# MEASUREMENT OPTIONS FOR NON-CONTROLLING INTERESTS AND THEIR EFFECTS ON CONSOLIDATED FINANCIAL STATEMENTS CONSISTENCY. WHICH SHOULD THE DISCLOSURE BE?

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**Abstract**

This paper aims at emphasizing some drawbacks arising from the alternatives consolidation approaches allowed by the IFRS 3 revised 2008. We develop our analysis working on simulated figures to demonstrate that subsidiaries with similar underlying economics might have a different impact on the calculation of the group equity and income. That is merely due to the accounting treatment chosen by the parent company. This fact does not respect the consistency among values within consolidated financial statements and causes lack of comparability among consolidated financial statements prepared by different reporting entities. Since nowadays there is not any Standard requiring disclosure suitable for the comprehension of this matter, we suggest which relevant disclosure should be provided to better understand the composition of the group results.

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## 1 Introduction

Referring to the business combinations that result in a parent-subsidiary relationship, IFRS 3 revised 2008 (IFRS 3R)[5] allows the parent to measure the non-controlling interests (NCI) either at their fair value or as their proportionate share in the subsidiary identifiable net assets[6]. The second option can be applied only whether the NCI represent ownership instruments and entitle their holders to a pro-rata share of the subsidiary net assets in the event of liquidation[7]. It should be pointed out that the parent is permitted to choose the consolidation approach for each business combination[8].

The different value attributable to the NCI occurs in a different goodwill recognised in the group accounts.

Goodwill is the resource by which we can synthetically figure out the future economic benefits arising from the assets acquired in a business combination that are not individually identified and separately recognised (IAS 38, § 11).

When we consider the nature of goodwill and the objective of the financial statements under the IASB Framework, the conceptually sound approach in accounting for goodwill consists in its full recognition. In fact, the role of the financial statements is to provide financial information that supports the users in making decisions. In order to make these forward-looking economic decisions, the relevant information is those that help the users to predict the entity future

[5] The revised version of IFRS 3 was issued in January 2008 and applies to all business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after 1 July 2009.

[6] The first version of IFRS 3, issued in 2004, required any minority interest was stated at its proportionate share of the net fair value of the subsidiary's identifiable assets, liabilities and contingent liabilities (IFRS 3, § 40).

[7] Amendment introduced by the Annual Improvements to IFRSs 2010.

[8] In 2005 the IASB issued the Exposure Draft of proposed amendments to IFRS 3, Business Combinations (ED 3). For what concern the reporting method for NCI, the accounting options allowed by the IFRS 3R were not present in the above-mentioned Draft. According to ED 3, the parent company should measure and recognise NCI as the sum of the non-controlling interest's proportional interest in the identifiable assets acquired and liabilities assumed plus the non-controlling interest's share of goodwill, if any. Further, it should be pointed out that the measurement of goodwill arising from consolidation implied the valuation of the subsidiary as a whole, being its value the difference between the fair value of the acquiree (subsidiary) and the net amount of the recognised identifiable assets acquired and liabilities assumed (ED 3, § 49). These requirements evidence how the Exposure Draft was definitely based on the entity theory.

net cash inflows (amount, timing and uncertainty)[9]. Consequently, in the case of business combination, the group accounts should present all the resources that contribute to generate the acquiree future cash flows, including those that are part of goodwill. According to this theoretical reasoning, the recognition of the full goodwill would provide financial information with greater predictive ability and greater relevance than does the partial goodwill approach allowed by IFRS 3R. However, in practice, the recognition of full goodwill has some troubles in measuring the goodwill related to the parent and the one related to the NCI. Thus, IFRS 3R still allows two alternative accounting treatments that are called, respectively, as "full goodwill approach" and "purchased goodwill approach".

The first one sees the group as a single economic entity and the consolidated financial statements aim at showing the total resources managed within the group, regardless of the percentage of controlling shareholders ownership. The group accounts present the full fair value of the subsidiary identifiable assets and liabilities and the whole goodwill of the subsidiary.

According to the purchased goodwill approach, the consolidated financial statements show the full fair value of the subsidiary identifiable assets and liabilities and just the goodwill related to the controlling interests.

The full goodwill approach shares the conceptual background of the entity theory and the consolidated financial statements provide useful information to all the group shareholders, including the non-controlling interests; conversely, the purchased goodwill approach is still anchored to the parent company extension theory[10]. The latter improves the proprietary theory claiming the consolidated financial statements to show the full fair value of the subsidiary identifiable assets and liabilities. Nonetheless, it keeps reflecting the point of view of the "proprietors" when prohibits to recognise the goodwill attributable to the NCI.

