

FAIR VALUE MEASUREMENT UNDER IFRS 13

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Abstract

The IFRS 13, „Fair Value Measurement”, was first published in May 2011 and it applies to annual reporting periods that begin on or after January 1st 2013; this standard comes as a result of shared efforts on the part of the IASB and the FASB to develop a convergent framework regarding fair value measurement.

The main purpose of this paper is to describe the main provisions of the IFRS 13 regarding fair value measurement, with a special emphasis on key concepts found throughout the standard, which refer to the principal market, the most advantageous market, the highest and best use, valuation techniques, and value hierarchy.

Keywords: fair value, IFRS 13, measurement, value hierarchy

JEL Classification: M41

1. Introduction

Of late, pressure from the investors and willingness from the accounting regulation bodies have brought about a transformation of the traditional accounting model, which was based on historical cost, into *an accounting model based on fair value (current value)*, which would satisfy the need for „*maximising shareholder value*”. Thus, we are currently witnessing a new line of thought with regards to measuring value in corporate accounting, to the extent where it is safe to assume we are living through a genuine accounting revolution or the birth of „a new accounting system”.

Fair value measurement is being increasingly promoted by accounting regulation bodies through the standards they issue, forecasting in the long run a decrease in the importance of traditional financial reporting based on historical cost, in paralel with an increase in the importance of financial reporting based on fair values.

The IASB’s stance with regards to fair value is described in several sets of IAS (International Accounting Standards) and IFRS (International Financial Reporting Standards) issued over time. Said standards refer to certain assets or operations/transactions that require that their fair value be estimated. The IFRS 13, *Fair Value Measurement*, replaces the provisions regarding fair value measurements that, at the moment, are scattered throughout various IFRS standards, offering a single definition of fair value and a single framework for fair value measurement and for presenting associated data, as well as detailed directions for their application. The IFRS 13 does not introduce any new requirements for the fair value measurement of assets or liabilities, nor does it eliminate the currently existing exceptions to various standards. The IFRS 13 was first published in May 2011 and it applies to annual reporting periods that begin on or after January 1st 2013; this standard comes as a result of shared efforts on the part of the IASB and the FASB to develop a convergent framework regarding fair value measurement.

In publishing this standard the IASB aimed to do the following:

- a) create a standard that would constitute a single source of guidance to serve as basis for establishing fair value as requested or allowed by the existing sets of IFRS;
- b) to provide clarifications in that which concerns the definition of fair value and to provide a better guidance with regards to the aims of such measurement;
- c) to ensure a more accurate understanding of fair value so that the users of financial statements may acknowledge the extent to which fair value is used and be informed about the inputs used in order to estimate fair value.

The IFRS 13 is applicable to such assets, liabilities and private equity instruments carried by an entity as required or allowed, in keeping with other existing standards, to be measured at their fair value or for which it is necessary to disclose information regarding their fair value.

The concept of fair value is an integral part of numerous international accounting standards (IAS 2 Inventories, IAS 16 Property, Plant and Equipment, IAS 19 Employee Benefits, IAS 36 Impairment of Assets, IAS 38 Intangible Assets, IAS 39 Financial Instruments: Recognition and Measurement, IAS 40 Investment Properties, IAS 41 Agriculture), and the accounting regulation body IASB (International Accounting Standards Board) also sticks with this concept when drafting the international financial reporting standards, using it with the following sets of IFRS

standards: IFRS 1 *First-time Adoption of International Financial Reporting Standards*, IFRS 2 *Share-based Payment*, IFRS 3 *Business Combinations under Common Control*, IFRS 7 *Financial Instruments: Disclosures*, IFRS 9 *Financial Instruments*. All these standards require the use of fair values for one or several categories of assets or liabilities.

This article is a descriptive research aimed at presenting the main provisions of the IFRS 13 with regards to fair value measurement, with a special emphasis on the key concepts found throughout the standard, which refer to the principal market, the most advantageous market, the highest and best use, and value hierarchy. The chosen undertaking, which is based on reviewing, analyzing and interpreting information, places this research in the category of deductive approaches, and in terms of type it can be considered the kind of research that includes qualitative elements.

