# Speculative Measurement in Business Combinations

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https://doi.org/10.53465/EDAMBA.2021.9788022549301.443-452

**Abstract.** The process of business combinations is closely linked to measurement. International Financial Reporting Standard IFRS 3 Business Combinations contains a large part focused on measurement. Measurement in business combinations can be divided into three areas, which are the measurement of the acquiree's identifiable assets acquired and liabilities assumed, the measurement of non-controlling interests and the measurement of goodwill or gain from a bargain purchase. The measurement of the acquiree's identifiable assets acquired and liabilities assumed is associated with the measurement principle, which states of fair value measurement. In the case of measurement of non-controlling interests, there are two measurement options - fair value measurement and proportionate share measurement. The measurement of goodwill or gain from a bargain purchase is related, among other things, to the measurement of non-controlling interests, which has a direct impact on it. The aim of the paper is to analyze measurement in business combinations with a focus on speculative measurement, which may occur in business combinations. Measurement analysis is focused on the results of practical examples in individual areas of measurement with subsequent comparison and summary.

**Keywords:** measurement, business combinations, fair value

**JEL classification:** *G34, M41*

## 1 Introduction

Measurement is an important part of business combinations. Business combinations essentially include rules for the proper measurement of acquired assets and assumed liabilities, the measurement of non-controlling interests and, ultimately, the measurement of goodwill or profit from a bargain purchase. Fair value measurement is widely used in business combinations. However, in the case of non-controlling interests, there is another option for measurement, which also affects the measurement of goodwill or gain from a bargain purchase.

There is room for speculation in areas where several methods of measurement are offered in the form of finding the best options for participants in business combinations. In this paper, we will focus on speculative measurement used primarily by the acquirer in a business combination.

However, the acquirer must not forget that it cannot think only of its advantages, but also of how attractive it is to third parties. There are many different groups of external users of business information, whose needs are more often in mutual contradiction [11].

The issue of business combinations is dealt with in International Financial Reporting Standard IFRS 3 Business Combinations (hereinafter “IFRS 3”). IFRS 3 contains several provisions regarding the measurement principle.

When measuring in business combinations, it is important to know the provisions of another International Financial Reporting Standard, which is IFRS 13 Fair Value Measurement (hereinafter “IFRS 13”). This standard deals with the general principles for fair value measurement, which is the basis for measurement in some areas within business combinations.

## 2 Theoretical Background

In this chapter, we present the theoretical knowledge and starting points of business combinations and measurement in business combinations.

### 2.1 Theoretical Background of Business Combinations

Theoretical knowledge of business combinations is based primarily on the International Standard IFRS 3. This standard contains several definitions in its appendix, including the definition of a business combination. A business combination is a transaction or other event in which the acquirer obtains control of one or more businesses [4]. Business combination refers to a company obtains control of another or a number of entities, or the joint result of two or more entities [12]. We will also refer to the acquirer as the parent entity and the acquiree as a subsidiary. International Standard IFRS 3 indirectly obliges the acquirer to analyze whether the transaction is a business combination as it is defined [3].

The central issue addressed in IFRS 3 is the acquisition method and its application. Each business combination is an acquisition that is accounted for in accordance with IFRS 3 by the only acceptable acquisition method [3]. The acquisition method consists of four basic steps [4]:

35. identifying the acquirer,
36. determining the acquisition date,
37. recognition and measurement of identifiable assets acquired, liabilities assumed and any non-controlling interests in the acquire,
38. recognition and measurement of goodwill or gain from a bargain purchase.

The identification of the acquirer should preferably be guided by the guidance for identifying parent entities in International Financial Reporting Standard IFRS 10 Consolidated Financial Statements ("IFRS 10") and, if clarity is not achieved, each specific business combination should be analyzed for its particularities [4]. In accordance with the definition in IFRS 10, a parent is an entity that controls one or more entities [5].

The next step in the acquisition method is to determine the acquisition date by the acquirer. Under IFRS 3, this is the date on which the acquirer obtains control of the acquiree [4]. The acquisition date may or may not be the same as the date of the transaction, which means the date of the consideration, the acquisition of assets and the assumption of liabilities [3].

In applying the acquisition method, it is important that the identifiable assets acquired, liabilities assumed and all non-controlling interests in the acquiree are properly recognized and measured [4], because only then is it possible to identify the consolidation difference - goodwill or gain from a bargain purchase in the correct amount [3]. The subsidiary's identifiable assets and liabilities might include assets and liabilities not previously recognized in the subsidiary's financial statements [8]. The IFRS 3 recognition principle states that the acquirer shall recognize, at the acquisition date, separately from goodwill, identifiable assets acquired, liabilities assumed and any non-controlling interests in the acquiree, while respecting specified conditions to ensure that the fact is not distorted [4]. At the acquisition date, the acquirer shall analyze each item of assets acquired and liabilities assumed in accordance with other International Financial Reporting Standards [3]. The measurement principle states that the acquirer measures the identifiable assets acquired and liabilities assumed at fair value at the acquisition date [4]. We will take a closer look at the principle of measurement and measurement in business combinations in a separate section.