Moreover, a parent-subsidiary relationship could be represented according to a third manner. Because of the transition to the IFRS 3 issued in 2004, business combinations occurred before 31 March 2004 shall be accounted for discontinuing amortisation of goodwill and testing it for impairment, whilst the NCI keep being measured at the carrying amount previously recognised in the consolidated financial statements. For subjects already applying IFRSs, the carrying amount was variously recorded, according to the options given by the pre-existing IAS 22; for subjects facing the first adoption of IFRSs, the carrying amount was recorded as required by the national GAAPs. In Italy, for example, the NCI have been recorded at their proportionate share in the subsidiary equity book value.

Indeed, the non-controlling interests within the group equity might be the aggregate of non-homogeneous values: some of them could include the goodwill related to the NCI, others could express the NCI portion of the subsidiary identifiable net assets measured at fair value and others can express the NCI portion of the subsidiary identifiable net assets at carrying amount.

The question is: do IFRS address the issue of non-consistency within the consolidated financial statements and require disclosure to reliably explain the effect of the measurement options on group equity and income?

Consolidated financial statements would be supposed to provide useful information to assess the quantitative effects of various NCI measurements on the group financial position and performance. However, we claim that neither the accounting numbers, because of their level of aggregation, nor the disclosure required by any Standards, supports the users in understanding the composition of the group results. Further, the deficiencies in the notes hamper effective financial statements analysis and limit empirical research on the value relevance of the information provided by financial statements reporting NCI under alternative accounting treatments.

Our study is built on simulated figures that allow us to demonstrate how subsidiaries with similar underlying economics might have a different impact on the measurement of the group equity and income. It is merely due to the reporting method for NCI chosen by the parent company. This fact does not respect the consistency among values within consolidated financial statements and causes lack of comparability among consolidated financial statements prepared by different reporting entities.

The matter is relevant because IFRS Conceptual Framework sets out comparability as a quality of information that is likely the most useful to users. The principle of comparability refers to the ability to compare financial statements from year-to-year, company-to-company, and industry-to-industry. To achieve the goal of comparability, consistency is the main way.

Since nowadays there is not any Standard requiring disclosure suitable for the comprehension of this matter, we also suggest which relevant disclosure should be provided to better understand the composition of the group results[11].

The remainder of the paper is organised as follow. Section 2 relates to prior studies on consolidated financial statements and IFRS. Section 3 develops simulations with the aim at evidencing how different accounting options on NCI affect the group

[9] IASB (2010), Conceptual Framework for Financial Reporting, OB2 and OB3.

[10] The parent company theory is not properly a group theory. It arises from different technical approaches belonging to both the entity and proprietary theory.

[11] IFRS 3R only requires to disclose, for each business combinations, the amount of the non-controlling interests in the acquiree (subsidiary) recognised at the acquisition date and the measurement basis for that amount (B64.o).

results. Section 4 describes which disclosure would be helpful to estimate the group results according to homogeneous criteria. Section 5 sets out our findings and conclusions. Finally, section 6 suggests future developments of our study.

## 2 Literature review

IFRS 10, Consolidated financial statement, sets out the rules for presenting and preparing consolidated financial statements when an entity controls one or more other entities. This standard was issued in May 2011 and replaced the previous IAS 27, Consolidated and Separate Financial Statement. However, it does not deal with the accounting requirements for business combinations and their effect on consolidation, including goodwill arising on a business combination. These aspects are prescribed by the IFRS 3, Business combinations, which is the standard where we find the presence of different accounting options related to the non-controlling interests.

Although nowadays the preparation of financial statement is ruled by generally accepted accounting standards (GAAPs), the group accounting originated from the development of the two main group theories in the late nineteenth and twentieth century.

The first theory, named proprietary theory, was illustrated by several authors, above all Hatfield (1909) and Sprague (1922). The second theory, the entity theory, is attributable mainly to Paton (1922). In the same or in the following years some others scholars contributed to the development of the theoretical framework of both theories (Dickinson, 1918, Kester, 1930, Canning, 1929 for the proprietary theory and above all Moonitz, 1942, for the entity theory).

Beside those contributes, we can find two other perspective theories on which the preparation of consolidated financial statements is based: the parent company theory and the parent company extension theory (Baxter and Spinney, 1975). A complete analysis on the different group theories is presented by Zambon (1996).