The issue of fair value measurement is widely debated in specialized literature. Some authors provide a description of practical considerations relevant to the first time application of the IFRS 13 (McCarroll J. & Khatri, G., 2012), pointing out that, while it is likely that the financial services sector will be the most impacted, this new standard could have significant implications for any entity that carries a financial or non-financial asset at fair value.

In that which concerns the measurement technique for those elements of the financial statements that don't have an active market, some authors (Pawel Mielcarz, 2014) provide an analysis of the valuation methods for unquoted equity instruments in keeping with the IFRS 13. Also, other authors (Paea V. & Maino R., 2013) analyze valuation methods for private equity in light of applying the IFRS 13, pointing out that defining fair value as exit price and applying measurement techniques based on Level 2 inputs is problematic when measuring this category of elements.

Another important novelty that the IFRS 13 proposes is changing the definition of fair value from how it was defined in the IAS 39 standard. Thus, as per the IFRS 13, fair value is a market dependent measurement, rather than an entity-specific one, meaning that entities will need to take into account the impact of their credit risk when measuring the fair value of a given debt, as it reflects the impact of their default risk. The effects of this change in the definition of fair value, namely incorporating credit risk when valuating financial instruments, in particular own credit risk, are analyzed by several authors (Wong Chien Mi, 2013, Blaik Wilson & Jacqui Drew, 2012).

2. How do we obtain the fair value?

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants, at the measurement date. Thus, the fair value is the price that would be applicable to a transaction between market participants. Such a price may be observed on an active market or estimated using a measurement technique. Whenever the price of a given asset or identical liability cannot be observed, an entity measures its fair value using another measurement technique that maximizes the use of relevant observable inputs and minimizes the use of unobservable inputs.

So fair value is a market dependent valuation rather than an entity-specific one, therefore it is carried out using the hypotheses that market participants would use to establish the value of an asset or a liability, including risk assessment hypotheses. As it follows, the entity's intention to carry an asset or settle a liability is not relevant when measuring fair value.

In order to carry out a fair value measurement an entity must cumulatively establish the following:

1. the asset or liability that is being measured (as per the corresponding unit of account). In order to recognize and present information, the unit of account determines whether the asset or liability is a stand-alone asset or liability or a group of assets, a group of liabilities, or a group of both assets and liabilities.

2. the principal market (or the most advantageous market) for the given asset or liability. When measuring fair value it is assumed that the transaction for selling the asset or transferring the liability occurs either:

(a) on the principal market of the given asset or liability, or

(b) lacking a principal market, on the most advantageous market for the given asset or liability.

3. in the case of a nonfinancial asset, the proper valuation premise (corresponding to the best use). The fair value measurement for a nonfinancial asset takes into account the market participant's capacity to generate economic benefits through the highest and best use of the asset or by selling it to another market participant, who will give the asset its highest and best use. The highest and best use of a nonfinancial asset takes into account the use that is physically possible, legally allowed, and financially feasible.

4. the proper measurement technique(s), taking into account the data available for preparing inputs, which are the hypotheses that market participants would use in order to establish the value of the asset or of the liability and the level of classification for the inputs in the fair value hierarchy.

