

## Gaps in GAAP on Consolidation Policies and Procedures: Case of Minority (Noncontrolling) Interest

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### Abstract

*There still exist gaps in GAAP relating to accounting for business combinations, and preparation of consolidated financial statements including measurement and disclosure of minority interest in international accounting environment. During the past several years, the Financial Accounting Standards Board (FASB) has issued several proposed statements on issues related to business combinations. However, issues relating to measurement and presentation of minority interest in consolidated financial statements have not been dealt with in a way that successfully addresses the differences. This paper describes some approaches to measure minority interest. Users of financial accounting information may prefer a range of values rather than a single estimate, such as book value. We believe that providing and disclosing a range of values is likely to enhance the relevance and reliability dimensions of information relating to minority interest on the date of business combination.*

### Introduction

There are differences in Generally Accepted Accounting Principle (GAAP) relating to consolidation policies and procedures followed by various countries. Major accounting issues affecting business combinations and the preparation of consolidated financial statements are as follows:

1. The decision to treat a combination as a uniting of interests or as an acquisition.
2. The proper accounting basis for the assets and liabilities of the combining entities.
3. The appropriate presentation of unidentifiable assets such as goodwill in financial reports.
4. The approach measuring and presenting minority (non-controlling) interests in financial statements.

In order to minimize differences and to harmonize accounting standards among countries, several papers have been published in academic and professional journals addressing the first three issues above, particularly on accounting treatment for goodwill. However, research on accounting treatment for minority interests

is very rare. This paper attempts to provide some alternative measurements and disclosure approaches regarding minority interests.

During the past several years, the Financial Accounting Standards Board (FASB) has issued several proposed statements on business combinations and related issues. Following a discussion memorandum (DM) on Consolidation Policy and Procedures (FASB, 1991), FASB has issued exposure drafts on business combination and consolidation issues (FASB, 1995; FASB, February 23, 1999; FASB, September 7, 1999; FASB, February 14, 2001). After many years of discussion and review, the FASB issued its Statement of Financial Accounting Standard (SFAS) No. 141, Accounting for Business Combinations in June, 2001. Further, several other pronouncements such as SFAS Nos. 142-144 were issued focusing on some related aspects of consolidation such as accounting treatment for goodwill. However, accounting for measurement and presentation of minority interest in consolidated financial statements has not been adequately addressed in any of the recent pronouncements.

Various policies and procedures have been applied for evaluation and disclosure of minority interest in different countries, as shown in Table 1.

**Table 1**  
**Comparison of Measurement and Disclosure of Minority Interest in Consolidated  
 Financial Statements in Different Countries**

| <b>Accounting Practice</b>         | <b>Presentation of Minority Interest in Balance Sheet</b>                | <b>Presentation of Minority Interest in Income Statement</b>         | <b>Basis of Measurement of Minority Interest of Acquired subsidiary</b>  |
|------------------------------------|--|--|--|
| <b>Countries</b>                   |  |  |  |
| Australia                          | As a component of shareholders' equity                                   | As a separate line item  | Historical cost of the investee  |
| Canada                             | Generally presented outside the shareholders' equity section             | As a separate line item  | Historical cost of the investee  |
| France                             | Generally between liabilities and shareholders' equity                   | As a separate line item  | Using the parent's revalued basis  |
| Germany                            | As a separate component of shareholders' equity                          | No charge to the income statement, rather charge directly to equity. | Using the parent's revalued basis  |
| Italy                              | As a non-current liability   | As a separate line item  | In the supplementary accounts, generally determined using the historical basis of the investee                 |
| Japan                              | In the supplementary accounts, as the last line in the liability section | As a separate line item  | In the supplementary accounts, generally determined using the historical basis of the investee                 |
| The Netherlands                    | Presented outside of the shareholders' equity section                    | As a separate line item  | Historical cost of the investee  |
| United Kingdom                     | Presented immediately before or after the shareholders' equity section   | As a separate line item  | Using the parent's revalued basis  |
| United States                      | Generally between liabilities and shareholders' equity                   | As a separate line item  | Historical cost of the investee <sup>1</sup>   |
| International Accounting Standards | Generally between liabilities and shareholders' equity                   | As a separate line item  | Preferably determined using the parents' revalued basis. Alternatively, determined using the historical basis. |

Source: Consolidation Policy and Procedures, FASB, Discussion Memorandum FAS #107, September 1991.

Numerous studies have dealt with a variety of issues in business combination, but literature on the valuation and disclosure of minority interest is relatively sparse. The purpose of this paper is to describe various theoretically viable approaches to measuring and reporting minority interest.

