Conceptual inconsistencies of fair value accounting

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1. Introduction to and issue of the paper

In the eyes of the leading Anglo-Saxon standard setters FASB and IASB general purpose financial statements strictly serve just one single purpose: “to provide financial information about the reporting entity that is useful to existing and potential investors, lenders and other creditors in making decisions about providing resources to the entity”\(^1\). Lately the fact that financial accounting has to serve multiple functions – contracting, stewardship, taxes, regulation and litigation as well as information\(^2\) – has been recognised as far as stewardship is concerned.\(^3\) Supporters of the fair value concept are convinced however that information useful for current and potential investors will also serve the stewardship function.\(^4\)

People deciding on the allocation of capital are primarily interested in information about future cash flows associated with the investment alternatives available to them.\(^5\) In case of financial statements the relevant alternative is the reporting entity. Unfortunately forecasts of future cash flows associated with risky investments are definitely not verifiable. Therefore they are unsuitable to be presented in financial statements. Trying to find a feasible solution financial accounting is faced with two competing concepts. Historical cost accounting under the revenue and expense view looks for a way to rearrange historical cash flows\(^6\) without changing their overall volume (“clean surplus”). The idea is to find a new timing that – to the extent possible – increases the predictive value of historical cash flows\(^7\). In any case this concept is far from being perfect. Especially its presentation of assets and liabilities is geared towards cash flow rearrangement and clean surplus but not towards information on net assets. Moreover the historical data will always need a subjective conversion into a forecast by the user of the financial statements.\(^8\)

Present values of future cash flows are as instructive for investors as future cash flows. Thus the dissemination of the idea of efficient prices in active markets led to resurgence of the second approach aiming at information on value.\(^9\) At first glance an asset and liability method based on efficient market prices gives good cause to hope for perfect satisfaction of the information needs characteristic of investors. Full fair value accounting takes up this idea and tries to turn it into a revolutionary new concept of financial accounting.\(^10\) Unfortunately the vision of informing markets by presenting assets and liabilities at fair value is not free from some fundamental problems. This paper is dedicated to work out the main conceptual limits and inconsistencies of fair value accounting. Full fair value accounting focuses on presenting

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1 IASB (2010b, OB2), similar FASB (2008, SFAC1.28 and .30).
3 See IASB (2010b, OB4). The term “stewardship” was avoided however with respect to “difficulties in translating it into other languages.” IASB (2010b BC1.28).
4 See IASB (2010b, BC1.24-1.28).
5 See, e.g., IASB (2010b, OB3) and FASB (2008, SFAC 1.25 and 1.37).
6 See, e.g., Schmalenbach (1926), Paton and Littleton (1940) and Nissim and Penman (2008, 14 – 17).
7 Rearrangement of cash flows is supposed to increase the predictive value: FASB (2008, SFAC 1.44) and IASB (2010b, OB17).
8 See, e.g., Soffer and Soffer (2003) and Penman (2007).
9 See Sprouse and Moonitz (1962).
10 Full fair value accounting is understood in the sense of Application 3 in Nissim and Penman (2008, 3-5).
net asset values. Section 2 of the paper will recall the fact that in a stochastic world this focus prevents fair value accounting from informing about profits useful for estimations of future cash flows and about the risk of a going concern. Section 3 will outline the differences between values in real world compared to an ideal world of perfect and complete markets. Instead of one definite value for every asset at every instant of time values depend on the ways assets are used, combined and managed – actually the reason for the need of stewardship. Normally values even exist for asset combinations only. Due to the insolubility of the value distribution problem this undermines bottom up value aggregation and any economic definition of an asset or a liability. Future cash flows probably provided by the reporting entity or the value resulting from these cash flows mark the relevant inputs to investment or stewardship decisions concerning this entity. Section 4 will analyze the relations between this entity-specific information on the one hand and quoted prices in active markets versus the highest-and-best-use assumption in a world of imperfection on the other. Finally section 5 examines some implications of the three level hierarchy of inputs to fair valuation. Similar to the information paradox of fair value accounting under ideal conditions the use of observable market inputs in real world can neither provide markets nor investors with additional knowledge. If alternatively fair value measurement depends essentially on unobservable subjective information input fair value accounting comes more than close to forecasting future cash flows of risky investments especially since there is – and there can be – no substantial supportive guidance. The figures presented by fair value accounting therefore are a mixture of figures which are already familiar to the market that provided the information or – at best – products of guesswork and neither verifiable nor trustworthy.

