/A$
January 31, 2021	0.60/A$

There is no goodwill impairment in fiscal 2021.

Required

a. Prepare a working paper to consolidate the accounts of Pathway and Superbarn for fiscal 2021.

b. Present the consolidated balance sheet and statement of comprehensive income for fiscal 2021, in good form.

P7.16 Consolidating an International Subsidiary, Year of Acquisition On July 1, 2019, MascotaMart, located in Spain, acquired all of the outstanding shares of Superpet, a Hong Kong pet supplies company, for €100 million in cash. The entire excess of acquisition cost over Superpet's book value was attributed to goodwill. Superpet's functional currency is the Hong Kong dollar (HK$). MascotaMart uses the complete equity method to report its investment in Superpet on its own books, and the accounting year for both companies ends June 30. The June 30, 2020 trial balances of MascotaMart and Superpet are below. **LO 3, 4**

(*in thousands*)	MascotaMart Dr (Cr)	Superpet Dr (Cr)
Current assets	€ 220,000	HK$ 170,000
Plant assets, net	950,000	820,000
Investment in Superpet	156,000	—
Liabilities	(700,000)	(800,000)
Capital stock	(20,000)	(50,000)
Retained earnings, July 1	(500,000)	(100,000)
Sales revenue	(5,000,000)	(3,000,000)
Equity in net income of Superpet	(5,600)	—
Equity in other comprehensive income of Superpet	(50,400)	—
Cost of goods sold	3,500,000	2,400,000
Operating expenses	1,450,000	560,000
Total	€ 0	HK$ 0

Exchange rates are as follows:

July 1, 2019	€0.10/HK$
Average for fiscal 2020	0.14/HK$
June 30, 2020	0.15/HK$

Goodwill arising from this acquisition was not impaired in fiscal 2020.

Required

a. Translate Superpet's June 30, 2020, trial balance into euros, the presentation currency of its parent, MascotaMart.

b. Prepare a working paper to consolidate the June 30, 2020 trial balances of MascotaMart and Superpet.

c. Present the fiscal 2020 consolidated balance sheet and statement of comprehensive income, in good form.

P7.17 Consolidating an International Subsidiary, Second Year Following Acquisition (see related P7.16) Refer to the information in P7.16. It is now June 30, 2021, the end of the second year following MascotaMart's acquisition of Superpet. The June 30, 2021 trial balances of the two companies are below. **LO 3, 4**

(in thousands)	MascotaMart Dr (Cr)	Superpet Dr (Cr)
Current assets	€ 260,000	HK$ 165,000
Plant assets, net	1,020,000	970,000
Investment in Superpet	211,000	—
Liabilities	(750,000)	(920,000)
Capital stock	(20,000)	(50,000)
Retained earnings, July 1	(555,600)	(140,000)
Accumulated other comprehensive income, July 1	(50,400)	—
Sales revenue	(5,500,000)	(3,500,000)
Equity in net income of Superpet	(2,550)	—
Equity in other comprehensive income of Superpet	(52,450)	—
Cost of goods sold	3,800,000	2,800,000
Operating expenses	1,640,000	675,000
Total	€ 0	HK$ 0

Exchange rates are as follows:

July 1, 2020	€0.15/HK$
Average for fiscal 2021	0.17/HK$
June 30, 2021	0.20/HK$

Goodwill arising from this acquisition was impaired by HK$10 million in fiscal 2021.

Required

a. Translate Superpet's June 30, 2021 trial balance into euros, the presentation currency of its parent, MascotaMart.

b. Prepare a working paper to consolidate the June 30, 2021 trial balances of MascotaMart and Superpet.

c. Present the fiscal 2021 consolidated balance sheet and statement of comprehensive income, in good form.