### Minority Interest

Minority (noncontrolling) interest represents the interest in the subsidiary's equity (net assets) held by third party shareholders other than the parent company. A question may arise as to when a parent and subsidiary relationship exists. Here again, differences exist for determining whether an investor company is a parent company and an investee company is a subsidiary. To determine whether a parent and subsidiary relationship exists, some jurisdictions use the concept of "control"; others use the concept of majority "ownership."

In the U.S., Germany, and Japan, among others, a subsidiary is based on majority ownership. However, a switch to the use of the control concept is being explored in the U.S.<sup>2</sup> In October 1995, FASB issued an Exposure Draft (ED) to propose a new definition for business combination, and introduced new policy and procedures for consolidation. In that ED, FASB considered "control" instead of "ownership" as the basis for consolidation. Control of an entity is defined as power over its assets: power to use or direct the use of the individual assets of another entity in essentially the same ways as the controlling entity can use its own assets. FASB, however, has not made any final pronouncement in this regard, as it indicated in its April 17, 2001 Business Combinations: Project Summary<sup>3</sup> and in its Project Updates (April 8, 2003): Consolidations Policy and Procedures. The use of concept of control instead of concept of ownership to establish parent company and subsidiary relationship may have prevented some accounting failures or scandals. When concept of ownership is used, only the investee entities that are owned are considered subsidiaries, and their operations and net assets are consolidated with the investor's (parent company's) accounts. When an investor company controls an investee company, on the other hand, the investee's operations and net assets are not consolidated. As a result, an investor company is

given the opportunity not to disclose essential data or information of investee companies that are controlled.

In Canada, Australia, New Zealand, and the United Kingdom the concept of control is used to determine whether a parent and subsidiary relationship exists between an investor and investee company. The United Kingdom adopted the control concept for determining parent and subsidiary relationship in 1990. In 1991, Price Waterhouse, in a study analyzing accounting policies and practices for consolidation and equity method in nine industrialized countries, found a widespread use of control rather than ownership as the primary condition requiring consolidation (FASB, 1991).

In Canada, the Canadian Institute of Chartered Accountants mandates consolidation of all subsidiaries, with "subsidiary" defined as an enterprise controlled by another enterprise. Control is defined as an enterprise's (the parent company's) continuing power to determine the other enterprise's (the subsidiary's) strategic operating, investing, and financing policies without the co-operation of others<sup>4</sup>.

Control over another enterprise usually could be obtained through acquisition of more than 50 percent voting shares (FASB, 1995)<sup>5</sup>. If the parent company owns less than 100 percent, then minority interest in the subsidiary company would exist. Questions arise as to how to value minority interest and how to report minority interest in the consolidated financial statements. As indicated earlier, differences exist in valuing minority interest on the date of business combination, for example (FASB, 1991):

In the US and Canada – generally, using historical cost (carrying/ book value) of the investee (subsidiary company), and In France, Germany and UK – using fair value basis.

The FASB in its 1995 ED proposed a change in valuation of minority interest. In particular, paragraph 27 of the ED indicates that "...the noncontrolling interest in the subsidiary shall be reported at its proportionate amount of the fair value of all of the subsidiary's identifiable assets and liabilities. Goodwill shall not be attributed to the noncontrolling interest."

**Valuation Approaches**

There are a number of logical ways available for valuation of minority interest on the date of business combination. In this regard, numerical examples are used to explain the various alternative valuation techniques. In this paper, using an example, we discuss seven approaches. The choice of each of these approaches should be guided by the qualitative characteristics of accounting information (FASB, 1980), such as relevancy, reliability, understandability, and comparability.

*Example:*

On January 1, 2XX3, P Company acquired 80 voting shares (80%) of S Ltd. for \$340 cash. Therefore, 20 shares of S Ltd. are held by third parties (i.e., other than P Company); these shareholders' interest in the subsidiary is labelled as minority interest. Data at the time of acquisition transaction (immediately be-

fore business combination) appear in Table 2.

**Seven Approaches for Valuing Minority (Noncontrolling) Interest**

**1. Parent Company Concept**

Under this approach, the focus is on the parent company shareholders' equity. The consolidated financial statements are prepared for the information needs of the parent company. The minority interests are considered as outsiders. Accordingly, the minority shareholders' interest in the subsidiary's equity is reported outside of the shareholders' (parent company's) equity, as a liability. Such a disclosure may be construed by some to consider minority interest as a liability (i.e., minority equity financing its proportionate interest in the subsidiary company's net assets). The presentation of minority interest as a liability has no conceptual support because it does not meet the definition of a liability as defined in Accounting Concept Statement No. 6<sup>6</sup>.

