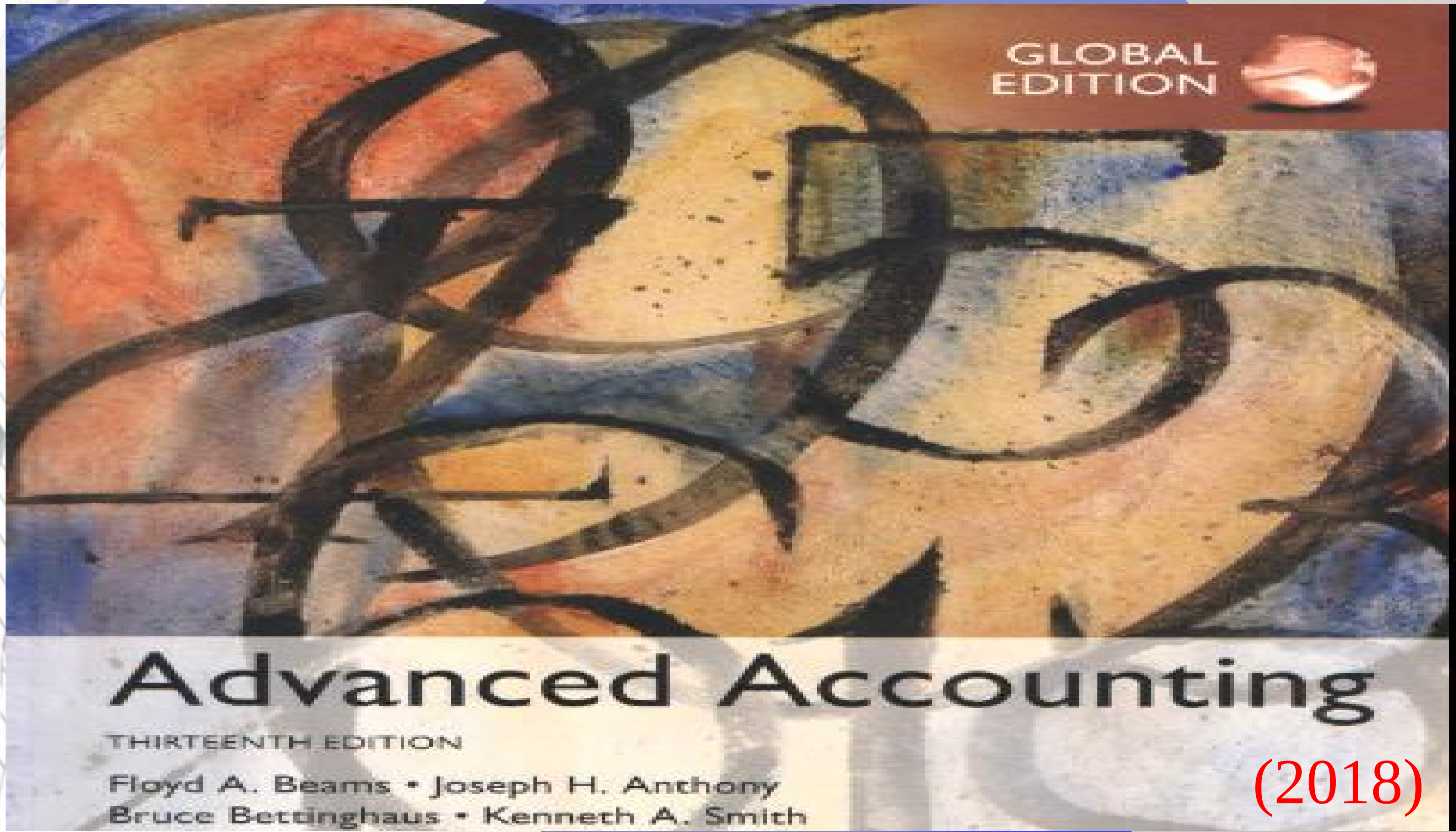
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Advanced Accounting
THIRTEENTH EDITION
Floyd A. Beams • Joseph H. Anthony
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BANDI