REVIEW SOLUTIONS

Review 1 Solution

a. Schedule of translation gain or loss

	C$	Rate	$
Beginning exposed position	C$411,200	$0.85	$349,520
Change in exposed position:			
Net income	24,800	0.78	19,344
			368,864
Ending exposed position	C$436,000	0.73	−318,280
Translation loss (OCI)			$ 50,584

Review 3 Solution

a. Trial balance, December 31, 2020

	€	Rate	$
Current assets	€ 1,500,000	$1.30	$ 1,950,000
Plant and equipment, net	50,000,000	1.30	65,000,000
Liabilities	(48,300,000)	1.30	(62,790,000)
Capital stock	(1,000,000)	1.40	(1,400,000)
Retained earnings, January 1	(2,000,000)	1.40	(2,800,000)
Sales revenue	(25,000,000)	1.36	(34,000,000)
Cost of goods sold	12,000,000	1.36	16,320,000
Operating expenses	12,800,000	1.36	17,408,000
Translation loss (OCL)	—	See schedule	312,000
Totals	€ 0		$ 0

Schedule of translation gain or loss

	€	Rate	$
Beginning exposed position	€3,000,000	$1.40	$ 4,200,000
Change in exposed position:			
Net income	200,000	1.36	272,000
			4,472,000
Ending exposed position	€3,200,000	1.30	−4,160,000
Translation loss (OCL)			$ 312,000

b.

Investment in Lodl	14,000,000	
Cash		14,000,000
To record the acquisition of Lodl's stock for $14,000,000.		
Equity in other comprehensive loss of Lodl ($312,000 + $700,000)	1 ,012,000	
Equity in net income of Lodl		272,000
Investment in Lodl		740,000
To record equity in net income and other comprehensive loss. *$700,000 = €7,000,000 x ($1.40 - $1.30)*		

The December 31, 2020, Investment balance is $13,260,000 (= $14,000,000 – $740,000).

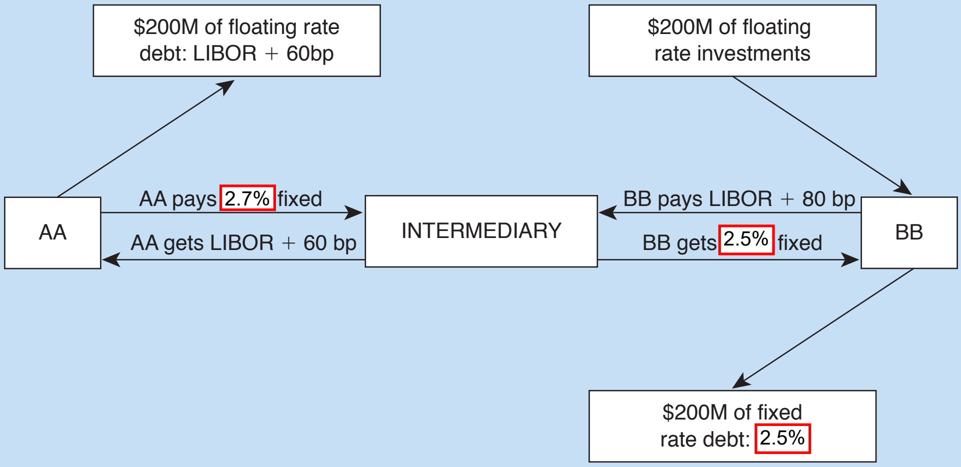
c. Consolidation eliminating entries are:

(C)	Equity in net income of Lodl	272,000	
	Investment in Lodl	740,000	
	Equity in other comprehensive loss of Lodl		1 ,012,000
(E)	Capital stock	1,400,000	
	Retained earnings, January 1	2,800,000	
	Investment in Lodl		4,200,000
(R)	Goodwill (1)	9,100,000	
	Other comprehensive loss	700,000	
	Investment in Lodl ~~(2)~~		9,800,000

(1) $9,100,000 = €7,000,000 × $1.30

~~(2) $9,800,000 = $13,960,000 + $40,000 − $4,200,000.~~

FIGURE 9.1 Details of AA/BB Interest Rate Swap



- Intermediary proposes this swap: it offers AA floating rate payments at LIBOR + 60 bp in exchange for fixed rate payments from AA at 2.7 percent; it offers BB fixed rate payments at 2.5 percent in exchange for floating payments from BB at LIBOR + 80 bp.