Regarding the standard setters position, the IASB and the FASB stated that consolidated financial statements should be prepared mainly according to the perspective of group entity even though there are some topics still linked to the parent company. For example, the accounting for NCI is one of those topics.

Even if it is assumed that the International Financial Reporting Standards are more oriented to the entity theory, this support is not sustained by empirical findings in the economic literature. Several scholars considered in recent years some topics regarding consolidated financial statements but almost none of them analyzed group theories effects on financial statements.

In the last two decades, Harris et al., 1994, Niskamen et al., 1998, Abad et al., 2000, Goncharov et al., 2007, Müller, 2011 concentrated on consolidated financial statements relevance compared to separate financial statement one. Furthermore, Bartov et al., 2005, Jermakowicz et al., 2007, Barth et al., 2007, Lin and Paananen, 2007 pondered on the IFRS impact on consolidated financial statements preparation. Other scholars as Beckman, 1995, Nurnberg, 2001, Zeff, 2005, Acèituno et al., 2006, claimed the superiority of the entity theory and its implications on NCI recognition.

However, we did find only few contributions and empirical studies on the influence of group theories on consolidated financial statements comparability, consistency and usefulness. Swanson and Mielke, 1997, Abad et al., 2000, Santos and Lourenco, 2007, found inconsistent and weak results (So and Smith, 2009).

Swanson and Mielke, 1997, tested listed company Compustat data with the Olson model (1995) and it resulted that NCI disclosures have decision-usefulness. As opposite, the findings of Abad et al., 2000, raise doubts on the significance of NCI components of equity and earnings. These findings suggest us that more and improved research is needed.

We do not aim at finding which should be the best theoretical approach for the preparation of consolidated financial statements, because this would need a deeper reasoning on other issues related to consolidation process (for example, in assessing when an entity controls another one, how to measure the full goodwill[12] as of the acquisition date, the reporting method for investments in associates and joint ventures, and so on). Our purpose is to demonstrate which are the main consequences of the coexistence of accounting numbers raised from contrasting perspectives in viewing the group.

We are confident that Standard Setters will definitely choose only one viewpoint in the consolidated financial statements building. Under the present state, we emphasize the role of disclosure in providing more comprehensive information on the composition of the group financial position and performance. There are empirical evidences that disclosures are at least partially valued by the investors (Davis-Friday et al., 1999).

## 3 Hypothesis for assessing the quantitative effects of different reporting options for NCI

In the following model, we consider a holding company and three directly controlled operating subsidiaries with the same percentage of ownership.

At the reporting date, December, 31st, 2013, we consolidate the subsidiaries adopting the three

[12] About this issue, the original version of Exposure Draft of Proposed AMENDMENTS TO IFRS 3 (2005) prescribed that the acquirer shall measure and recognise goodwill as of the acquisition date as the excess of the fair value of the acquiree, as a whole, over the net amount of the recognized identifiable assets acquired and liabilities assumed. (§ 49)

measurement bases for NCI that might coexist after the IFRS 3R first adoption. The subsidiaries have the same underlying economics and their individual financial statements present the same structure and amount of assets and liabilities, revenues and expenses. Thanks to this hypothesis, the different impact of the subsidiaries consolidation on the group representation arises only from the method adopted in accounting for NCI.

### 3.1 Detailed features of the group

The following detailed features of the group were identified:

a) The group is made by the parent company (P) that controls three subsidiaries (Alfa, Beta, Gamma), holding 60% of the voting power of each one;

b) the subsidiaries were funded on January, 1st, 2000 and we suppose they are identical in business, organisation, technical and capital structure;

c) the parent obtained control over:

- Alfa, on January 1st, 2004, transferring a consideration of 33.600;
- Beta, on January 1st, 2006, transferring a consideration of 32.400;
- Gamma, on January 1st, 2010, transferring a consideration of 30.000.

The results of the purchase price allocation (PPA) are shown in Table 1.

**Table 1.** Purchase Price Allocation

| | **Alfa** 01/01/2004 | **Beta** 01/01/2006 | **Gamma** 01/01/2010 |
|---|---|---|---|
| Consideration transferred by P | 33.600 | 32.400 | 30.000 |
| Revaluation surplus | 9.600 | 8.400 | 6.000 |
| Goodwill | 6.000 | 6.000 | 6.000 |
| % Equity book value (EBV) | 18.000 | 18.000 | 18.000 |

d) At the date P obtained control over subsidiaries, the only asset to be revalued at fair value is an item of property. Each subsidiary bought its item of property on January 1st, 2000, at the cost of 20.000. The asset useful life is 20 years.