**Table 2**  
**Data at the Time of Acquisition**

| #1                                | #2                    | #3                    | #4                    | #5<br>(#4 – #3)                 |
|-----------------------------------|-----------------------|-----------------------|-----------------------|---------------------------------|
|                                   | P Co.<br>(Book Value) | S Co.<br>(Book Value) | S Co.<br>(Fair Value) | S Co.<br>(Fair Value<br>excess) |
| Cash                              | 200                   | -                     | -                     |                                 |
| Marketable securities             | -                     | 100                   | 110                   | 10                              |
| Inventory                         | 500                   | 200                   | 215                   | 15                              |
| Equipment                         | 600                   | 60                    | 100                   | 40                              |
| Patents                           | 300                   | 30                    | 25                    | (5)                             |
| Total assets                      | 3400                  | 390                   | 450                   | 60                              |
| Liabilities                       | (800)                 | (90)                  | (90)                  | -                               |
| Net assets                        | 2600                  | 300                   | 360                   | 60                              |
| Shareholders' equity (100 shares) | 2600                  | 300                   |                       |                                 |

An extension of the parent company concept supports the disclosure of minority interests after long-term liabilities and deferred taxes but before the consolidated shareholders' equity. This is because a minority interest is neither equity nor a liability of the parent. Most respondents to the FASB Discussion Memorandum supported this disclosure and indicated that this is the prevailing practice of business enterprise in the United States (see para. 102 of the ED, 1995). Although the minority interest finances its interest in a subsidiary's net assets, it is not a liability<sup>7</sup>. Another approach is to disclose minority interest after the consolidated (parent company's) shareholders' equity.

Under the parent company perspective, the minority interest on the date of business combination is based on the book value (carrying value) recorded in the accounting records of the subsidiary company. This is because the acquisition transaction does not involve minority interest<sup>8</sup>.

Using the numerical example, the 20% minority interest in the subsidiary company, under this approach, would be based on the subsidiary company's book values as given in column 3 in the example. The minority interest would be 20% of the book value of subsidiary's assets (\$390) less liabilities (\$90), on the date of business combination, i.e.,  $20\% * (\$390 - \$90) = \$60$ .

The parent company's (80 percent) share of the subsidiary's net assets as recorded in the books of the sub-

sidary would be \$240 (80% of \$300). Parent company paid (\$340) to acquire a basket of net assets (assets less liabilities assumed), which should be assigned to individual elements in the basket of net assets based on fair values. The amount of \$340 exceeds the book value of acquired net assets of \$240 by \$100. This excess (i.e., the cost in excess of book value) of \$100 is first assigned to identifiable assets<sup>9</sup> net of liabilities in the amount of \$48 (i.e., 80% of \$60). The amount of \$60 represents the excess of fair value of net assets of the subsidiary company over the book value (as indicated in column 5 in the example). The residual ( $\$100 - \$48$ ) of \$52 is assigned to goodwill. The \$52 for goodwill (in substance) represents the present value of 80% of superior excess earnings that would be generated by the subsidiary. The parent company's portion (80%) of identifiable assets ( $80\% * \$390 = \$312$ ) would be valued at an acquisition cost of \$360 ( $=\$312 + \$48$ ).

The subsidiary's net assets (recorded at \$300) would be consolidated using two valuation bases: the parent company's portion (80%) would be based on the cost consideration given by the parent (\$340), and the remaining 20% (minority interest) would be based on carrying values of net assets in the amount of \$60 ( $= 20\% * \$300$ ). Since the parent company paid an excess of \$100 for its 80 percent interest, the subsidiary company's net assets recorded at \$300 would be incorporated in consolidated statements at \$400 ( $= \$300 + \$100$ ), as shown in Table 3.

The consolidated work sheet appears in Table 4.

**Table 3**  
**Asset Valuation under the Parent Company Concept**

| Item                | Parent's (80%) portion based on fair value | Minority (20%) portion based on book value | Total  |
|---------------------|--|--|--------|
| Identifiable assets | \$ 360                                     | \$ 78                                      | \$ 438 |
| Goodwill            | 52   | -  | 52     |
| Liabilities         | (72)                                       | (18)                                       | (90)   |
| Total               | 340  | 60   | 400    |

**Table 4**  
**Consolidated Work Sheet under Parent Company Concept**

|   | P Co. | S Co. | difference (80% of fair value<br>in excess of book value) | Consolidated |
|---|-------|-------|---|--------------|
| Cash  | 1660  | -     |   | 1660         |
| Marketable securities                         | -     | 100   | 8   | 108          |
| Inventory                                     | 500   | 200   | 12  | 712          |
| Equipment                                     | 600   | 60    | 32  | 692          |
| Patents                                       | 300   | 30    | (4)   | 326          |
| Goodwill                                      |       |       | 52  | 52           |
| Liabilities                                   | (800) | (90)  | -   | (890)        |
| Net assets excluding investment in subsidiary | 2260  | 300   | 100   | 2660         |
| Investment in subsidiary                      | 340   |       |   |              |
| Net assets                                    | 2600  | 300   |   | 2660         |
| Minority (noncontrolling) interest            |       |       |   | 60           |
| Owner's equity (controlling interest)         | 2600  | 300   |   | 2600         |

This technique is easy to apply. Since minority interest is not a party in the acquisition transaction (business combination), it can be argued that it is appropriate to reflect minority interest at the carrying values of net assets recorded in the subsidiary's books. Current practice in consolidated accounting uses this valuation approach due to its objectivity for both minority and majority interests. Majority shareholders' equity is reported at cost, which reflects the acquisition price paid by the parent company for its interest. Minority interest is also based on the carrying value, since there is no arm's length transaction involving minority shareholders.