All payments are to be calculated on a notional amount of $200 million.

AA: Because AA pays LIBOR + 60 bp on its debt and receives LIBOR + 60 bp from intermediary, its net outflow is the 2.7 percent fixed payment to intermediary. AA becomes the *fixed rate payer* and the *floating rate receiver* in the swap. AA has an annual opportunity gain of $600,000 [= (0.03 − 0.027) × $200M] because the swap enables it to borrow fixed at 2.7 percent; 30 bp or 0.3 percent below its best direct fixed borrowing opportunity. By locking in this 2.7 percent rate, AA benefits directly if LIBOR goes above 2.1 percent (2.1 percent + 60 bp = 2.7 percent) but forgoes interest savings if LIBOR stays below 2.1 percent.

BB: The 2.5 percent fixed rate payment from intermediary offsets the 2.5 percent fixed rate payment BB makes on its debt. BB has *unlocked* its fixed rate and now pays LIBOR + 80 bp to intermediary. BB becomes the *floating rate payer* and the *fixed rate receiver* in the swap. Although BB directly benefits when LIBOR does not go above 1.7 percent (1.7 percent + 80 bp = 2.5 percent), it achieved its goal of stabilizing the relation between its floating rate revenues and its borrowing costs.

The swap produces a net spread of 40 basis points to intermediary. This spread's annual net cash inflow of $800,000 compensates intermediary for arranging the swap and for accepting the risk of default by either counterparty. The following display summarizes intermediary's cash inflows and outflows when LIBOR is 1 percent.

Fixed payment received from AA, 0.027 × $200M	$5.4M
Variable payment received from BB, 0.018 × $200M	3.6
Variable payment paid to AA, 0.016 × $200M	(3.2)
Fixed payment paid to BB, 0.025 × $200M	(5.0)
Net cash inflow to intermediary	$0.8M

Accounting for Interest Rate Swaps

The Codification requires that interest rate swaps be marked to market as their value changes. Recall that swaps have a floating payment side and a fixed payment side. As interest rates change, the present value

Since the "fair value adjustment" for the swaps reduced the hedged debt balance, we can conclude that the entry debited the long-term debt and credited the investment in swaps. Does this imply that market interest rates increased or decreased? Since the swap has a liability balance, we can conclude that interest rates increased, increasing Kellogg Company's variable rate payment and reducing the value of the swap. This loss is offset by a decline in the value of the fixed rate debt, since higher interest rates reduced the present value of its future payments.

Accounting Events and Entries for Interest Rate Swaps

The accounting at **settlement** and **balance sheet dates** involves journalizing these events:

1. Interest expense on the hedged debt
2. Adjustment to interest expense—increase when making net payments to intermediary, decrease when receiving net payments from intermediary
3. Change in fair value of the swap hedge
4. Change in fair value of the hedged debt attributable to the hedged risk (fair value hedges)

We illustrate the entries using the swaps previously described.

BB Swap BB has fixed rate debt and swaps its fixed payments for variable payments. This receive fixed/pay variable swap is a *fair value hedge*. When market interest rates fall, the present value of the future payments on the debt increases, creating a loss on the fixed debt. This is offset by the gain from swapping its 2.5 percent fixed interest payments for lower variable interest payments. The gain and the loss are both reported in income.

BB's first entry records interest expense on the hedged debt.

Interest expense	5,000,000	
Cash		5,000,000
To record periodic interest expense on BB's fixed rate debt; $5,000,000 = 0.025 \times \$200,000,000$.		

BB then receives $1,400,000 [= (0.025 − 0.018) × $200M] net cash from intermediary to settle the swap.

