Chapter 10
Translation Exposure

Learning Objectives
• Demonstrate how translation practices result in a foreign exchange exposure for the multinational enterprise
• Explain the meaning behind the designation of a foreign subsidiary’s “functional currency”
• Illustrate both the theoretical and practical differences between two primary methods of converting foreign currency denominated financial statements into the reporting currency of the parent company
• Compare translation exposure with operating exposure
• Analyze the costs and benefits of managing translation exposure

Translation Exposure

Translation exposure, also called accounting exposure, arises because the financial statements of foreign subsidiaries must be restated in the parent’s reporting currency for the firm to prepare its consolidated financial statements.

Translation exposure is the potential for an increase or decrease in the parent’s net worth and reported income caused by a change in exchange rates since the last transaction.

Translation methods differ by country along two dimensions:
• One is a difference in the way a foreign subsidiary is characterized depending on its independence.
• The other is the definition of which currency is most important for the subsidiary.

Subsidiary Characterization

Most countries specify the translation method to be used by a foreign subsidiary based upon its operations.

A foreign subsidiary can be classified as:
• Integrated Foreign Entity – one which operates as an extension of the parent company, with cash flows and line items that are highly integrated with the parent.
• Self-sustaining Foreign Entity – one which operates in the local economy independent of its parent.

The foreign subsidiary should be valued in terms of the currency that is the basis of its economic viability.

Functional Currency

A foreign affiliate’s functional currency is the currency of the primary economic environment in which the subsidiary operates.

The geographic location of a subsidiary and its functional currency can be different:
• Example: US subsidiary located in Singapore may find that its functional currency could be:
  – US dollars (integrated subsidiary)
  – Singapore dollars (self-sustaining subsidiary)
  – British pounds (self-sustaining subsidiary)

Translation Methods

There are two basic methods for the translation of foreign subsidiary financial statements:
• The current rate method
• The temporal method

Regardless of which is used, either method must designate:
• The exchange rate at which individual balance sheet and income statement items are remeasured
• Where any imbalances are to be recorded
  – This can affect either the balance sheet or the income statement.
**Current Rate Method**

- Under this method all financial statement items are translated at the “current” exchange rate.
- **Assets & liabilities** – are translated at the rate of exchange in effect on the balance sheet date.
- **Income statement items** – all items are translated at either the actual exchange rate on the dates the various revenues, expenses, gains and losses were incurred or at a weighted average exchange rate for the period.
- **Distributions** – dividends paid are translated at the rate in effect on the date of payment.
- **Equity items** – common stock and paid-in capital are translated at historical rates; year end retained earnings consist of year-beginning plus or minus any income or loss on the year.

**Current Rate Method**

- Any gain or loss from re-measurement is closed to an equity reserve account entitled the *cumulative translation adjustment*, rather than through the company’s consolidated income statement.
- These cumulative gains and losses from re-measurement are only recognized in current income under the current rate method when the foreign subsidiary giving rise to that gain or loss is liquidated.

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**Temporal Method**

- Under this method, specific assets and liabilities are translated at exchange rates consistent with the timing of the item’s creation.
- The *temporal method* assumes that a number of line items such as inventories and net plant and equipment are restated to reflect market value.
- If these items were not restated and carried at historical costs, then the temporal method becomes the *monetary/non-monetary method*.

**Temporal Method**

- Line items included in this method are
  - **Monetary assets** (primarily cash, accounts receivable, and long-term receivables) and all monetary liabilities are translated at current exchange rates.
  - **Non-monetary assets** (primarily inventory and plant and equipment) are translated at historical exchange rates.
  - **Income statement items** – are translated at the average exchange rate for the period except for depreciation and cost of goods sold which are associated with non-monetary items, these items are translated at their historical rate.

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**Temporal Method**

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  - **Distributions** – dividends paid are translated at the exchange rate in effect the date of payment.
  - **Equity items** – common stock and paid-in capital are translated at historical rates; year end retained earnings consist of year-beginning plus or minus any income or loss on the year plus or minus any imbalance from translation.
- Under the temporal method, any gains or losses from re-measurement are carried directly to current consolidated income and not to equity reserves.

**US Translation Procedures**

- The US differentiates foreign subsidiaries on the basis of functional currency, not subsidiary characterization.
- Under US GAAP, following are the procedures for foreign subsidiary translation.
US Translation Procedures

Purpose: Foreign currency financial statements must be translated into U.S. dollars

If the financial statements of the foreign subsidiary are expressed in a foreign currency, the following determinations need to be made:

1. Is the local currency the functional currency?
   - Yes
   - No

2. Is the dollar the functional currency?
   - Yes

3. Remeasure from foreign currency to functional currency (temporal method) and translate to dollars (current rate method)
   - No
   - Yes

Remeasure to dollars (temporal method)

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Remeasure to dollars (temporal method)

Hyperinflation Countries

- FAS #52 has a special provision for translating statements of US subsidiaries operating in countries where cumulative inflation has been approximately 100% or more for over a three-year period
- Financial statements of these subsidiaries must be translated using the temporal method
  - The rationale is to correct the problem of the “disappearing asset”
  - If the current rate method were used, depreciation would be overstated in real terms and the book value of the physical assets would disappear from the balance sheet