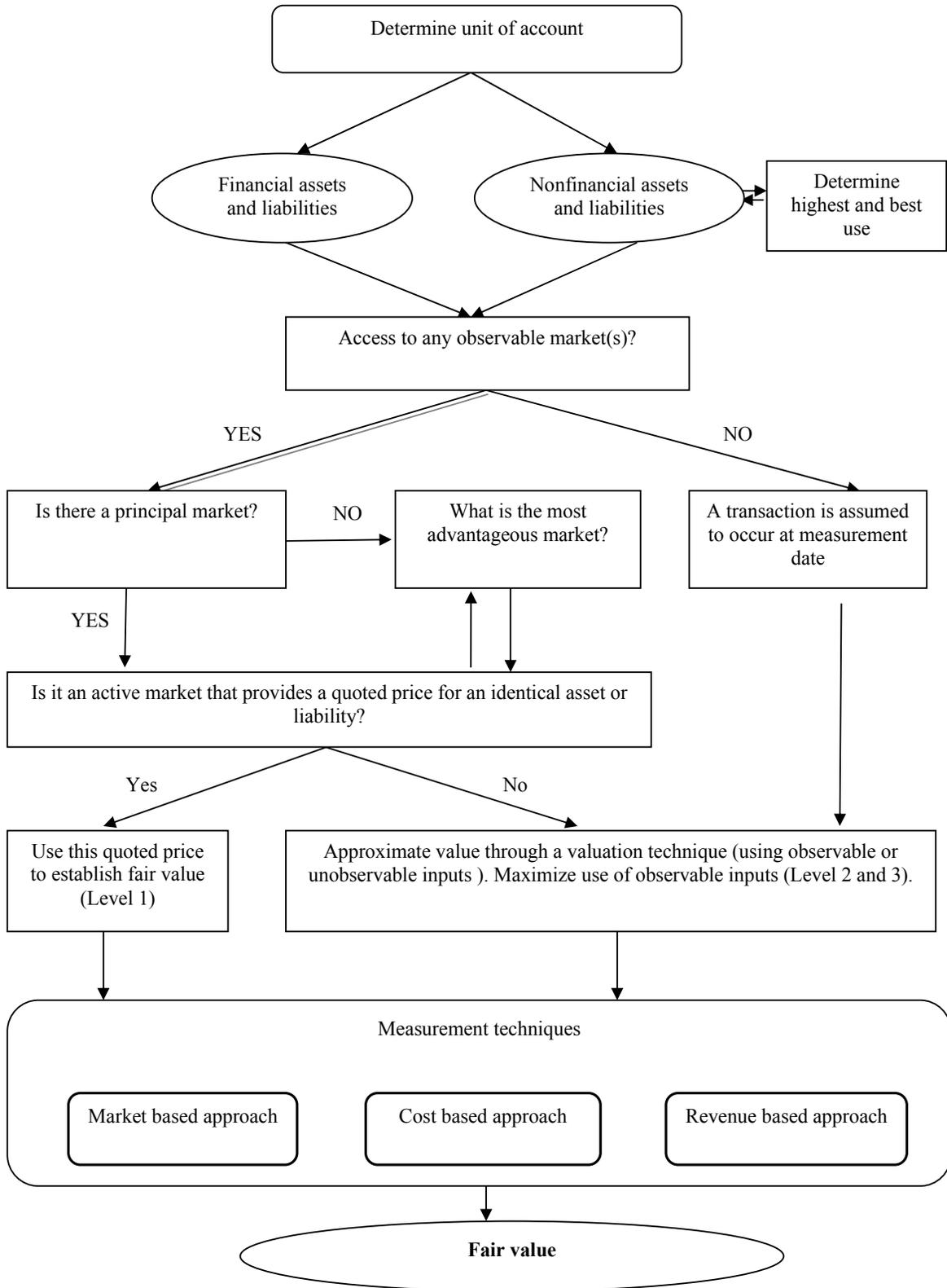


Figure no. 1 Obtaining fair value

In order to improve the consistency of fair value measurements and disclosures of associated information, the IFRS 13 establishes a fair value hierarchy which allows for the inputs used in fair value measurement techniques to be classified by three levels. Within this fair value hierarchy the first degree of priority is granted to quoted prices (unadjusted) on active markets for identical assets or liabilities (level 1 inputs), and the lowest degree of priority is granted to unobservable inputs (*level 3* inputs).

Level 1 inputs are quoted prices (unadjusted) on active markets for identical assets and liabilities, that the entity has access to on measurement date.

Level 2 inputs are those inputs different from the quoted prices included at level 1, but which can be observed directly or indirectly for the given asset or liability. Level 2 inputs include the following:

- (a) quoted prices for similar assets or liabilities on active markets.
- (b) quoted prices for identical assets or liabilities on markets that aren't active.
- (c) any other inputs other than observable quoted prices for the given asset or liabilities
- (d) market dependent inputs.

Level 3 inputs are unobservable inputs for the given asset or liability. Unobservable inputs must be used in measuring fair value to the extent where observable inputs are not available on measurement date. Nevertheless, the aim of fair value measurement remains the same, namely to establish an exit price on measurement date from the perspective of a market participant who carries the given asset or liability.

The measurement techniques used for measuring fair value must maximize the use of observable inputs and minimize unobservable inputs. In the case of those techniques that use unobservable inputs, an entity must ensure that such measurement techniques reflect observable market data (for instance the price of a similar asset or liability) on measurement date, keeping in mind that the aim of using a measurement technique is to estimate the price that the asset would be sold at or the liability would be transferred at, in the course of an orderly transaction between market participants at measurement date, under current market conditions. The measurement techniques may be applied using any of the three following approaches: the market based approach, the cost based approach, and the revenue based approach.