Cash	1,400,000	
Interest expense		1,400,000
To record cash received from intermediary to reduce interest expense under the terms of the swap.		

Suppose interest rates increase by 0.5 percent. Applying a higher discount rate to the future fixed debt payments results in a *lower* fair value for the fixed debt. Similarly, applying a higher discount rate to the future fixed payments received from intermediary reduces their present value and results in a *lower* fair value for the swap. We assume the increase in interest rates results in a $600,000 reduction in the fair value of the debt and the swap. Pursuant to the 2017 *ASU*, we record the gains and losses as adjustments to interest expense.

Interest expense	600,000	
Investment in swaps		600,000
To mark interest rate swap to market and record the ~~gain~~ loss produced by the increase in interest rates.		
Long-term debt	600,000	
Interest expense		600,000
To mark hedged fixed-rate debt to market and record the ~~loss~~ gain produced by the increase in interest rates.		

4, 2020, Capital Foods purchases 5,000,000 bushels of oats at the spot price of $2.57/bushel. It sells products containing the oats on October 2, 2020.

Required

Prepare entries to record the above events, including the June 30, 2020, adjusting entry. Assume Capital Foods reports the change in option time value directly in income.

Homework MBC **LO 2** **E9.12** **Fair Value Hedge of a Foreign Currency Firm Commitment: Call Options** On May 1, 2020, Greenwave Foods, a U.S. company, issued a purchase order to an Italian company for €10,000,000 in food products, to be delivered in 3 months. On that date, the spot rate was $1.20/€ and the 3-month forward rate was $1.203/€. Greenwave guarantees the maximum U.S. dollar cost of this purchase by investing in call options on €10,000,000 at a strike price of $1.20/€, costing $0.008/€. Management designates the intrinsic value of the calls as a fair value hedge of a firm commitment. On June 30, Greenwave's fiscal year-end, the spot rate is $1.235/€, the 1-month forward rate is $1.238/€ and the options sell for $0.041/€. On August 1, 2020, the spot rate is $1.242/€. Greenwave takes delivery of the food products, sells the options at their intrinsic value of $0.042/€, and pays the Italian supplier by buying €10,000,000 in the spot market.

Required

a. Prepare entries to record the above events, including the June 30, 2020, adjusting entries. Greenwave records all income effects of inventory and related hedges in cost of goods sold.

b. Calculate the effectiveness of the hedge (change in intrinsic value of the options divided by the change in the value of the firm commitment). Why isn't the hedge perfectly effective?

Homework MBC **LO 3** **E9.13** **Interest Rate Swap: Profit and Default** On July 1, 2020, Queen Corp. and Prince, Inc. entered into an interest rate swap on a notional amount of $1 million. They accepted the following offer of Intermediary:

To Intermediary from Queen	LIBOR + 30 (floating)
To Intermediary from Prince	2.4% (fixed)
To Queen from Intermediary	2.3% (fixed)
To Prince from Intermediary	LIBOR + 20 (floating)

At inception of the swap, LIBOR = 2.3 percent. Due to an increase of 20 bp in the floating interest rate at the end of September, Queen Corp. defaulted and Intermediary honored its commitment to Prince, Inc. by continuing with the swap.

Required

a. What monthly profit, in dollars, was Intermediary making on the swap before default?

b. Is Intermediary losing money after the default? If so, how much?

Homework MBC **LO 3** **E9.14** **Fair Value Hedge: Interest Rate Swap** On January 1, 2020, Greentree Foods borrowed $5 million of fixed rate debt at an annual rate of 2.5 percent, interest paid semiannually on June 30 and December 31 of each year. To hedge against falling interest rates, Greentree entered a receive fixed/pay variable interest rate swap at the Treasury bill rate plus 80 bp on a notional amount of $5 million, with the rate reset every six months. The Treasury bill rate was 2 percent on January 1, 2020. On June 30, 2020, the Treasury bill rate is 2.4 percent; the swap declined in value by $5,000 and the fair value of the fixed rate debt declined by the same amount. On December 31, 2020, the Treasury bill rate is 2.5 percent; the swap and fixed rate debt declined in value by another $1,000.