Table 2 reports the data related to the item of property.

**Table 2.** Property's value relevant for consolidation

| | **Alfa** 01/01/2004 | | **Beta** 01/01/2006 | | **Gamma** 01/01/2010 | |
|---|---|---|---|---|---|---|
| | Parent | NCI | Parent | NCI | Parent | NCI |
| Historical cost | 12.000 | 8.000 | 12.000 | 8.000 | 12.000 | 8.000 |
| - Accumulated depreciations | -2.400 | -1.600 | -3.600 | -2.400 | -6.000 | -4.000 |
| Net property | 9.600 | 6.400 | 8.400 | 5.600 | 6.000 | 4.000 |
| Revaluation surplus* | 9.600 | // | 8.400 | 5.600 | 6.000 | 4.000 |
| Revalued amount | 19.200 | 6.400 | 16.800 | 11.200 | 12.000 | 8.000 |

Note: *We suppose that the revaluation surplus is equal to the net carrying value at the business combination's acquisition date.

e) since the time of the acquisition, the subsidiaries have been paying dividends to the shareholders, without retaining any earnings as well as the parent to its owners;

f) the parent income statement just presents the dividends received from the subsidiaries.

### 3.2 First simulation

In order to demonstrate how different reporting methods for identical economic substance cause different effects on financial performance and position of the group, we develop a simplified consolidation process. We do not consider taxation and we assume that no intercompany transactions occurred.

The parent company consolidates:

- subsidiary Alfa recording NCI at their proportionate share in the subsidiary equity book value;
- subsidiary Beta recording NCI at their proportionate share in the fair value of subsidiary net identifiable assets (purchased goodwill approach);
- subsidiary Gamma recording NCI at their fair value (full goodwill approach).

Table 3 shows the income statement values referred to the parent and subsidiaries separate/individual financial statements.

**Table 3.** Parent's and subsidiaries' income statements

| 2013 | **Parent** | **Alfa** | **Beta** | **Gamma** |
|---|---|---|---|---|
| Revenues/Dividends | 7.200 | 27.000 | 27.000 | 27.000 |
| Expenses | 0 | 22.000 | 22.000 | 22.000 |
| *EBITDA* | *7.200* | *5.000* | *5.000* | *5.000* |
| Depreciations | 0 | 1.000 | 1.000 | 1.000 |
| Impairment of Goodwill | 0 | 0 | 0 | 0 |
| *EBIT* | *7.200* | *4.000* | *4.000* | *4.000* |
| Interest costs | | 0 | 0 | |
| *Net income* | *7.200* | *4.000* | *4.000* | *4.000* |

Table 4 presents the income statement values adjusted for consolidation (depreciation of revaluation surplus and dividends).

**Table 4.** Parent's and subsidiaries' income statements adjusted for consolidation

| 2013 | **Parent** | **Alfa** | **Beta** | **Gamma** | **Consolidated** |
|---|---|---|---|---|---|
| Revenues/Dividends | 0 | 27.000 | 27.000 | 27.000 | 81.000 |
| Expenses | | 22.000 | 22.000 | 22.000 | 66.000 |
| *EBITDA* | | *5.000* | *5.000* | *5.000* | *15.000* |
| Depreciations | | 1.600 | 2.000 | 2.000 | 5.600 |
| Impairment of Goodwill | | 0 | 0 | 0 | 0 |
| *EBIT* | | *3.400* | *3.000* | *3.000* | *9.400* |
| Interest costs | | 0 | 0 | | 0 |
| *Net income* | *0* | *3.400* | *3.000* | *3.000* | *9.400* |

As shown above, the group net income consists only of the results from the subsidiaries, which present identical individual income statements. Nonetheless, unlike Beta and Gamma, subsidiary Alfa contributes to group results with an amount of 3.400.

It does not depend on its performance but only on the reporting method adopted in the consolidation of Alfa. In fact, net income share of Alfa attributable to NCI is higher than Beta and Gamma ones because Alfa NCI are measured at their proportionate share in the equity book value. In a nutshell, depreciation of revaluation surplus does not affect NCI.

Also the statement of financial position gives evidence of the inconsistency between the economic substance – which is identical for all subsidiaries – and the accounting pattern.

Table 5 synthesizes the values presented in the separate/individual statements of financial position prepared by the parent and its subsidiaries.