The market based approach uses prices and other relevant data generated by market transactions that involve assets, liabilities, or a group of both assets and liabilities either identical or comparable to those being measured. This approach provides a clue on market value by comparing the object asset to identical or similar assets that have known prices. If it proves impossible to find comparable assets identical to the one to be measured, in order to reflect any differences between the characteristics of the assets that were already subject to a transaction and those of the asset to be measured, it is usually necessary to adjust the actual prices or the asking prices of the comparable assets.

The cost based approach is the one that views value based on the economic principle that states that a buyer will pay for a given asset no more than the cost required to obtain an asset with the same utility.

The cost-based model reflects the value that would be necessary at that given moment in order to replace the service capacity of that given asset (often called current replacement cost). The method of the net replacement costs (NRC) is included in the cost based approach that indicates the value by calculating the current replacement cost of an asset minus physical impairment and any relevant forms of impairment.

The replacement cost is the cost estimated for purchasing an equivalent asset on measurement date. The first step in estimating the replacement cost is establishing the type of equivalent asset that a hypothetical buyer would consider as an alternative to the asset subject to the measurement. In order to do that, it is necessary to understand the utility or functionality provided by the asset subject to the measurement. The main concept of the cost based approach is that, in order to establish the amount that a potential buyer would have to pay for the asset subject to the measurement, the buyer could take into account the cost of purchase or the cost of creating an alternative asset, which would be able to provide the same utility.

Both the theory and the practice of value measurement account for three types of asset impairment: physical impairment, functional impairment, and economic impairment. Physical impairment constitutes a loss of utility caused by physical damage suffered by the asset or its components, as an effect of its age and orderly use, which translates into a loss of value. The formula to accurately measure the physical impairment of an asset is the percentage ratio between the actual age (Aag) of a fixed asset (instead of its chronological age) and its useful life (UL). Functional impairment constitutes a loss of utility caused by the inefficiencies of the asset subject to the measurement as compared to its replacement, which translates into a loss of value. Economic impairment is any loss of utility caused by economic factors or localization factors outside the asset, which leads to a decrease of its value. This is usually called economic impairment when the external factors refer to changes in the supply or demand for that specific asset or for the products manufactured by that asset.

The essence of the *revenue based approach* is that, in order to estimate the value of an asset, one must take into account the current value of the future benefits (revenues, cash-flows) that might be obtained by using that asset. This approach is based on bringing to date/capitalizing such benefits, taking into account a given forecast period.

3. Conclusions

The IFRS 13 standard requires fair value to be measured based on an exit price on the measurement date, from the perspective of a market participant that carries the given asset or liability, and not based on its entry price or transaction price, using several key concepts. Preparers must understand these concepts and how they interact, some of them referring to the principal market (or the most advantageous market), the highest and best use for nonfinancial assets, choosing and using the best measurement techniques, fair value hierarchy. Preparers must also understand the theory and principles of value measurement to make sure that their measurement of fair value is in keeping with accounting standards.

The IFRS 13 ensures a single framework for measuring fair value and supports measuring fair value based on market information, rather than allowing the entity to carry out its specific measurement, but it does not provide practical solutions that may be applied to the process of fair value measurement. Even though drafting and publishing the IFRS 13 constitutes a significant step forward on the part of the international regulation body (IASB) in the field of fair value measurement, professionals in the economic field still encounter difficulties in estimating fair value in particular when there is no market information available. Therefore such professionals must resort to their professional reasoning both when choosing the measurement techniques and when applying them.

Measuring fair value entails going through a series of various assumptions and lines of argument. On the other hand, investors want timely and transparent information on how fair value is measured, as well as on the impact that such measurements have over current and future financial statements.

As the IFRS 13 was published and began being applied in 2013, this set of standards now represents a launch pad for future research aimed at identifying methodological solutions in the field of fair value measurement. Thus, in order to improve the quality of accounting information it will become necessary to find solutions to upgrade the accounting valuation system, all the more so as it is by now obvious that the debate around the hot subject of using various bases for valuation is by no means coming to an end.

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