Should Be Fair Value a Single Measurement Base in Financial Accounting?

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Abstract: Important characteristic of accounting systems, which substantially determines the explanatory power of accounting information, is the measurement method of particular segments of the financial statements. Accounting theory and practice has developed quite a wide range of possible approaches to the measurement in accounting. In the interest of reliability, clarity, and comparability of accounting data measurement is a significant part of the regulation of accounting both at the national level and within international accounting harmonization. Paper formulates key issues, which need accounting standard-setters to response within the process of regulatory rules determination and assess various approaches, their advantages and disadvantages especially during financial crisis conditions.

Key-Words: accounting, measurement, fair value, cost, asset, liability.

1 Introduction
Measurement determines the explanatory power of financial statements and their comparability. Whether it is to standardize the output of accounting, which is characteristic of Anglo-Saxon area, or whether it is to standardize current accounting practices and the related regulation of financial reporting used in continental Europe, there are always specific rules set, adjusting the measurement used for accounting of transactions during the reporting period as well as the measurement for the preparation of financial statements. The aim of this paper is a critical review of various systematic approaches to measurement and related valuation bases.

2 Problem Formulation
There is a strong tendency to use the fair value measurement in an increased extent. The arguments for the departure from the historical costs base at balance sheet date are as follows.

1. Low information potential of historical cost
The first argument can be found especially in the case of investments and financial instruments where historical costs have low information capacity which has been criticized mostly by external users of accounting information.

2. Physical capital maintenance
The recognition of expenses that are determined by the inflation undervalued historical costs of consumed assets brings higher profit and its complete distribution to owners can lead to a disability of an enterprise to finance the full reproduction of inputs. There is a clear requirement not only from external users of accounting information but also from the management of an enterprise to depart from historical costs with the goal to recognize the profit at the moment when the physical productive capacity is maintained.

3. Objectivity, comparability of measurement
The third argument for the fair value measurement is the objectivity and comparability of such fair value measurement that is not based on individual conditions reached at the initial recognition of assets or liabilities.

2.1 Literature Review
Numerous researches dealt with information potential of measurement and accounting. This can also be explained by the activities developed by the regulatory setting bodies, FASB issuing SFAS 157 in late 2006, followed by SFAS 159 in early 2007. IASB issued Discussion paper „Fair Value Measurements Part 1: Invitation to Comment and relevant IFRS guidance“ [7] and discussion paper on Fair Value Measurements also in late 2006, having the American standard as a source of inspiration, the exposure draft on fair value
measurement guidance being on the 2009 agenda. Numerous discussions followed about measurement. Danbolt and Rees [4] approached the British real estate and investment fund industries as experimental settings in order to show that fair value accounting for their real estate sample is considerably less value relevant than for the investment companies. Ronen [11] and Whittington [17] theoretically analyzed advantages and disadvantages of fair value.

Theoretical researches have the highest rejection degrees of fair value accounting within the general category of studies, dealing with the concept of fair value [2, 14, 15]. The general category of studies had a growing tendency for ‘against studies’, but this also is more explained thorough Abacus’ 2008 special issue that stimulated a series of debates at the conceptual level of fair value, coming up with o series of new approaches of the authors that suggested the replacement of fair value (Ronen, [11]; Whittington, [16] etc.). Ryan [10] directly addresses the financial crisis, and even if he discusses the critical aspects of SFAS 157’s fair value definition and measurement guidance and explains the practical difficulties that have arisen in applying this definition and guidance to subprime positions during the crisis, together with raising a potential issue regarding the application of SFAS 159’s fair value option, makes it clear that fair value does not, and moreover could not, represent the root of the current, or any other potential financial crisis [3, 13, 15].

Currently there are discussed not only fair value issues, but also the use of different measurement bases than fair value. E.g. Dean [5] discussed issues concerning the use of exit value, Lennard [8] dealt with entry value, and Macve [9] with deprival value issues. Within the next part of the paper we will focus on the above mentioned measurement approaches and will point out pros and cons of their use.

2.2 Methodology
This paper is based on deductive analysis of current approaches to measurement. The starting point of paper is a generalization of questions to be answered in the process of determining the valuation rules in the system of financial accounting.