**Table 5.** Parent's and subsidiaries' statements of financial position

| 31/12/2013 | **Parent** | **Alfa** | **Beta** | **Gamma** |
|---|---|---|---|---|
| Other assets | 0 | 34.000 | 34.000 | 34.000 |
| Property | 0 | 20.000 | 20.000 | 20.000 |
| - Accumulated depreciation | 0 | -14.000 | -14.000 | -14.000 |
| Property net value | 0 | 6.000 | 6.000 | 6.000 |
| Goodwill | 0 | 0 | 0 | 0 |
| Investment in ALFA | 33.600 | | | |
| Investment in BETA | 32.400 | | | |
| Investment in GAMMA | 30.000 | | | |
| *Total assets* | *96.000* | *40.000* | *40.000* | *40.000* |
| *Total Liabilities* | *0* | *10.000* | *10.000* | *10.000* |
| Equity | 96.000 | 30.000 | 30.000 | 30.000 |

Table 6 reports the same values adjusted for consolidation (revaluation surplus and goodwill):

**Table 6.** Parent's and subsidiaries' statements of financial position adjusted for consolidation

| 31/12/2013 | Parent | Alfa | Beta | Gamma | Group |
|---|---|---|---|---|---|
| Other assets | 0 | 34.000 | 34.000 | 34.000 | 102.000 |
| Property | 0 | 29.600 | 34.000 | 30.000 | 93.600 |
| - Accumulated depreciation | 0 | - 20.000 | - 22.000 | - 18.000 | - 60.000 |
| Property Net value | 0 | 9.600 | 12.000 | 12.000 | 33.600 |
| Goodwill | 0 | 6.000 | 6.000 | 10.000 | 22.000 |
| *Total Assets* | | *49.600* | *52.000* | *56.000* | 157.600 |
| *Total Liabilities* | | *10.000* | *10.000* | *10.000* | 30.000 |
| Equity | 96.000 | | | | 82.800 |
| NCI | | 12.000 | 14.400 | 18.400 | 44.800 |

The group statement of financial position evidences that some assets are undervalued because the property in Alfa is recognised at 60% of its revalued amount (9.600). In particular, at the reporting date, subsidiary Alfa shows a residual undervaluation of its property (2.400).

Another undervaluation occurs both in Alfa and in Beta, because the goodwill related to the NCI is not recognised.

As opposite, NCI in Gamma exactly worth the 40% of Gamma fair value (18.400)[13].

### 3.3 Second simulation

In the second simulation, we consider the same data of section 2.2, adding an impairment loss on goodwill of each subsidiaries[14], equal to the 8,33%[15] of its carrying amount.

Table 7 shows the income statement values already adjusted for consolidation.

Table 8 shows the statement of financial position values already adjusted for consolidation.

This second simulation evidences that, consequently to the impairment of goodwill, the consolidated income statement does not report the impairment loss attributable to NCI of Alfa and Beta.

### 3.4 Quantitative findings

In order to make clearer the non-consistency within the consolidated financial statements previously prepared, we compare the evidences of both simulations.

The following tables allow us to contrast the adjustments made in the simulation 1 and in the simulation 2.

Table 9 and Table 10 present, in detail, the comparison between the different items of the group equity.

We can observe that, even though the economic substance changes from the simulation 1 to the simulation 2, due to an impairment loss for goodwill, Alfa and Beta NCI are still measured at the same amount in both simulations.

Table 11 and Table 12 show in detail the composition of the group net income.

It is evident how the recognition of an impairment loss increases the non-homogenous composition of the group results attributable to the parent and to the NCI, respectively. In fact, for ALFA and BETA, the consolidated income statements report only the impairment loss of goodwill related to the parent.

## 4 Role of disclosure

Once we illustrated the quantitative effects of the coexistence of different accounting treatment for NCI, we ask ourselves which disclosure would be helpful to estimate the group results according to homogeneous criteria.

With reference to the figures of the first simulation, we claim the notes[16] should present, at least, the following information:

- the portion of goodwill arising from consolidation related to the controlling interests (18.000) and the one related to the NCI (4.000). The group statement of financial position shown in table 6 only report the aggregate value of 22.000;
- the amount of the NCI within the group equity still measured according to the pre-acquisition carrying amount of the net assets of the subsidiaries (as it was allowed by IAS 22); in the simulation (table 6), the NCI of Alfa are measured at 12.000. The disclosure suggested allow users to understand the composition of the NCI within the group equity
- the amount of the residual undervaluation of the property in Alfa (2.400); in fact this asset is not recognised at its full fair value in the consolidated statement of financial position.
- the residual undervaluation of the property amount related to group total assets and related to the NCI; we need this information to assess the magnitude of undervaluation.