This approach can be criticized on the grounds that it uses two valuation bases to establish the subsidiary's net assets on the date of business combination, viz., the parent's portion of the subsidiary's net assets are established based on the parent company's acquisition cost (at fair values), and minority interest at book val-

ues. As alluded to earlier, in some countries fair values are used to reflect minority interest in the subsidiary company. The use of fair values to determine minority interest is described next.

## 2. Economic Unit Concept or Entity Theory

In this perspective, the minority interest is considered part of the ownership of the entire business combination. Accordingly, the noncontrolling (minority) interest in the subsidiary's equity is disclosed as part of the consolidated owners' equity. For the purposes of disclosure, a parallel could be drawn between partnership interest and minority interest. If minority interest is considered as similar to a partner (say a junior partner), then in a partnership all junior and senior partners' capital accounts represent partnership's owners' equity. Likewise minority interest (as a junior/noncontrolling partner) in a business combination representing only a part of the consolidated eq-

uity should be considered (and reported) as part of the owners' equity in the business combination.

Paragraph 110 of ED (FASB, 1995) has a different interpretation. It refers to the economic unit approach by indicating the fact that the parent's control of a subsidiary gives it power over and stewardship responsibilities for all of the subsidiary's individual assets and liabilities—not just a portion of each asset and liability based on the parent's equity interest. Consequently, the value of minority interest on the date of business combination is based on the fair values of the subsidiary's net assets (both tangible and intangible assets including goodwill, less liabilities).

Since minority interest shareholders are not involved in the business combination transaction, a question arises as to how to determine fair value of the net assets owned by the minority interest in the subsidiary company. In this regard, a convenient approach is to use the price paid by the parent company as the basis to impute value for the minority interest. The Discussion Memorandum (FASB, 1991) describes two methods: the purchased goodwill method and the full goodwill method. Under the former method, goodwill is measured in the same way as in the parent company approach. The latter method, however, measures goodwill by attributing an amount for goodwill to the non-controlling interest based on the goodwill attributed to the parent.

Using the numerical example, the minority interest un-

der the entity approach (economic unit concept) would be based on the fair value of net assets, i.e., all tangible and intangible assets including goodwill, minus liabilities. The fair value of minority interest can be estimated based on the purchase price paid by P Company for its 80 shares (80%).

For 80 shares, P Company paid . . . . . \$340

Imputed value for 20 shares held by

minority shareholders ( $\$340/80 * 20$ ) . . . . . \$85

P Company's acquisition cost of \$340 would be assigned, as described in the first approach (the parent company concept) above, to identifiable assets and liabilities at fair values, which is  $80% * (\$450 - \$90) = \$288$ , and the residual ( $\$340 - \$288$ ) of \$52 to goodwill. The amount of \$85 attributable to minority interest exceeds the corresponding book value of \$60 by \$25. This excess would be assigned \$12 (20% of \$60) to identifiable net assets. The amount of \$60 represents the excess of fair values over the recorded book values as indicated in column 5 in the example. The residual of \$13 (i.e.,  $\$25 - \$12$ ) would be assigned to goodwill. The subsidiary's net assets recorded at \$300 in the books of the subsidiary company would be incorporated in the consolidated statements at \$425 (i.e.,  $\$300 + \$100$  excess paid by parent company + \$25 excess imputed to minority interest or  $\$340$  parent cost of acquisition + \$85 imputed value of minority interest based on parent's cost). The consolidated work sheet under this perspective is presented in Table 5.

**Table 5**  
**Consolidation Work Sheet under the Economic Unit Concept**

|  | P Co. | S Co. | Difference | Consolidated |
|--|-------|-------|------------|--------------|
| Net assets excluding investment in sub, & goodwill | 2260  | 300   | 60         | 2620         |
| Investment in subsidiary                           | 340   |       |            |              |
| Goodwill   |       |       | 65         | 65           |
| Net assets   | 2600  | 300   | 125        | 2685         |
| Minority interest                                  |       |       |            | 85           |
| Owner's equity                                     | 2600  | 300   |            | 2600         |

The make-up of the consolidated net assets of \$2620 shown in the first row is:

|  |        |
|--|--------|
| P Company's net assets at book value . . . . .   | \$2260 |
| S Company's net assets at book value . . . . .   | \$300  |
| Cost in excess of book value paid by parent company assigned to identifiable assets (other than goodwill) . . . . .                                      | \$48.  |
| Minority interest in monetary assets net of liabilities at fair values (20% of \$60 fair value in excess of book value of identifiable assets) . . . . . | \$12   |

The amount of \$65 representing goodwill consists of \$52 relating to 80% of the parent company's interest and \$13 relating to 20% minority interest.