## 2.2 Theoretical Background of Fair Value Measurement

As the acquirer measures identifiable assets acquired and liabilities assumed at fair value at the acquisition date, it is important to disclose the basic knowledge about fair value in general. The issue of fair value is addressed in the aforementioned separate International Standard IFRS 13. This standard defines fair value as the price that would be received to sell an asset or paid to transfer a liability in a regular transaction between market participants at the measurement date [6].

IFRS 13 provides far-reaching guidance on how the fair value of assets and liabilities should be ascertained. This standard requires that the following are considered in determining fair value [8]:

39. the asset or liability being measured,
40. the principal market (i.e. that where the most activity takes place) or where there is no principal market, the most advantageous market (i.e. that in which the best price could be achieved) in which an orderly transaction would take place for the asset or liability,
41. the highest and best use of the asset or liability and whether it is used on a standalone basis or in conjunction with other assets or liabilities,
42. assumptions that market participants would use when pricing the asset or liability.

IFRS 13 provides a hierarchy of inputs for determining fair value, which is divided into three levels defined in Table 1:

**Table 26.** Fair Value Hierarchy.

| Level inputs | Definition |
|---|---|
| Level 1 | quoted prices in active markets for identical assets or liabilities that the entity can access at the measurement date |
| Level 2 | inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly |
| Level 3 | unobservable inputs for the asset or liability |

Source: *IFRS 13 Fair Value Measurement*. 2011. IASB.

The fair value hierarchy proceeds from Level 1 to Level 3. The highest priority is given to quoted prices in active markets for identical assets or liabilities (Level 1 inputs) and the lowest priority to unobservable inputs (Level 3 inputs). Among the three Levels, Level 1 is clearly observable in the market. However, the Level 2 is measured based on observable inputs with adjustment and Level 3 is based on unobservable inputs or internal data [1]. In addition, entities with larger boards have lower information quality of entity-generated fair value estimates [10]. Level 1 is required where possible.

### 2.3 Theoretical Background of Measurement in Business Combinations

In connection with business combinations, we have introduced the fair value measurement principle. In practice, this means that, as part of consolidation, the acquirer must remeasure the assets and liabilities of each subsidiary to fair value, i.e. to revalue it at the acquisition date. Also, the acquirer discloses information that enables users to evaluate the nature and financial effects of the acquisition [2].

At the same time, the acquirer will measure all non-controlling interests in the acquiree (unless it owns 100% of the equity interests in the subsidiary), and may choose one of two alternatives [4]:

43. measurement of non-controlling interests at fair value; or
44. measurement by the proportionate share of non-controlling interests in the net identifiable assets of the acquiree.

The option for the acquirer in measuring non-controlling interests is an approach that does not promote uniformity in measurement but should take into account the differences in the specific conditions in which the business combination takes place [3].

Another area of measurement in business combinations is the measurement of goodwill or gain from a bargain purchase. The acquirer shall measure goodwill in excess of the amount obtained as a sum of:

45. the consideration transferred,
46. the amount of all non-controlling interests in the acquiree,

47. the fair value at the acquisition date of the acquirer's previously owned interest in the acquiree's equity (if the business combination is effected gradually)

above the difference between the values of the identifiable assets and liabilities assumed (the net assets of the acquiree) measured in accordance with IFRS 3 [4]. Otherwise, if the net assets of the acquiree are higher than the sum of the mentioned values, it is the gain from a bargain purchase. The acquirer will measure the gain from a bargain purchase in the amount of the excess of net assets over the sum of all values. Assets and liabilities of the acquirer are carried forward at previous carrying amounts [9].

Identified goodwill or gain from a bargain purchase may be linked not only to shares acquired in the form of consideration transferred in a business combination, but also to non-controlling interests that the acquirer controls but does not own (owned by another investor). It is an approach to the identification of goodwill or gain of a bargain purchase, the result of which is the so-called full goodwill or full gain from a bargain purchase, which practically means that it is tied to 100% of the equity of the acquiree and not only to the share that is the subject of the acquisition. Full goodwill or gain from a bargain purchase is identified on the basis of non-controlling interests measured at fair value. If non-controlling interests are measured at proportionate share, then the goodwill or gain from a bargain purchase attributable to the non-controlling interests is not recognized. The specific amount of goodwill or gain from a bargain purchase thus depends on the chosen method of measuring non-controlling interests [3]. Full goodwill is part of assets and it is debatable whether its increase by a portion related to non-controlling interests is not misleading information about the amount of assets for users of consolidated financial statements due to the fact that the parent does not decide on share prices, for example when selling them. The parent entity only uses the net assets invested by other investors in business activities and values them. The same applies to the full gain from a bargain purchase, which is part of the revenue and ultimately affects profit or loss.