[13] In order to simplify our data, we suppose that the portion of goodwill attributable to the parent and to the NCI of Gamma is proportional to their respective percentage of ownership. In some circumstances, a subsidiary's goodwill might not be attributed on a proportional basis, as for example when the fair value of controlling and non-controlling interests includes a control premium or a non-controlling discount.

[14] In order to simplify our data, we suppose that in the goodwill impairment test, each subsidiary represents a cash generating unit.

[15] We set the percentage of 8,33% in order to simplify our data.

[16] That after stating, for each business combination, the measurement basis applied to the NCI. Actually, this disclosure is already required by the IFRS 3, § B64, (o), (i).

**Table 7.** Parent's and subsidiaries' income statements adjusted for consolidation

| 2013 | **Parent** | **Alfa** | **Beta** | **Gamma** | **Consolidated** |
|---|---|---|---|---|---|
| Revenues/Dividends | 0 | 27.000 | 27.000 | 27.000 | 81.000 |
| Expenses | 0 | 22.000 | 22.000 | 22.000 | 66.000 |
| *EBITDA* | *0* | *5.000* | *5.000* | *5.000* | *15.000* |
| Depreciations | 0 | 1.600 | 2.000 | 2.000 | 5.600 |
| Impairment of Goodwill | 0 | 500 | 500 | 833 | 1.833 |
| *EBIT* | *0* | *2.900* | *2.500* | *2.167* | *7.567* |
| Interest costs | 0 | 0 | 0 | 0 | 0 |
| Net income | 0 | 2.900 | 2.500 | 2.167 | 7.567 |
| *attributable to:* | | | | | |
| Parent | | 1.300 | 1.300 | 1.300 | 3.900 |
| NCI | | 1.600 | 1.200 | 867 | 3.667 |

**Table 8.** Parent's and subsidiaries' statements of financial position adjusted for consolidation

| 31/12/2013 | **Parent** | **Alfa** | **Beta** | **Gamma** | **Group** |
|---|---|---|---|---|---|
| Other assets | 0 | 34.000 | 34.000 | 34.000 | 102.000 |
| Property | 0 | 29.600 | 34.000 | 30.000 | 93.600 |
| Accumulated depreciation | 0 | 20.000 | 22.000 | 18.000 | 60.000 |
| Net value | 0 | 9.600 | 12.000 | 12.000 | 33.600 |
| Goodwill | 0 | 5.500 | 5.500 | 9.167 | 20.167 |
| *Total Assets* | *0* | *49.100* | *51.500* | *55.167* | *155.767* |
| *Total Liabilities* | *0* | *10.000* | *10.000* | *10.000* | *30.000* |
| Equity | 96.000 | | | | 81.300 |
| NCI | | 12.000 | 14.400 | 18.067 | 44.467 |

**Table 9.** Composition of the group's equity attributable to parent company and NCI: example 1

| | | **Parent** | | | **NCI** | |
|---|---|---|---|---|---|---|
| | **Alfa** | **Beta** | **Gamma** | **Alfa** | **Beta** | **Gamma** |
| Equity book value | 18.000 | 18.000 | 18.000 | 12.000 | 12.000 | 12.000 |
| Revaluation surplus | 9.600 | 8.400 | 6.000 | // | 5.600 | 4.000 |
| Goodwill | 6.000 | 6.000 | 6.000 | // | // | 4.000 |
| Purchase price | 33.600 | 32.400 | 30.000 | // | // | // |
| NCI at the acquisition date | // | // | // | 12.000 | 17.600 | 20.000 |
| - Consolidation adjustments for depreciation | -6.000 | -4.800 | -2.400 | // | -3.200 | -1.600 |
| Group's equity attributable to: | | | | | | |
| Parent | 27.600 | 27.600 | 27.600 | // | // | // |
| NCI | // | // | // | 12.000 | 14.400 | 18.400 |