Before we proceed to interpret the measurement bases, their comparison and consideration of their advantages and disadvantages, it is important to remember that before setting out specific rules for measurement for accounting practice, the standard setters must deal with the following issues:

1. Should a single measurement approach be used for measurement or rather mixed measurement approaches that appear optimal (or more appropriate) for a certain situation?
2. Should financial reporting provide users with information based on several measurement methods simultaneously (e.g. multi-column reporting), if no measurement basis could be considered optimal or sufficient in all cases? Or should an alternative measurement approach be allowed? In this case, it must be decided whether the choice of a specific measurement approach is left to the entities or whether rules (algorithm) should be established for selecting a particular method of measurement.
3. On what perspective should the measurement be based (should it reflect the entity specific measurement, or the bases objectified by the market)?

3 Single Measurement Approach versus Mixed Measurement Approach
Theoretically, accounting rules might be based on the choice of a single measurement basis setting, which would be universally used in measurements in all situations, or may use mixed measurement approaches.

The use of mixed measurement approaches is characteristic for local accounting practices as well as for International Financial Reporting Standards (IFRS). In recent years, there is an apparent effort of the International Accounting Standard Board to establish a single measurement approach

3.1 Single Measurement Approach
Only one starting point can be provided for the purpose of measurement that (according to the standard setters) best satisfies the criteria of the financial accounting and reporting measurement. These measurement bases are "pure" base of measurement as historical cost, replacement cost, value in use or fair value.

The objective would always be to estimate the selected measurement basis, other bases being allowed only as proxies where direct measurement was impossible [12, 17].

The consistency of the measurement, comparability and meaningful aggregation of the accounting data are the advantages of this approach. The adoption of single measurement method is predicated on the belief that such a measurement will be always the most relevant and will be reliably measurable. Such a "perfect" measurement basis has not yet been found. Macve believes that it is
impossible to prove that any individual measurement approach is Pareto superior to others for external users—ideally they probably need a range of alternative measures in order to triangulate the information they receive from various sources [9].

IASB attempts to find and defend such a base in its projects dealing with measurements (e.g [6]). According to the IASB's projects the fair value measurement should be such a base, however, in our opinion in many cases not even fair value meets the criteria, which a measurement in financial accounting should meet.

3.2 Mixed Measurement Approaches

As stated above, virtually all systems of accounting regulation (IFRS no exception) do not currently use a single measurement approach, required and preferred in all cases, but the mix of measurement approaches. The advantage of this approach is that it is not necessary to use a single measurement approach for all situations, which, considering the information needs of users, but also for example the reliability of establishing such measurement might not be appropriate in a particular situation. Different Measures for Different Purposes is appropriate for financial accounting - for example, as Penman (2007) demonstrates, cost measures may provide useful margins on turnover for predicting operating cash flows in a going concern business, whereas fair value may be a more direct and reliable means of valuing a portfolio of marketable investments [17].

However, disadvantages of using mix measurement approaches are obvious – it leads to aggregation of the data measured by different approaches, the explanatory power of such aggregation is weak, plus the use of different measurement approaches entails various risks. To report the items which are measured by different measurement approaches separately is therefore a minimum requirement, which should be held. Separate reporting of items bound to various estimating risks enables the users of financial information their independent analysis and assessment.

Measurement approaches are in practice differentiated according to both the moment at which the measurement is performed (e.g. initial recognition of the particular item or subsequent measurement) and according to nature of the subject of the measurement (e.g. long-term assets in terms of meeting the prerequisites of going concern, inventories and derivatives or securities held for trading are measured differently.)

By accepting this approach the measurement problem has been limited to the search of an appropriate measurement base for the measurement of particular items in a particular situation. Only one method of measurement would be associated with a particular item, different item would, or could, be measured using different methods, if those methods best represented the economic properties of the particular item [17].

However, even in this case the choice of the only measurement approach may not be simple or straightforward considering the criteria which the selected measurement should meet. The question therefore arises whether the output information from financial accounting (e.g. balance sheet items) should not be measured by more alternative ways at the same time (multiple-column reporting). Disclosure of information using multiple options of measurement for a single item has been so far applied in accounting rather exceptionally in notes to the financial statements and not on a systematic basis. Normally, the results of measurements based on a parallel usage of various measurement bases are not used; the reason is the high cost and laboriousness of such a procedure. Whittington, comments: …many alternative measures might be potentially useful as information to some user, but it would be impractical, expensive and possibly confusing to report many alternatives measures [17].