As the most disordered and debated topics there are considered to be accounting for goodwill, fair value measurement of non-controlling interests and impairment of intangible assets [7].

## 3 Methodology

The aim of this paper is to analyze measurement in business combinations with a focus on speculative measurement that may occur in business combinations.

The basis of measurement in business combinations is fair value, and the acquirer uses it to measure the acquired assets and assumed liabilities of the acquiree. Speculative fair value measurement may arise from situations in which the acquirer considers at what point in which it will enter into a business combination in order to provide the best terms for it. In addition, when measuring non-controlling interests, the acquirer has the option of measuring - on the basis of fair value or on the basis of a proportionate share. In the next steps, the measurement of non-controlling interests has an impact on other aspects related to business combinations, in particular the quantification of goodwill or gain from a bargain purchase, which again entices the acquirer to speculate, trying to turn everything in its favor. This article focuses on speculative measurement.

First of all, the article offers an overview of the theoretical background for business combinations and measurements that are directly related to them. Based on theoretical knowledge, it is possible to proceed methodologically and reach results based on practical examples. Practical examples can be divided into three main parts, which are addressed:

48. measurement of acquired assets and assumed liabilities at fair value,
49. measurement of non-controlling interests at fair value and measurement of non-controlling interests on the basis of a proportionate share,
50. measurement of goodwill or gain from a bargain purchase.

The individual examples are based on fictitious assumptions and in some cases follow each other. The task of practical examples is to find situations that contribute to speculative measurement in business combinations. Based on the results of practical examples, an analysis is performed and then a comparison.

## 4 Results

In this section, we will reach practical results through practical examples, which we will use to analyze and compare individual measurement options in business combinations.

### 4.1 Measurement of Acquired Assets and Assumed Liabilities at Fair Value

Based on the measurement principle based on IFRS 3, all acquired assets and assumed liabilities are measured at fair value at the acquisition date. Possibilities for speculation in this case arise, for example, through the moment when a business combination occurs, respectively what will be the date of acquisition.

Suppose company A wants to buy 80% of the shares in company B. Company A is considering the date of the acquisition. Practical Example 1 and Practical Example 2 are based on the assumptions of different acquisition dates, and thus different fair values of the assets acquired and liabilities assumed. Company A would acquire the land and assume various liabilities by purchasing shares in company B, paying the same amount for the shares in both cases, i.e. € 75,000. We will abstract from liabilities in practical examples and focus only on the land.

**Practical Example 1**
Company A acquired the acquisition on January 1, 2021. The fair value of the land at that date is € 90,000.

**Practical Example 2**
Company A acquired the acquisition on July 1, 2021. The fair value of the land at that date is € 95,000.

**Analysis and Comparison of Practical Examples 1 and 2**

If company A were able to determine the fair value of the mentioned land in advance on the basis of the fair value measurement rules, it would be more advantageous from its point of view as from the acquirer's point of view until July 1, 2021, when it would acquire land with a higher fair value for the same amount. However, if it had already acquired the acquisition on January 1, 2021, the land could be revalued when the consolidated financial statements were prepared. Each acquiring company must consider what is more advantageous for it and what results it needs to report at the moment in order to be attractive to third parties.

## 4.2 Measurement of Non-Controlling Interests

As mentioned above, non-controlling interests may be measured at fair value or at proportionate share. The choice of measurement affects other aspects of business combinations.

Assume that company A has purchased an 80% interest in company B, with the remaining 20% owned by company C. At the acquisition date, company B's net assets represent € 100,000.

**Practical Example 3 - Fair Value**

In the case of measuring non-controlling interests at fair value, we need to know, for example, the fair value per 1% of the interest. Assume that 1% = € 1,750. The non-controlling interest in fair value represents 1,750 [€] x 20 [%] = € 35,000.

**Practical Example 4 - Proportionate Share**

In the case of valuation of non-controlling interests by a proportionate share, we calculate the non-controlling interest as 20% of net assets, i.e. 20% of € 100,000 = € 20,000.

**Analysis and Comparison of Practical Examples 3 and 4**

From the results of non-controlling interests, we see that the choice of measurement option affects the value of such interests. In practical example 3, the value of the non-controlling interest is higher by € 15,000 than in practical example 4. At the moment, we can only conclude that their values differ, which we have also compared on the basis of the difference. Different values will affect the calculation of goodwill or gain from a bargain purchase.

## 4.3 Measurement of Goodwill or Gain from a Bargain Purchase

The measurement of goodwill or gain from a bargain purchase depends on several of the mentioned aspects. It is also significantly affected by the measurement of non-controlling interests.