ADVANCED ACCOUNTING
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Chapter 14: Foreign Currency Financial Statements

Chapter 14

Foreign Currency Statements: Objectives

1. *Identify the factors that should be considered when determining an entity's* **functional currency**.
2. *Understand how* **functional currency assignment determines the way** *the foreign entity's financial statements are converted into its parent's reporting currency.*
3. *Understand how a foreign subsidiary's economy is determined to be* **highly inflationary** *and how this affects the conversion of its financial statements to its parent's reporting currency.*

Objectives *(cont.)*

4. *Understand how the investment in a foreign subsidiary is accounted for* **at acquisition***.*
5. *Understand which rates are used to translate balance sheet and income statement accounts under the* **current rate method** *and the* **temporal method** *on a translation/ remeasurement worksheet.*
6. *Know how the* **translation gain or loss***, or* **remeasurement gain or loss***, is reported under the current rate and temporal methods.*

Objectives *(cont.)*

7. *Know how a parent accounts for its investment in a subsidiary using the* **equity method** *depending on the subsidiary's functional currency determination.*
8. *Understand* **consolidation** *under the temporal and current rate methods.*
9. *Understand how a* **hedge of the net investment** *in a subsidiary is accounted for under the current rate and temporal methods.*

Foreign Currency Financial Statements

1: Functional Currency

Functional Currency

- Currency of the primary economic environment in which the entity operates
  - Customer receipts
  - Liability payments
- Other factors
  - Setting of sales prices
  - Sales market
  - Expenses
  - Financing
  - Intercompany transactions

Foreign Currency Financial Statements

2: Functional Currency Determines Method

Restatement Methods

- Temporal method
  - Use if functional currency is the US dollar
- Current rate method
  - Use if the functional currency is the local currency

Examples:

1. A Mexican subsidiary of a US firm has the Peso as its functional currency.
2. A Japanese subsidiary of a US firm has the US dollar as its functional currency.
3. An Australian subsidiary of a US firm, keeping its own records in Australian dollars, determines its functional currency is the euro.

Selecting the Method

	Local currency	Functional currency	Reporting currency
Ex 1	Peso	Peso	US$
	Translate (temporal method) from Peso to US$		
Ex 2	Yen	US$	US$
	Remeasure (current rate) from Yen to US$		
Ex 3	Aus$	Euro	US$
	Remeasure from Aus$ to Euros, then Translate from Euros to US$		

Exchange Rates

- Remeasurement, generally
  - Current (FYE): monetary assets, liabilities
  - Historical: other assets, liabilities
  - Historical: equity, dividends (retained earnings is not remeasured)
  - Current (average) and Historical: revenues, expenses
- Translation, generally
  - Current (FYE): assets, liabilities
  - Historical: equity, dividends (retained earnings is not remeasured)
  - Current (average): revenues, expenses
- Details on next three slides

Assets

	Remeasurement to Functional Currency	Translation to Currency of Reporting Entity
Assets		
Cash, demand deposits, and time deposits	Current	Current
Marketable securities carried at cost		
Equity securities	Historical	Current
Debt securities	Historical	Current
Accounts and notes receivable and related unearned discounts	Current	Current
Accounts for uncollectible accounts and notes	Current	Current
Inventories		
Carried at cost	Historical	Current
Carried at lower of cost or market	*	Current
Prepaid insurance, advertising, and rent	Historical	Current
Refundable deposits	Current	Current
Property, plant, and equipment	Historical	Current
Accumulated depreciation on property, plant, and equipı	Historical	Current
Cash surrender value of life insurance	Current	Current
Deferred income tax assets	Current	Current
Patents, trademarks, licenses, and formulas	Historical	Current
Goodwill	Historical	Current
Other intangible assets	Historical	Current