Translation Example – Trident Europe

- As we continue with our Trident example from the previous chapter, we now shift from Trident’s operating exposure to its translation exposure
- Recall that the euro depreciated by 16.67% or moved from $1.200/€ in December 2002 to $1.000/€ in January 2003
- The functional currency of the subsidiary is the euro and the currency of the parent is US dollars
- PP&E, common stock, and long-term debt were acquired by Trident Europe at a past rate of $1.2760/€
- Inventory on hand was purchased or manufactured during the immediately prior quarter when the average exchange rate was $1.2180/€
- The example will also look at the consequences had the euro appreciated to $1.3200/€

Trident Europe: Current Method

<table>
<thead>
<tr>
<th>EXHIBIT 10.4</th>
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<tbody>
<tr>
<td></td>
<td>December 31, 2001</td>
</tr>
<tr>
<td></td>
<td>In euros</td>
</tr>
<tr>
<td>Current-Rate Method</td>
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- Accounts payable | $8,800,000 | 1.2000 | $5,760,000 | 1.0000 | $5,760,000 |
- Short-term bank loan | $3,160,000 | 1.2700 | $2,385,000 | 1.0000 | $2,385,000 |
- Long-term debt | $1,600,000 | 1.2900 | $2,042,000 | 1.0000 | $2,042,000 |
- Common stock | $8,096,000 | 1.2700 | $2,073,000 | 1.0000 | $2,073,000 |
- Retained earnings | $6,200,000 | 1.3000 | $5,760,000 | 1.0000 | $5,760,000 |
- Translation adjustment (ETM) | $312,000 | 1.2800 | $38,400 | 1.0000 | $38,400 |

Total | $12,572,000 | 1.2800 | $16,013,000 | 1.0000 | $16,013,000 |

Trident Europe: Temporal Method

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- Retained earnings before depreciation are the cumulative sum of additions to retained earnings of all prior years, translated at exchange rates in each year. See footnotes above for details used in this example.
- Under the temporal method, the translation loss of $312,000 would be closed into retained earnings via the income statement rather than the capital account, since the stockholders’ equity would originally have been recorded at the history rate of $8,096,000 / $5,000 = 1.6173 (1996).
Managerial Implications

- In the previous slides, the translation loss or gain is larger under the current rate method because inventory and PP&E as well as monetary assets are deemed exposed.
- The managerial implications are:
  - If management expects a currency to depreciate, it could minimize translation exposure by reducing net exposed assets.
  - If management expects appreciation, it should increase net exposed assets to benefit from the gain.

Comparing Translation Exposure to Operating Exposure

- Translation gains or losses can be different from operating gains or losses, not only in magnitude but in sign.
- A manager focusing only on translation losses might avoid countries because of likelihood of such losses:
  - The manager might fear losses tied to reported profits.
- Operating exposure, under these same circumstances shows that Germany is more desirable location because of the operating consequences:
  - This illustrates the importance of focusing decisions on operating consequences and not accounting based consequences.

Managing Translation Exposure

- **Balance Sheet Hedge** – this requires an equal amount of exposed foreign currency assets and liabilities on a firm’s consolidated balance sheet:
  - A change in exchange rates will change the value of exposed assets but offset that with an opposite change in liabilities.
  - This is termed monetary balance.
  - The cost of this method depends on relative borrowing costs in the varying currencies.
Managing Translation Exposure

- When is a balance sheet hedge justified?
  - The foreign subsidiary is about to be liquidated so that the value of its CTA would be realized
  - The firm has debt covenants or bank agreements that state the firm’s debt/equity ratios will be maintained within specific limits
  - Management is evaluated on the basis of certain income statement and balance sheet measures that are affected by translation losses or gains
  - The foreign subsidiary is operating in a hyperinflationary environment

Choosing Which Exposure to Minimize

- As a general matter, firms seeking to reduce both types of exposures typically reduce transaction exposure first
  - They then recalculate translation exposure and then decide if any residual translation exposure can be reduced without creating more transaction exposure

Summary of Learning Objectives

- Translation exposure results from translating foreign currency denominated financial statements into the parent’s consolidated reporting currency
- Translation exposure is the potential for loss or gain from this translation process
- A foreign subsidiary’s functional currency is the currency of the primary economic environment in which it operates
- The two basic procedures for translation used in most countries today are the current rate and the temporal method

Summary of Learning Objectives

- Technical aspects of translation include questions about when to recognize gains or losses in the income statement, the distinction between functional and reporting currency and the treatment of subsidiaries in hyperinflation countries
- Translation gains and losses can be quite different from operating gains and losses, not only in magnitude but in direction; management may need to determine which is of greater significance

Summary of Learning Objectives

- The main technique for managing translation exposure is a balance sheet hedge; this calls for having an equal amount of exposed foreign currency assets and liabilities
- Even if management chooses to follow an active policy of hedging translation exposure, it is nearly impossible to offset both transaction and translation exposure simultaneously; if forced, most managers will choose to reduce transaction exposure first and then translation exposure