It can be argued that imputing fair value for minority interest based on the consideration given by the parent company may not be reliable, particularly with respect to some of the non-current non-monetary assets (e.g., patents, goodwill); and that it violates the cost principle. Further, this approach is criticized on the basis that these two types of ownership interest are in two different economic environments, e.g., shares held by minority shareholders usually are harder to sell than it is to sell shares held by the controlling interest, particularly in a closely-held firm. This is because of, for example, a lack of control by minority shareholders over the subsidiary company.

### 3. Modified Economic Unit Concept

This approach is an extension of the second approach (economic unit concept) described above. The parent's acquisition cost of \$340 would be assigned to net identifiable assets (\$288) and residual to goodwill (\$52). The minority interest is established at fair value of identifiable net assets (tangible and identifiable intangible assets less liabilities, i.e., excluding goodwill).

Based on this approach, minority interest (20 shares) would be computed using fair values of net identifiable assets only (i.e., without assigning any value for goodwill for determining minority interest).

$(20\% * \$360) \dots\dots\dots \$72$

Like the economic unit concept, this approach uses fair values of identifiable assets and liabilities for minority interest. The consolidated work sheet under this perspective appears in Table 6.

Note that the make-up of the consolidated net assets of \$2620 shown in the first row is the same as for approach 2 described earlier. The amount of \$52 representing goodwill consists of \$52 relating to 80% of the parent company's interest, and unlike the second approach, no goodwill for minority interest is imputed.

This approach for valuing minority interest may be criticized as unreliable using the same arguments as for the second approach (economic unit concept) above, including the following:

**Table 6**  
**Consolidated Work Sheet under the Modified Economic Unit Concept**

|  | P Company | S Company | Consolidated |
|--|-----------|-----------|--------------|
| Net assets excluding investment in sub, & goodwill | 2260      | 300       | 2620         |
| Investment in subsidiary                           | 340       |           |              |
| Goodwill   |           |           |              |
| Net assets   | 2600      | 300       | 2672         |
| Minority interest                                  |           |           | 72           |
| Owner's equity                                     | 2600      | 300       | 2600         |



- This method uses fair values for identifiable net assets in which minority interest is not a party at arms length. This violates the cost principle;
- it may be difficult to determine fair values for identifiable intangibles (e.g., patents, copyrights, trade marks); and
- valuing identifiable assets net of liabilities at fair values and not valuing goodwill relating to minority interest at fair value is not consistent and may be criticized as arbitrary.

Despite the above criticisms, recognition of the fair value for all identifiable assets and liabilities at the date of the acquisition is the basis (to measure/value majority and minority interests) followed in both Australia and the United Kingdom and the allowable alternative treatment in International Accounting standard No. 22, Accounting for Business Combinations. The FASB in the United States also is considering adopting this approach, as ED, para.114, (FASB, 1995) states:

The Board concluded that in accounting for the acquisition of a subsidiary by a parent, the purchase price (cost of the acquisition) should be assigned to each of the identifiable assets acquired and liabilities assumed based on the full amount of their fair values at the date the parent-subsidary relationship is established. The Board also decided to require recognition of only the parent's share of goodwill. That is, goodwill is the excess of the cost of the acquisition over the parent's

share of the net amount assigned to the identifiable assets acquired and liabilities assumed.<sup>10</sup>

Approaches 4, 5, 6, and 7, described below are variations of the above three approaches.

#### 4. Monetary Assets at Fair Values

Since the fair values of monetary assets<sup>11</sup> of the subsidiary company on the date of business combination can be determined reliably, fair values for monetary assets to establish minority interest in the subsidiary's monetary assets and liabilities would be used. With respect to non-monetary assets, carrying values as recorded in the subsidiary's books would be used. Accordingly, minority interest would be:

|   |      |
|---|------|
| Non-monetary assets at their carrying values    |      |
| 20%*(\$200+\$60+\$30) .....                     | \$58 |
| Fair values of monetary assets less liabilities |      |
| 20%* (\$110 - \$90) .....                       | \$4  |
| Minority interest .....                         | \$62 |

(In this situation, inventory is considered as a non-monetary item)

This approach is based on the premise that monetary assets are as good as cash. Therefore, it can be argued that it is appropriate to use fair values (cash equivalent) for monetary items for determining minority interest. The consolidated work sheet under this perspective is presented in Table 7.