Liabilities and Equity

	Remeasurement	Translation
Liabilities		
Accounts and notes payable and overdrafts	Current	Current
Accrued expenses	Current	Current
Deferred income tax liabilities	Current	Current
Deferred income	Historical	Current
Other deferred credits	Historical	Current
Bonds payable and other long-term debt	Current	Current
Stockholders' Equity		
Common stock	Historical	Historical†
Preferred stock carried at issuance price	Historical	Historical†
Other paid-in capital	Historical	Historical‡
Retained earnings	Not remeasured	Not translated

Revenues and Expenses

Income Statement Items Related to Nonmonetary Items‡	Remeasurement	Translation
Cost of goods sold	Historical	Current
Depreciation on property, plant, and equipment	Historical	Current
Amortization of intangible items (patents, etc.)	Historical	Current
Amortization of deferred income taxes	Current	Current
Amortization of deferred charges and credits	Historical	Current

Note that "current" rate, as used for income statement items, is usually the average rate for the year. Firms with seasonal business fluctuations would use a weighted average rate.

Foreign Currency Financial Statements

3: Highly Inflationary Economy

Inflation and Functional Currency

In a highly inflationary economy

Functional currency → Parent's reporting currency

Functional currency → US dollar
for subsidiaries of US firms in highly inflationary economies.

Highly inflationary = cumulative inflation of 100% or more over 3 years.

Foreign Currency Financial Statements

4: Translation on Acquisition Date

Translation at Acquisition

- Foreign assets and liabilities are translated using the current rate method.
- If functional currency = local currency
  - Translation is appropriate
  - Analysis of fair value/book value differentials is performed in local currency
  - Results are translated at current rates

Remeasurement at Acquisition

- Foreign assets and liabilities are translated using the current rate method.
- If functional currency = US$ or reporting currency
  - Remeasurement is appropriate
  - Analysis of fair value/book value differentials is performed in US$
  - *The 'earliest' historical rate generally used in remeasurement is the date of the acquisition.*

Noncontrolling Interest

- For both, remeasurement and translation, the consolidation process is applied to the financial statements as restated in US$.

- Measures of noncontrolling interest, noncontrolling interest share, and controlling interest share are computed in US$.

Foreign Currency Financial Statements

5: Current Rate Method and Temporal Method

Current Rate Method

Translating the adjusted trial balance:

Debits
- Assets, contra liabilities = year end rate
- Expenses = average rate
- Dividends = historical rate

Credits
- Liabilities, contra assets = year end rates
- Equity = historical
- Except retained earnings
  - Use last year's translated amounts
  - If first year, use historical rate
- Revenues = average rate

- Subtotal debits and credits. The difference is accumulated other comprehensive income from the translation adjustment.

Translation

Debits			
Cash	£110,000	$1.40	$ 154,000
Accounts receivable	80,000	1.40	112,000
Inventories (FIFO)	120,000	1.40	168,000
Plant assets	100,000	1.40	140,000
Advance to Pat	60,000	1.40	84,000
Cost of sales	270,000	1.45	391,500
Depreciation	10,000	1.45	14,500
Wages and salaries	120,000	1.45	174,000
Other expenses	60,000	1.45	87,000
Dividends	30,000	1.42	42,600
Accumulated other comprehensive income			28,600
	£960,000		$1,396,200

- All assets are at year end rates. Expenses are at the average rate for the year.
- The accumulated OCI from the translation adjustment is calculated last, after credits (next slide).

Translation *(cont.)*

Credits			
Accumulated depreciation	£ 30,000	$1.40	$ 42,000
Accounts payable	36,000	1.40	50,400
Bonds payable	100,000	1.40	140,000
Capital stock	200,000	1.50	300,000
Retained earnings	50,000	Computed	75,000
Sales	540,000	1.45	783,000
Exchange gain (advance)	4,000	1.45	5,800
	£960,000		$1,396,200

Contra assets and liabilities are at year end rate.
Revenues and expenses are at average rate for the year.
Subtotal debits and credits. The debits happen to be $28,600 less than the credits. This is the debit to accumulated OCI at the end of the year.