Thus, if we admit that it is not possible to find and define a single “correct” solution even in the measurement of a particular item in a particular situation and the disclosure of measurements in several alternatives is expensive and laborious, the question arises whether to accept the choice of several options in a single accounting system. Of course, any alternative in the measurement further deteriorates the comparability of financial information. If an alternative measurement is allowed within the accounting system, it is necessary to consider other consequences.

It must be decided whether in certain specific cases retain the right to choose the method of the measurement from the options given to the accounting entity, or whether to develop a procedure (algorithm) of setting a single measurement resulting from the comparison of several measurement bases. In practice these two commonly options are used.

If the right to choose the measurement policy is left to the accounting entity, the entity may choose the approach that best suits the circumstances. However, at the same time the possibility of subjective manipulations with the measurement (e.g.
the choice of LIFO or FIFO method of the measurement of inventories) is opened to the entity.

Setting of certain rules or hierarchy for the choice of a measurement from various measurement approaches (used e.g. for deprival value) can help to bring a uniform order to the procedure of measurement and enable the choice of an appropriate measurement which is inter-company comparable. The disadvantage of this approach is its labour.

4 Market versus Entity-Specific Measurement Objectives

Measurement in accounting may be based on the entity-specific measurement objective or on the market value measurement objective.

The entity specific measurement objective reflects specific conditions under which the entity acquires an asset (or for which it incurs a liability) and individual benefits (benefit outflow), which are expected from the asset (liability) due to the expected use. The specific terms of the entity for the measurement of the acquired asset reflect the purchase costs or production costs, with the subsequent measurement of the asset also value-in-use, the selling (exit) price net realizable value (selling price less cost to sell), replacement costs etc.

The market specific measurement objectives are based on the market prices, which may be achieved at the market when buying or selling the asset in arm’s length transaction at the measurement date, is independent of the individual conditions of the entity. Dean (2010, p. 84) states: “Market based valuations within that set have taken many forms: for example, exit price (selling), entry price (replacement price), deprival value and a catch-all fair value accounting.” Requirements for a market-based measurement, which is independent of the specific conditions and intentions of the entity, are reflected e.g. by the definition of fair value used in the currently applicable IFRS.

The answer to the question, which of the above two approaches better reflects the needs of users of accounting information, is fundamental to the concept of measurement. This issue is discussed not only by the standard-setters, but also by the wider public.

The current project of the IASB and the FASB to develop a joint conceptual framework started by Discussions paper Measurement Bases for Financial Accounting—measurement on Initial Recognition (IASB, 2005), prepared by staff of the Canadian Accounting Standards Board. The paper compares the market and the entity-specific measurement objectives. A market measurement reflects the price in an open and active competitive market, it reflects market expectations. On the contrary an entity-specific measurement is based on the expectations and preferences of the management of an entity.

The discussion paper IASB concludes: The paper concludes that, for external financial reporting purposes, the market value measurement objective has important qualities that make it more relevant than entity-specific measurement objectives on the initial recognition of assets and liabilities. An entity-specific measurement objective looks to the expectations of the reporting entity, which may differ significantly from those implicit in a market price [6].

The reasons for the preference of the measurement at fair value to the entity-specific measurement are obvious from the discussion material IASB. Fair value is considered to be a more relevant and reliable measurement because in the opinion of the creators of this material it prevents the penetration of subjective effects to the measurement.

This justification is controversial. Whittington thinks that the adoption of a single measurement method (- fair value -) is predicated on the belief that such a measure will be always the most relevant and will be reliably measurable. This will be the case if markets are complete and in perfectly competitive equilibrium. In such a situation, a unique market value can be attributed to every asset and liability, so a single measurement method, consistent with fair value is appropriate. Such properties as consistency and comparability can then be achieved in a very precise sense. Unfortunately, in reality, markets are not perfect and complete, so that this ideal information is not available.

Grossman and Stiglitz (1980) have demonstrated that information asymmetry, which is pervasive in markets and whose partial relief is a fundamental object of accounts, is a fundamental barrier to market perfection: "because information is costly, prices cannot perfectly reflect the information which is available, since, if it did, those who spent resources to obtain it would receive no compensation [17]."