**Table 7**  
**Consolidated Work Sheet under Monetary Assets at Fair Values**

|  | P Company | S Company | Consolidated |
|--|-----------|-----------|--------------|
| Net assets excluding investment in sub, & goodwill | 2260      | 300       | 2610         |
| Investment in subsidiary                           | 340       |           |              |
| Goodwill   |           |           | 52           |
| Net assets   | 2600      | 300       | 2662         |
| Minority interest                                  |           |           | 62           |
| Owner's equity                                     | 2600      | 300       | 2600         |

The make-up of the consolidated net assets of \$2610 shown in the first row is:

|  |        |
|--|--------|
| P Company's net assets at book value . . . . .   | \$2260 |
| S Company's net assets at book value . . . . .   | \$300  |
| Cost in excess of book value paid by parent company assigned to identifiable assets (other than goodwill) . . . . .  | \$48   |
| Minority interest in monetary assets net of liabilities at fair values (20% of \$10 fair value of marketable securities in excess of book value) . . . . . | \$2    |

**5. Current Assets and Monetary Assets at Fair Values**

This is an extension of approach 4, described above. It can be argued that, in addition to fair values of monetary assets, fair values of all current assets, both monetary and non-monetary, can be determined with a high degree of reliability. Accordingly, under this approach fair values of all current assets and all other long-term monetary assets, and carrying values of long-term non-monetary assets, are used for determining the minority interest in subsidiary's equity.

Based on the above (i.e., fair values of all current assets and monetary assets less fair values of liabilities, plus book values of long term non-monetary assets), the minority interest in the subsidiary's net assets

would be as follows.

|  |      |
|--|------|
| Fair values of monetary items and inventory less liabilities {20% *(\$110 + \$215 - \$90)} . . . . . | \$47 |
| Non-monetary items {20% * (\$60 + \$30)} . . . . .   | \$18 |
| Minority interest . . . . .  | \$65 |

This approach is based on the premise that fair values of all monetary assets and non-monetary current assets (e.g., inventory), are as good as cash. Since fair values of long-term non-monetary assets such as equipment or patents may not be objectively determinable in all situations, it can be argued that the minority interest attributable to these assets should be based on their carrying values. The consolidated work sheet under this perspective appears in Table 8.

The make-up of the consolidated net assets of \$2613 shown in the first row is:

|  |        |
|--|--------|
| P Company's net assets at book value . . . . .   | \$2260 |
| S Company's net assets at book value . . . . .   | \$300  |
| Cost in excess of book value paid by parent company assigned to identifiable assets (other than goodwill) . . . . .                                      | \$48   |
| Minority interest at fair values for all current assets 20% of \$25 fair value of marketable securities and inventory in excess of book value) . . . . . | \$5    |

**Table 8**  
**Consolidated Work Sheet under Current Assets and Monetary Assets at Fair Values**

|  | P Company | S Company | Consolidated |
|--|-----------|-----------|--------------|
| Net assets excluding investment in sub, & goodwill | 2260      | 300       | 2613         |
| Investment in subsidiary                           | 340       |           |              |
| Goodwill   |           |           | 52           |
| Net assets   | 2600      | 300       | 2665         |
| Minority (noncontrolling) interest                 |           |           | 65           |
| Owner's equity (controlling interest)              | 2600      | 300       | 2600         |

**6. At Lower of Book or Fair Values of Non-monetary Assets**

The valuation method discussed in approach 5 uses the fair values of current assets (e.g., inventory), and carrying values of other non-current non-monetary assets. This may not be conservative (e.g.) when the carrying values of non-monetary assets such as patents exceed fair values.

This approach overcomes the shortcoming of using carrying values that exceed fair values to reflect minority interest. According to this approach, minority interest is established at fair values of monetary assets less fair values of liabilities, plus the lower of book or fair values of non-monetary assets. Applying this technique to the example, the minority interest would be:

$$\{(\$110 - \$90) + \$200 + \$60 + \$25\} * 20\% = \$61$$

This approach is an extension of approach 5. Non-monetary assets (current and non-current) are valued conservatively at the lower of book or fair values. The consolidated work sheet under this perspective appears in Table 9.

The make-up of the consolidated net assets of \$2609 shown in the first row is:

P Company's net assets at book value . . . . . \$2260

S Company's net assets at book value . . . . . \$300

Cost in excess of book value paid by parent company assigned to identifiable assets (other than goodwill) . . . . . \$48

Attributable to minority interest (20% of \$10 attributable to marketable securities, market value in excess of book value) . . . . . \$2

Attributable to Minority interest at lower of fair value or book value of non-monetary assets (20% of \$5 book value of patents in excess of fair values) . . . . . \$(1)

**7. Lower of Carrying or Fair Value of Assets Approach**

This approach would produce a conservative valuation of minority interest in the subsidiary's net assets. Based on this approach (i.e., lower of carrying or fair values of assets less fair value of liabilities) the minority interest would be:

$$\{\$390 \text{ carrying value of assets} - \$5 \text{ to adjust patents to bring to lower of carrying or fair value} - \$90 \text{ liabilities} = \$295, \text{ lower of carrying or market value of assets less liabilities}\}, \text{ i.e., } \$295 * 20\% = \$59.$$

The consolidated work sheet under this perspective appears in Table 10.