Temporal Method

Remeasuring the adjusted trial balance:

<u>Debits</u>

- Assets, contra liabilities = Year end or historical rates
- Expenses = historical or average rate
- Dividends = historical rate

<u>Credits</u>

- Liabilities, contra assets = year end or historical rates
- Equity = historical
- Except retained earnings
  - Use last year's translated amounts
  - If first year, use historical rate
- Revenues = average or historical rate

Subtotal debits and credits. The difference is an exchange gain or loss for the current period from the remeasurement process.

Remeasurement Worksheet

	Trial Balance in British Pounds	Exchange Rate		Trial Balance in U.S. Dollars
Debits				
Cash	£110,000	C	$1.40	$ 154,000
Accounts receivable	80,000	C	1.40	112,000
Inventories (FIFO)	120,000	H	1.42	170,400
Plant assets	100,000	H	1.50	150,000
Advance to Pat	56,000*	R		84,000
Cost of sales	270,000	H		401,100
Depreciation	10,000	H	1.50	15,000
Wages and salaries	120,000	A†	1.45	174,000
Other expenses	60,000	A†	1.45	87,000
Dividends	30,000	R		42,600
Exchange loss				3,300
	£956,000			$1,393,400

- Cash and receivables use year end rate. Dividends and Advance are reciprocal amounts from parent. The exchange loss is the last step in the worksheet. It balances the debits with the credits (next slide).

Remeasurement *(cont.)*

Credits				
Accumulated depreciation	£ 30,000	H	$1.50	45,000
Accounts payable	36,000	C	1.40	50,400
Bonds payable	100,000	C	1.40	140,000
Capital stock	200,000	H	1.50	300,000
Retained earnings	50,000	Computed		75,000
Sales	540,000	A	1.45	783,000
	£956,000			$1,393,400

- Accumulated depreciation uses the same rate as the plant assets and their depreciation expense.
- Bonds payable are monetary and use the year end rate like other receivables and payables.
- Adding the debits and credits will find that the debits are <u>$3,300 less</u> than the credits. This is the exchange loss.

Foreign Currency Financial Statements

6: Translation Adjustments and Remeasurement Gain/Loss

Balancing the Worksheet

Mathematically:

- Apply the temporal (remeasurement) or current rate (translation) rule to all accounts
- Subtotal debits and credits
- Balance the worksheet by including the difference with the lower subtotal (debits or credits)
- Label the difference appropriately

Adjustment or Gain/Loss

Remeasurement results in

- Exchange gains or losses
- Credit to balance = exchange gain
- Debit to balance = exchange loss
- Include the gain or loss in calculating net income in US dollars.

Translation results in

- Translation adjustment, part of accumulated other comprehensive income
- Include as part of stockholders' equity
    - *Debit to balance = deduct from equity*
    - *Credit to balance = add to equity*

Foreign Currency Financial Statements

7: Equity Method for Foreign Investments

Equity Method Investee

- A US firm has a foreign investment it accounts for under the equity method.
  - If functional currency is the local currency
  - Translation is appropriate
- At acquisition
  - Analyze fair value and book values, compute goodwill – in local/functional currency
- Annually
  - Translate statements into US dollars
  - Record other comprehensive income for translation adjustment

Equity Method Entries

12/31/08	Investment in Star	525,000	
	Cash		525,000
	Acquisition cost		
12/1/09	Cash	42,600	
	Investment in Star		42,600
	Dividends received, at current exchange rate		
12/31/09	Investment in Star	93,200	
	OCI, translation adjustment	28,600	
	Income from Star		121,800
	Year end adjustment for income		

The income is from the translated income statement, with appropriate amortizations for fair value/book value differences.

OCI will be debited or credited for the change in that account during the period.