Fluctuations, the uncertainty of the findings or the unavailability of market prices due to the absence of active markets is particularly striking at non-financial assets. Fair value must be in these cases often established on the basis of subjective estimates based on judgments and decisions of managers. In the case of these estimates the
measurement is based not on the fair market conditions, it is de facto an entity-specific measurement objective and the declaration that the assets were in these cases measured at fair value is thus for the users of accounting information rather misleading without further specifications. The risks associated with estimates of fair value when no active market price is available, are noted for example by Ronen: "... measures, derived as they are from current observed market prices, can be objectively determined and hence would meet the threshold of reliability... estimations of fair value based on predictable relationships among the observed input prices and the value of the asset or liability being measured. The degree of reliability one can attach to these derived measures would depend on the goodness of the fit between the observed input prices and the estimated value. Measurement errors and mis-specified models may compromise the precision of the derived estimates.... In the latter, unobservable inputs, subjectively determined by the firm’s management, and subject to random errors and moral hazard, may cause significant distortions both in the balance sheet and in the income statement. Moreover, discounting cash flows to derive a fair value invites deception. [11]”

“...as based on my own auditing experiences of long ago—the following ideas are based on several behavioural premises: Information that is useful for and used by managers is more likely to be reliable than information that is only produced to satisfy external reporting requirements. However, this has to be tempered by the fear that management may manipulate data: hence bodies like the FASB/IASB seek ‘objective statistics’ (e.g., based on the original ‘myth’ of fair value derived from financial economics (e.g., bromwich, 2007; Hitz 2007; Dean, 2008). It is important to triangulate management-prepared values against external market evidence wherever available—and especially now given recent experiences (post-2001) with Enron, WorldCom, etc., and even more recently, given the matters emerging in the aftermath of the GFC [9].”

“Enron used, to a large extent, level 3 and level 2 inputs for its external and internal reporting. Level 3 valuation was first used for energy contracts, then for trading activities generally and undertakings designated as “merchant’” investments, these fair values simultaneous being used to evaluate and compensate senior employees. As proven later, Enron’s accountants (with Andersen’s approval) used accounting devices to report cash flow from operations rather than financing and to otherwise cover up fair-value overstatements and losses on projects undertaken by managers whose compensation was based on fair values [1].”

During the financial crisis it can be doubted whether the measurement of fair value is more reliable and more relevant than the entity-specific measurement of not only non-financial assets but also of financial instruments. Makve states to it: “That said, the major question now is whether, in the current markets even the Level 1 FVs (NB.: Level 1 FVs = market price for identical assets or liabilities which are readily available from active markets) are now reliable. It is worth contemplating this in the light of the recent developments regarding FASB’s new FSP 157-4; and also FAS 115-2, FAS 124-2 regarding impairments [9].”

Financial crisis precipitates discussion about measurement first of all in USA (FASB, SEC) and also in IASB in year 2008. IASB accepted in October 2008 an amendment to IAS 39 permitting an entity to reclassify non-derivative financial assets (other than those designated at fair value through profit or loss by the entity upon initial recognition) out of the fair value through profit or loss category in particular circumstances. The amendment also permits an entity to transfer from the available-for-sale category to the loans and receivables category a financial asset that would have met the definition of loans and receivables (if the financial asset had not been designated as available for sale), if the entity has the intention and ability to hold that financial asset for the foreseeable future. This amendment allows as we see it pointed manipulation with income and comprehensive income.

Moreover IASB issues almost in the very same time a new IFRS 9 which radically and inconsistently changes system of financial assets measurement. On the other hand IASB does not pay an attention to issues of fair value measurement of nonfinancial assets (e.g. investment properties and their fair value measurement). These changes allow target manipulation with profit as well as comprehensive income.
5 Conclusion
Based on analysis of issues and problems related to measurement, we can state that the use of single measurement basis in all situations does not contribute to improving the information provided in the published financial statements for external users of accounting information.

The requirements of financial information users are different and also different circumstances may require different measurement bases. Another argument against the use of a single measurement basis is a problem of reliability of its assessment. In many cases selected measurement base in "pure form" is not observable and for its determination is necessary to use a different valuation basis. As far as the issue whether the valuation based on market conditions or on the entity specific measurement and unilateral preferences fair value as a representative of market value is concerned, it is also discussable. The absence of market prices leads to using alternative measurement approaches, which are often inconsistent with the fair value definition (e.g. determining the fair value through present value of future net cash flows - especially by non-financial assets reflects the significant estimates and subjective conditions of the entity).

Single measurement approach based on fair value measurement is only theoretical approach and is not fully applicable in practice. Current changes in IFRS don’t respond satisfactorily to the economic situation. Some of these changes can increase risks, which are included in the accounting data.

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