To quantify goodwill or gain from a bargain purchase, we need to know the fair value of the consideration transferred by the acquirer for the interests, the value of the non-controlling interests and the fair value of the interests previously held by the acquirer. The sum of these values represents the fair value of the acquiree, and we further compare it with the fair value of net assets, which is € 100,000. To illustrate the effect of measuring non-controlling interests, we will quantify goodwill or gain from a bargain purchase over the values of non-controlling interests in Practical Examples 3 and 4. The other values will be the same in comparative Practical Examples 5 and 6.

**Practical Example 5 - Non-Controlling Interests at Fair Value**
The assumptions for calculating the fair value of the acquiree are in Table 2:

**Table 2.** Assumptions – Non-Controlling Interests at Fair Value.

| Item | Value (€) |
|---|---|
| Fair Value of the Consideration Transferred | 75,000 |
| Non-Controlling Interests at Fair Value | 35,000 |
| Fair Value of the Acquirer’s Previously Held Equity Interests | 0 |

Source: Own Processing.

The sum of the stated values shows that the fair value of the acquiree is € 110,000. By comparing with the fair value of net assets, we find that the fair value of the acquiree is € 10,000 higher than the net assets. This means that goodwill of € 10,000 arises. As non-controlling interests are measured at fair value, goodwill is referred to as full goodwill, i.e. goodwill is measured at the amount of the acquirer's interests as well as the non-controlling interests.

**Practical Example 6 - Non-Controlling Interests at Proportionate Share**
The assumptions for calculating the fair value of the acquiree are in Table 3:

**Table 3.** Assumptions – Non-Controlling Interests at Proportionate Share.

| Item | Value (€) |
|---|---|
| Fair Value of the Consideration Transferred | 75,000 |
| Non-Controlling Interests at Fair Value | 20,000 |
| Fair Value of the Acquirer’s Previously Held Equity Interests | 0 |

Source: Own Processing.

The sum of the stated values shows that the fair value of the acquiree is € 95,000. By comparing with the fair value of net assets, we find that in this case the net assets are higher, by € 5,000. This means that gain from a bargain purchase worth € 5,000 arises. As non-controlling interests are measured on a proportionate share, the gain from a bargain purchase is referred to as the partial gain from a bargain purchase, i.e. it is calculated at a value that is attributable only to the acquirer's shares.

**Analysis and Comparison of Practical Examples 5 and 6**

Practical Examples 5 and 6 are clear evidence of how the choice of measuring non-controlling interests affects other aspects of business combinations. In the case where the fair value measurement of non-controlling interests was used, goodwill arose. Conversely, in the case where the measurement of non-controlling interests by a proportionate share was used, a gain from a bargain purchase was made. This situation could give the acquirer room to speculate and consider how to measure non-controlling interests.

Another difference can be seen in the fact that in the case of fair value measurement it is full goodwill (or full gain from a bargain purchase) and in the case of proportionate share it is a partial gain from a bargain purchase (or partial goodwill). This situation also gives the acquirer room for speculation and a decision on what is more suitable for it at a given moment.

Under those conditions, the acquirer must decide whether it is more advantageous for it to recognize goodwill that is part of the assets in the consolidated financial statements or to recognize a gain from a bargain purchase that is part of the revenue in the consolidated financial statements and ultimately affects consolidated profit or loss.

## 5 Conclusions

Business combinations could not have arisen if the measurement area had not been linked to them. The area of measurement gives acquirers in business combinations room for various speculations, which we have shown on practical examples based on theoretical knowledge about business combinations and measurement associated with them.

If the acquirer has information about the acquired assets in advance, he can dispose of such information to his advantage. Based on the measurement principle in business combinations, the assets acquired and the liabilities assumed must be measured at fair value. Depending on the time at which the acquisition date occurs, the acquirer can assess whether the current business combination is beneficial to him.

In addition, the acquirer also has the option of measuring, in particular the measurement of non-controlling interests. He may choose to measure at fair value or a proportionate share measurement. This again gives the acquirer room for his own speculation and decision-making to his best advantage.

The option to measure non-controlling interests further affects whether goodwill or gain from a bargain purchase arises and whether full or partial goodwill or gain from a bargain purchase is recognized. The acquirer can decide again.

However, decisions are not always purely up to the acquirer, and it is not right for the acquirer to look solely for their own benefit. It must also ensure that it remains attractive in the eyes of third parties for future business activities, be they business partners, state institutions or the banking sector.

In conclusion, we state that we managed to meet our set aim. We introduced, analyzed and compared several options for speculative valuation in business combinations, which we wanted to point out that the provisions relating to business combinations are not always perfect and if acquirers know the individual measurement options, they can deal with information speculatively.

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