Required

Prepare the journal entries related to the debt and the swap for the year 2020. All income effects are recorded in interest expense.

Homework MBC **LO 3** **E9.15** **Cash Flow Hedge: Interest Rate Swap** On January 1, 2020, Greentree Foods borrowed $5 million of variable rate debt at an annual rate equal to the Treasury bill rate plus 80 bp, interest paid semiannually on June 30 and December 31 of each year. The variable rate is reset every six months. To hedge against increasing interest rates, Greentree entered a receive variable/pay fixed interest rate swap, agreeing to pay a 2.5 percent fixed rate on a notional amount of $5 million. The present value of the expected future net swap payments was $25,000. The treasury bill rate was 2 percent on January 1, 2020. On June 30, the treasury bill rate is 2.4 percent and the swap has a fair value of $22,500. On December 31, 2020, the treasury bill rate is 2.5 percent and the swap has a fair value of $6,000.

Required

Prepare the journal entries to record the events for the year 2020.

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REVIEW 2 • Registration and Periodic Reporting Requirements

Required

a. Summarize the process for registering new security issues with the SEC, including the forms used, the accountant's role, and the mechanics of typical underwriting.
b. Although Form 10-K is probably the best-known SEC filing, it contains much non-accounting information that is governed by Regulation S-K. Indicate which items governed by Regulation S-K relate to accounting and reporting.
c. Regulation S-X governs the financial statement information in the 10-K. Explain why Articles 3 and 4 are particularly important.
d. Explain the purpose of Form 8-K and comment briefly on the importance of Items 2.03, 2.04 and 4.01.

Solutions are located after the chapter assignments.

CORPORATE ACCOUNTABILITY AND GOVERNANCE

LO5 Describe the SEC's role in corporate accountability and governance.

In addition to concerns over corporate *accounting,* capital market participants show considerable interest in the broader notion of corporate *accountability*. Complying with SEC requirements for periodic financial reporting helps the corporation fulfill its obligation to be accountable for its actions. How a corporation conducts its affairs and relates to its security holders, employees, and the public are major aspects of corporate accountability. The SEC plays an important role, both directly and indirectly, in setting guidelines for corporate accountability and governance.

One of its indirect influences appeared in the *Foreign Corrupt Practices Act (FCPA)* of 1977 that prohibits certain activities in the conduct of international transactions. This Act also requires management to maintain accurate books and records that will reveal any illegal transactions, and to maintain an adequate system of internal control to reduce the occurrence of such transactions. Despite this apparently clear requirement, note that SOX revisits much of the same territory.

The blockbuster Sarbanes-Oxley (SOX) legislation was enacted in 2002 in response to a series of corporate accounting scandals. One major provision of SOX established the **Public Company Accounting Oversight Board (PCAOB)** to regulate and monitor auditing firms, subject to SEC oversight. In an early decision, the PCAOB received authority to assume the AICPA's role in setting auditing standards for audits of public companies.

Another major SOX provision addresses auditor independence and conflict-of-interest concerns by severely limiting the types of non-audit services that CPA firms can provide to audit clients. Section 201 of SOX prohibits services such as bookkeeping, design and installation of financial information systems, internal audit outsourcing, and any other services that the PCAOB decides to prohibit. To limit overfamiliarity with a company or its management, SOX requires rotation of the lead engagement partner and concurring audit partner every five years. Finally, the importance of properly functioning committees of a company's board of directors motivates summarization below of some of the principal provisions of SOX relating to key board committees, especially the audit committee, and to director independence.

BUSINESS APPLICATION Changes in Auditor Disclosures

In recent years the PCAOB has adopted two standards designed to improve information available to investors concerning audit quality and conclusions. In 2016, the SEC approved a PCAOB standard, effective in 2017, requiring the auditor to disclose the name of the engagement partner, the name, location, and extent of participation of each accounting firm involved in the audit that constituted at least 5 percent of total audit hours, and aggregate information on other accounting firms involved. This information is filed separately with the PCAOB, using Form AP, for each audit report issued.