**Table 9**  
**Consolidated Work Sheet under Lower of Book or Fair Values of Non-monetary Assets**

|  | <b>P Company</b> | <b>S Company</b> | <b>Consolidated</b> |
|--|------------------|------------------|---------------------|
| Net assets excluding investment in sub, & goodwill | 2260             | 300              | 2609                |
| Investment in subsidiary                           | 340              |                  |                     |
| Goodwill   |                  |                  | 52                  |
| Net assets   | 2600             | 300              | 2661                |
| Minority (noncontrolling) interest                 |                  |                  | 61                  |
| Owner's equity (controlling interest)              | 2600             | 300              | 2600                |

**Table 10**  
**Consolidated Work Sheet for Lower of Carrying or Fair Value of Assets Approach**

|  | P Company | S Company | Consolidated |
|--|-----------|-----------|--------------|
| Net assets excluding investment in sub, & goodwill | 2260      | 300       | 2607         |
| Investment in subsidiary                           | 340       |           |              |
| Goodwill   |           |           | 52           |
| Net assets   | 2600      | 300       | 2659         |
| Minority (noncontrolling) interest                 |           |           | 59           |
| Owner's equity (controlling interest)              | 2600      | 300       | 2600         |

The make-up of the consolidated net assets of \$2607 shown in the first row is:

- P Company's net assets at book value . . . . . \$2260
- S Company's net assets at book value . . . . . \$300
- Cost in excess of book value paid by parent company assigned to identifiable assets (other than goodwill) . . . . . \$48
- Minority interest at lower of fair value or book value of assets (20% of \$ 5 book value of patents in excess of fair values) . . . . . \$(1)

Consolidated data on the date of business combination based on the above seven approaches are shown in Table 11.

**Proportionate Consolidation**

This approach is based on the proprietary theory of consolidation. In this approach, only the parent company's proportionate share in the subsidiary company's net assets would be included in the consolidated statements, and minority interest in the subsidiary would not be included.

In order to be meaningful and for fair presentation, the consolidated statements should reflect the net assets controlled by the business combination (the accounting entity). When the parent company controls the subsidiary, net assets owned by both majority and minority interests would be under the control of the accounting entity.

**Table 11**  
**Consolidated Data on Date of Business Combination Based on Above Seven Approaches**

|                                     | 1    | 2    | 3    | 4    | 5    | 6    | 7    |
|-------------------------------------|------|------|------|------|------|------|------|
| Identifiable Net Assets             | 2608 | 2620 | 2620 | 2610 | 2613 | 2609 | 2607 |
| Goodwill                            | 52   | 65   | 52   | 52   | 52   | 52   | 52   |
| Total Net Assets                    | 2660 | 2685 | 2672 | 2662 | 2665 | 2661 | 2659 |
| Minority (non-controlling) interest | 60   | 85   | 72   | 62   | 65   | 61   | 59   |
| Majority (controlling interest)     | 2600 | 2600 | 2600 | 2600 | 2600 | 2600 | 2600 |

By contrast, proportionate consolidation would be appropriate in accounting for joint ventures. A joint venture is a venture jointly controlled by two or more venturers, and the relationship between venturers for managing and other matters relating to the joint venture is usually governed by an agreement<sup>12</sup>. Since none of the individual venturers is in a position to unilaterally control the joint venture, only the venturers' proportionate share of the net assets in the joint venture would be consolidated with the other net assets of the venturer. In other words, the inclusion of all net assets of the joint venture in the consolidated financial statements of any individual venturer would not be appropriate, since none of the venturers individually has control over the entire net assets of the joint venture.

### **Subsidiary Company's Goodwill on the Date of Business Combination**

At the time of acquisition, if the acquiree (the subsidiary) company has goodwill in its books, then the process of valuation of minority interest would be along the lines described above under approaches 1 through 7. For example:

- Approach 1: The minority share of goodwill would be based on the carrying value of goodwill in subsidiary's books.
- Approach 2: The minority interest in goodwill would be based on the fair value of the subsidiary's net assets including goodwill.
- Approaches 3 through 6: The minority share of goodwill would be based on the carrying value of goodwill in the subsidiary's books.
- Approach 7: The minority share of goodwill would be based on the lower of carrying or fair value of the subsidiary's goodwill.