Amortization of differentials

On 12/31/08, Pat acquired Star. Star had unrecorded patent of £100,000. The exchange rate was $1.50.

The patent is amortized over 10 years. The average and year end exchange rates are $1.45 and $1.40.

12/31/08	Patent	£100,000	$1.50	$150,000
2009	Amortization expense	£10,000	$1.45	$14,500
12/31/09	**Patent**	**£90,000**	**$1.40**	**$126,000**

OCI translation adjustment for patent is $9,500.
$150,000 – 14,500 – 126,000 = $9,500
The adjustment brings the net value of the patent to its translated year end amount of $126,000.

Foreign Currency Financial Statements

8: Consolidation of Foreign Subsidiaries

Consolidating Foreign Subsidiaries

- The parent uses the appropriately translated or remeasured subsidiary financial statements in its consolidation worksheet.
- Income from the subsidiary and Investment in subsidiary are eliminated.
- Subsidiary equity accounts are eliminated (including accumulated OCI).
- Worksheet procedures are similar to that for domestic subsidiaries

Worksheet – Income Statement

	Pat	Star	Adjustments and Eliminations	Consolidated Statements
Income Statement Sales	$1,218,300	$ 783,000		$2,001,300
Income from Star	107,300		a 107,300	
Cost of sales	(600,000)	(391,500)		(991,500)
Depreciation	(40,000)	(14,500)		(54,500)
Wages and salaries	(300,000)	(174,000)		(474,000)
Other expenses	(150,000)	(87,000)	d 14,500	(251,500)
Exchange gain		5,800		5,800
Net income	**$ 235,600**	**$ 121,800**		**$ 235,600**

- Star's balances come from the translated statements. Current amortization for the patent is recorded.

Worksheet – Retained Earnings

Retained Earnings Retained earnings—Pat	$ 245,500				$ 245,500
Retained earnings—Star		$ 75,000	b 75,000		
Net income	**235,600**	**121,800**			**235,600**
Dividends	(100,000)	(42,600)		a 42,600	(100,000)
Retained earnings— December 31, 2009	**$ 381,100**	**$ 154,200**			**$ 381,100**

- Star's beginning retained earnings and current dividends are eliminated.

Worksheet - Assets

Balance Sheet Cash	$ 317,600	$ 154,000			$ 471,600
Accounts receivable	150,000	112,000			262,000
Inventories	300,000	168,000			468,000
Plant assets	400,000	140,000			540,000
Accumulated depreciation	(100,000)	(42,000)			(142,000)
Advance to Pat		84,000		e 84,000	
Investment in Star	551,600		c 38,100	a 64,700 b 525,000 c 9,500	
Patent			b 150,000	d 14,500	126,000
	$1,619,200	$ 616,000			$1,725,600

- The Investment in Star and intercompany receivables are eliminated. Differentials from acquisition are recorded – the patent and its current amortization.

Worksheet – Liabilities & Equity

Accounts payable	$ 142,200	$ 50,400		$ 192,600
Advance from Star	84,000		e 84,000	
Bonds payable	250,000	140,000		390,000
Capital stock	800,000	300,000	b 300,000	800,000
Retained earnings	**381,100**	**154,200**		**381,100**
Accumulated other comprehensive income	(38,100)	(28,600)	c 28,600	(38,100)
	$1,619,200	$ 616,000		$1,725,600

- Intercompany payable is eliminated. All of the subsidiary equity is eliminated, including Accumulated OCI. Parent's Accumulated OCI contains impact of translation adjustments.

Foreign Currency Financial Statements

9: Hedge of Net Investment

Hedge a Foreign Investment

- Investee's functional currency = local currency
  - Effective hedges qualify for hedge treatment
  - "Gains or losses" are
    - *translation adjustments*
    - *included in accumulated OCI*
- Investee's functional currency = reporting currency
  - "Hedging" is treated as speculative
  - Gains or losses are currently reco
  - gnized in income