In 2017, the SEC approved the PCAOB's standard changing the audit report to clarify the auditor's responsibilities and disclose more information about the audit. Portions of this standard are effective in 2018. New disclosures are as follows:

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years before the FASB took the upper hand and in 2004 issued a revised standard making expensing mandatory. That standard appears in *ASC Topic 718*.

The SEC put pressure on the FASB after the Enron accounting scandal, pushing it to get its project on **consolidating special purpose entities** on the "fast track." That guidance emerged quickly in 2003 and now appears in *ASC Topic 810*. As discussed in Chapter 3 of this text, this standard continues to be modified with the goal of consolidating any entity a company controls.

In 2009 the SEC completed a Congressionally-mandated study of the FASB's standards on **mark-to-market accounting**, found in *ASC Topic 820*, and its application to valuation of financial instruments. This study was motivated by concern over the effects of fair value accounting on financial institutions, market responses to investment write-offs, and the usefulness of the information to investors. The study's main conclusion was that fair value accounting standards provide useful information and should not be suspended. However, in the midst of the crisis, markets for financial instruments became very limited. The SEC persuaded the FASB to develop new guidelines allowing valuation of these investments using normal market prices, allowing banks to avoid catastrophic write-downs.

An ongoing SEC initiative relates to the **relationship between U.S. GAAP and IFRS**. In 2008, the SEC proposed a "roadmap" that would require all U.S. public companies to file under IFRS in 2014, following a phase-in beginning with certain 2010 filings. However, the initial fervor over rapid adoption of or convergence with IFRS has significantly abated, with major differences still remaining. Accounting for business acquisitions is one example of almost complete convergence. Consolidation of special purpose entities and classification of and impairment testing for financial instruments are areas where U.S. GAAP and IFRS diverge, with no indication of convergence in the near future.

REVIEW 3 • Corporate Accountability and Governance, SEC Intervention in Standard-Setting

Required

a. Briefly explain the nature of fraudulent financial reporting and the ethical dilemma it poses.
b. Explain why strong audit committees are so important to good corporate governance.
c. Twenty-four years after Congress passed the Foreign Corrupt Practices Act (1977) requiring companies to maintain accurate books and records and an adequate system of internal control, Congress passed the Sarbanes-Oxley Act (2002), which contains similar provisions. Comment on what this tells us about the state of corporate accountability in the U.S.

Solutions are located after the chapter assignments.

REVIEW OF KEY CONCEPTS

LO 1 **Discuss why the SEC was established and the principal legislation it enforces. (p. 746)** The 1929 stock market crash and ensuing economic depression led Congress to legislate governmental oversight for the financial markets and the companies with securities traded on those markets. Congress enacted the **Securities Act of 1933** to regulate the issuance of new securities. The subsequent **Securities Exchange Act of 1934** regulates the trading of already-issued securities and establishes the **Securities and Exchange Commission (SEC)**. The SEC is responsible for the administration and enforcement of the federal securities laws including the 1933 and 1934 Acts.

LO 2 **Examine the SEC's organization and structure. (p. 748)** The **SEC is an independent non-partisan agency** funded by a combination of user charges and congressional appropriations. It is organized into five divisions with the **Division of Corporation Finance** being most relevant to accountants. Of its several supporting staff offices, the **Office of the Chief Accountant** has the most effect on the financial reporting process. The SEC has statutory authority to establish accounting and reporting principles for publicly held companies. Although it relies heavily on the private sector for standard-setting—currently the FASB—the SEC does issue its own pronouncements—*Financial Reporting Releases (FRR)*, *Accounting and Auditing Enforcement Releases (AAER)* and *Staff Accounting Bulletins (SAB)*.

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