### **Conclusion**

Compared to majority shareholders, minority (non-controlling) shareholders may be at a disadvantage (like absentee partners in a partnership) by not receiving needed information about their ownership interest for investment decisions. Since a minority shareholder

is not a party to the acquisition transaction, it can be argued that the current practice in the U.S. and Canada, to provide for minority interest on the date of business combination based on the book value of the subsidiary company, is convenient to apply, neutral, verifiable, and objective. However, this practice is not universally accepted.

As discussed above, differences exist in international accounting practices in measurement of minority interest on the date of business combination. To achieve uniformity in practice and comparability of data among enterprises, prescribing uniform international accounting standards for measuring and disclosing minority interest in sufficient detail will reduce the information asymmetry (particularly in closely-held operations) that may exist between a majority shareholder and a minority shareholder. Minority shareholders as users of financial information may prefer a range of values (that is reliable) rather than a single amount. For example, in addition to using the book value for reporting minority interest, the users of financial information may find useful the fair value of minority interest, which could be based on the consideration given by the parent company (approach #2); or the lower of fair value or book value (approach #7). The choice should be guided by the financial statement concepts<sup>13</sup>.

To enhance the relevance and reliability of information relating to minority interest on the date of business combination, we suggest a range of values be disclosed, as follows:

- The existing approach (e.g., approach 1) should be used for the consolidation process to reflect minority interest at book value of the subsidiary company because of its simplicity and verifiability characteristics.
- In addition to the above (book value), management should use its judgment to select (from among approaches 2 through 7) an appropriate (or more than one) value for minority interest, and describe the approach used and amount in sufficient detail as a footnote to the financial statements as a supplementary information.

Providing additional information will likely protect minority shareholders, and in addition will assist them in making informed decisions.

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## Endnotes

1. According to Wiley GAAP 2003, both measurement techniques of minority interests (i.e., historical cost of the investee and the parent revalued basis) are acceptable in the United States, see page 469.
2. Ibid.
3. "The Board will not make any final decisions or consider whether to issue final Statement until it has addressed all of the substantive issues rose by constituents and has considered the entire set of tentative decisions reached during its re-deliberations."
4. *CICA Handbook*, Section 1590.03 (August 1991). Toronto: Canadian Institute of Chartered Accountants.
5. The U.S. GAAP has not yet officially adopted the control concept for consolidation; however, paragraph 14 of the ED (FASB, 1995) has proposed for adoption. The ED has listed the following examples having one entity effective control over another entity other than majority ownership:
  - Ownership of a large minority voting interest (approximately 40 percent) and no other party or organized group of parties has a significant interest
  - An ability demonstrated by a recent election to dominate the process of nominating candidates for another entity's governing board and to cast a majority of the votes cast in an election of board members.
  - A unilateral ability to obtain a majority voting interest through ownership of securities or other rights that may be converted into a majority voting interest at the option of the holder without assuming risks in excess of the expected benefits from the conversion
  - A relationship with an entity that it has established that has no voting stock or member voting rights and has provisions in its charter, bylaws, or trust instrument that (1) cannot

- be changed by entities other than its creator (sponsor) and (2) limit the entity, including the powers of its board of directors or trustees, to activities that the creating entity can schedule (or can initiate) to provide substantially all future net cash inflows or other future economic benefits to its creator
- A unilateral ability to dissolve an entity and assume control of its individual assets, subject to claims against those assets, without assuming economic costs in excess of the expected benefits from that dissolution
  - A sole general partnership interest in a limited partnership.
6. According to the FASB *Statements of Financial Accounting Concepts No. 6*, liability represents present obligation of an entity, which would be discharged by paying cash or distributing other assets of the entity.
  7. According to the FASB *Statements of Financial Accounting Concepts No. 6*, liability represents present obligation of an entity, which would be discharged by paying cash or distributing other assets of the entity.
  8. Also see *CICA Handbook*, Section 1600.14 (August, 1991). Toronto: Canadian Institute of Chartered Accountants.
  9. Assets can be classified as identifiable and unidentifiable (i.e., goodwill), and can be described as resources, owned or controlled by an entity, having potential future economic benefits. Identifiable assets, in turn, can be classified as (e.g., inventory) and identifiable intangible (e.g., patents).
  10. The board believes that the amount a parent pays in excess of the fair value of identifiable net assets may be paid in part of a subsidiary's goodwill and in part as a premium paid to gain control of a subsidiary. Therefore, this should not be attributed to the minority interest.
  11. The value of assets that is fixed by contract or otherwise.
  12. Canadian Institute of Chartered Accountants, *CICA Handbook*, Section 3055.04 (August, 1991), p. 1131.
  13. Financial Accounting Standards Board (1980). Qualitative characteristics of accounting information. *Statement of Financial Accounting Concept 2*.
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