**Table 10.** Composition of the group's equity attributable to parent company and NCI: example 2

| | | **Parent** | | | **NCI** | |
|---|---|---|---|---|---|---|
| | **Alfa** | **Beta** | **Gamma** | **Alfa** | **Beta** | **Gamma** |
| Equity book value | 18.000 | 18.000 | 18.000 | 12.000 | 12.000 | 12.000 |
| Revaluation surplus | 9.600 | 8.400 | 6.000 | // | 5.600 | 4.000 |
| Goodwill | 6.000 | 6.000 | 6.000 | // | // | 4.000 |
| Purchase price | 33.600 | 32.400 | 30.000 | // | // | // |
| NCI at the acquisition date | // | // | // | 12.000 | 17.600 | 20.000 |
| - Consolidation adjustments for depreciation | -6.000 | -4.800 | -2.400 | // | -3.200 | -1.600 |
| - Consolidation adjustments for impairment | -500 | -500 | -500 | // | // | -333 |
| Group's equity attributable to: | | | | | | |
| Parent | 27.100 | 27.100 | 27.100 | // | // | // |
| NCI | // | // | // | 12.000 | 14.400 | 18.067 |

**Table 11.** Composition of the group's net income attributable to parent company and NCI: example 1

| | Parent | | | NCI | | |
|---|---|---|---|---|---|---|
| | Alfa | Beta | Gamma | Alfa | Beta | Gamma |
| Net income | 2.400 | 2.400 | 2.400 | 1.600 | 1.600 | 1.600 |
| - Consolidation adjustments for depreciation | -600 | -600 | -600 | // | -400 | -400 |
| Group's net income attributable to: | | | | | | |
| Parent | 1.800 | 1.800 | 1.800 | // | // | // |
| NCI | // | // | // | 1.600 | 1.200 | 1.200 |

**Table 12.** Composition of the group's net income attributable to parent company and NCI: example 2

| | Parent | | | NCI | | |
|---|---|---|---|---|---|---|
| | Alfa | Beta | Gamma | Alfa | Beta | Gamma |
| Net income | 2.400 | 2.400 | 2.400 | 1.600 | 1.600 | 1.600 |
| - Consolidation adjustments for depreciation | -600 | -600 | -600 | // | -400 | -400 |
| - Consolidation adjustments for impairment | -500 | -500 | -500 | // | // | -333 |
| Group's net income attributable to: | | | | | | |
| Parent | 1.300 | 1.300 | 1.300 | // | // | // |
| NCI | // | // | // | 1.600 | 1.200 | 867 |

Other relevant disclosure should point out, for each business combination not accounted for using the full goodwill approach, the goodwill related to the NCI. Such information is helpful to estimate the group equity and income according to homogeneous criteria, but would be a heavy burden for the reporting entity.

The above listed information relates to the statement of financial position. As far as the income statement is concerned, the notes should signal:

- the whole amount of costs deriving from the PPA which still affects the group net income attributable to the parent. In the simulation, the parent share of depreciation of the higher value assigned to the property (1.800). The group income statement shown in table 4 only report the aggregate value of depreciation (5.600);
- the whole amount of costs which would affect the group net income attributable to the NCI for the subsidiaries still measured according to the pre-acquisition carrying amount of their net assets. In the simulation, they would be depreciations of 400 for Alfa property;
- the previous amount (400) related to:
  - the group EBIT;
  - the group net income;
  - the group net income attributable to the NCI.

We need this information to assess the magnitude of the "lack of costs" in the group income statement.

Referring to the figures of the second simulation, the best disclosure helpful to understand the composition of group results would be the same we have described in the first simulation, with the further information related to the goodwill impairment loss attributable to the NCI of Alfa and Beta.

This requirement would imply the measurement of the NCI at their fair value, even though the reporting entity has chosen another, and maybe easier, measurement basis.

Since additional complexity and undue costs might arise from this disclosure, we suggest that the notes to the financial statement identify, at least, the subsidiaries in which the impairment loss has occurred.

Thus, users of financial information receive qualitative information about the subsidiaries, for which goodwill no longer exists or has decreased[17], although the consolidated financial statement recognises only the part of this asset related to the parent company.

## 5 Concluding remarks

There are many drawbacks generated by the accounting options in IFRS 3R.

From a general point of view, the decision to introduce measurement options for the NCI represents an inconsistency with the IASB policy to enhance comparability between financial statements by excluding options in accounting treatment for similar transactions during the revision of pre-existing Standards or when the Board issues a new Standard. Further, it is a backward step in the ongoing process to reduce the divergences between IFRS and US GAAP[18].

More specifically, the requirements in IFRS 3R hamper the consistency within financial statements due to the circumstance that the reporting entity is allowed to choose between the full goodwill approach and the purchased goodwill approach for each business combination.

[17] As stated before, the impairment loss on goodwill is attributable to each subsidiary because of the convergence between legal entity and cash generating unit.

[18] The US Statement of Financial Accounting Standard (SFAS) 141, Business Combinations, only accepts the full goodwill approach.

Our study focuses on the disclosures that could be helpful to the financial information users to better understand the effects on the composition of the group equity and net income of adopting different measurement bases for the NCI. After stating for each business combination the measurement basis applied to the NCI, we suggest the notes should present, at least, the following information:

- the portion of goodwill arising from consolidation related to the controlling interests and the one related to the NCI;
- the amount of the NCI within the group equity still measured according to the pre-acquisition carrying amount of the net assets of the subsidiaries (as it was allowed by IAS 22);
- the amount of the residual undervaluation of assets not recorded at their full fair value (as it was allowed by IAS 22);
- the amount of the residual undervaluation of assets related to the group total assets and related to NCI.

As far as the income statement is concerned, the notes should signal:

- the whole amount of costs and revenues deriving from the PPA which still affects the parent profit or loss (the parent share of: depreciation and amortisation expenses of the higher/lower value assigned to tangible and intangible assets; the higher/lower value assigned to the inventories; the lower value of investments in associates and joint ventures, etc.);
- the whole amount of operating costs and revenues which affects parent profit or loss and influence the group EBIT (impairment of goodwill and the above listed costs and revenues, unless the lower value of investments in associates and joint ventures);
- the whole amount of operating costs and revenues which affects parent profit or loss and influence the group EBIT related to:
  - the group EBIT;
  - the group net income;
  - the group net income attributable to NCI.

Finally, the notes should identify the subsidiaries reported using the purchased goodwill approach for which an impairment loss of goodwill has been recognised in the consolidated financial statements (not affecting the measurement of the NCI)[19].

## 6 Future developments

Related to the comparability and consistency within consolidated financial statements, the consolidation of investments in subsidiaries and the recognition of NCI are not the only issues that might deserve to be deeply studied.

Also the parties of IFRS are aware of these issues and they pondered them during a recent IASB meeting about Phase I of the Post-implementation Review (PiR) of IFRS 3.

The staff of IFRS Foundation gathered many inputs from users, preparers, accounting firms, national standard-setters and endorsement advisory bodies and have assigned a high degree of relevance to the issues related to these matters. The staff admitted that ‘we have learnt that when NCI arises in a business combination the practical implementation matters that arise are significant and contribute to divergence in practice’.

One of the divergence that can occurs in practice is related to changes in ownership interest while retaining control, that is to say when, after a parent has obtained control of a subsidiary, it may change its ownership interest in that subsidiary without losing control. It can occur when the parent buys shares from – or sells shares – to the NCI or when the parent issues new shares or acquires its share. It can also happen when ‘other’ non-controlling interests are converted to ‘ordinary’ NCI.

As established by IFRS3 R, such transactions are accounted for as equity transactions because they involve just equity holders (controlling and non-controlling shareholders). Consequently, any gain or loss is not recognised in the consolidated financial statements. Moreover, no change in the carrying amount of assets (including goodwill[20]) and liabilities is recognised in consequence of such transactions. The amount of non-controlling interest is adjusted to reflect their related changes in the subsidiary equity. Any difference between the amount by which the NCI are adjusted and the fair value of consideration transferred by or to the parent is recognised in the group equity attributable to the parent.

Since IFRS do not provide any rules to quantify the adjustment made on the NCI, several methods are used in practice. It could be an additional issue about consolidated financial statements comparability and consistency, above all if the NCI were initially measured at their proportionate share in the identifiable net assets of the subsidiary.

For simulation, when a parent sells part of its interests (we suppose the ownership interests decrease from 80% to 70%) in a subsidiary, but retains control of it, the adjustment to the NCI could be determined as:

a) 10% of the total net assets of the subsidiary (including goodwill);

b) 10% of the total identifiable net assets of the subsidiaries (excluding goodwill);

c) 10%/80% of the parent share of the total net assets of the subsidiary (including goodwill).

Approach a) and c) will assign part of subsidiary goodwill to the NCI, even if they are initially reported for using the purchased goodwill approach.

[19] See footnote 14.

[20] Ifrs 10, Consolidated Financial Statements, Basis for Conclusion, BCZ 168.

We suggest that it would be interesting studying which is/are the best accounting policy/policies consistent with the conceptual framework.

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