Of course fair value accounting can not provide perfect information in a realistic world where markets are at best only partly efficient, where estimates of fair value cover a wide range of equally legitimate results requiring subjective selection and where preparers are interested in glossing over the facts instead of informing the public. But as all concepts of financial accounting suffer from fair bits of specific imperfections it is hard to compare them by considering their strengths and weaknesses particularly since individual judgement is inevitable to do a job like that. The kind of conceptual inconsistencies however regarded in this paper seems to be a distinctive feature of fair value accounting. In order to work them out properly the analysis has to focus on full fair value accounting instead of the “mixed measurement model” characteristic of current IFRS and SFAS. Even if analysis is mostly confined to assets it will generally refer to liabilities in their quality as “negative” assets too.

Finally this analysis is dedicated to full fair value accounting as a vision of the future of financial reporting. But current accounting standards serve as an important guideline for this vision of full fair value accounting.

2. Information by accounting for value – the idea and its conceptual limits

Full fair value accounting focuses on the presentation of economic resources and claims culminating in the value of net assets. Similar to fair value accounting under ideal conditions and in accordance with the traditional structure of a balance sheet the value of the reporting entity is derived by aggregation of individual assets and liabilities at fair value.

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11 See, e.g., Beaver and Demski (1979, 38).
12 Verifiability has replaced reliability as one of the qualitative characteristics in the Conceptual Framework, IASB (2010b, QC26-28).
14 For illustration by data taken from actual Forms 20-F filed with the SEC by four EU foreign filers see Ernst & Young (2005, 8).
Apart from the statement of financial position fair value accounting is unable to inform markets or market participants. Calculated according to ideal fair value accounting “earnings are uninformative about future earnings and about value; earnings are changes in value and as such do not predict future value changes, nor do they inform about value.” Whether fair value-based “earnings report the stewardship of management in adding value to the shareholders” is dubious especially from the perspective of a going concern since “earnings (change in value) is a random shock that has no growth” and they “do not repeat in any predictable fashion.”\(^{17}\) Some figures showing ideal profits in a perfect multi-period model-world of uncertainty might illustrate the background.

<table>
<thead>
<tr>
<th></th>
<th>Day of formation</th>
<th>End of year 1</th>
<th>End of year 2</th>
<th>End of year 3</th>
<th>End of year 4</th>
<th>End of year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>2.000</td>
<td>3.000</td>
<td>2.500</td>
<td>1.500</td>
<td>2.000</td>
<td>2.500</td>
</tr>
<tr>
<td>Earnings</td>
<td>–</td>
<td>+ 300</td>
<td>+ 250</td>
<td>+ 150</td>
<td>+ 200</td>
<td>+ 250</td>
</tr>
<tr>
<td>Capital gain</td>
<td>–</td>
<td>+ 1.000</td>
<td>– 500</td>
<td>– 1.000</td>
<td>+ 500</td>
<td>+ 500</td>
</tr>
<tr>
<td>Earnings plus gain</td>
<td>–</td>
<td>+ 1.300</td>
<td>– 250</td>
<td>– 850</td>
<td>+ 700</td>
<td>+ 750</td>
</tr>
</tbody>
</table>

The example assumes an entity in a stochastic world which was founded with no day one profit and whose future cash flow-based economic value has gone up and down afterwards. A possible history of these economic values together with an expected rate of return of 10% determines three kinds of profit: information adjusted ex ante economic earnings (“earnings”), capital gain or loss (“capital gain”) and the sum of both (“earnings plus gain”). Current value can easily be deduced from information adjusted ex ante economic earnings\(^{18}\) – the ideal of revenue and expense view. Asset and liability view on the other hand combines earnings with capital gain or loss which in markets of rational expectations result from pure random. The example above proves that even under ideal conditions there is no way to deduce value from earnings plus capital gain or loss. Real conditions will of course lead to imperfect profits. But an additional pure random component will still spoil the chances left for a profit-based estimation of future cash flows and future cash flow-based values.

If fair value-based earnings – as asserted by Nissim and Penman – inform about risk\(^{19}\) this is definitely not the risk of a going concern inherent in the expected net future cash flows resulting from the intended use of the assets by the reporting entity. The risk it tries to reveal instead is the risk of an investor who wants to be able to abandon his investment any day and who assumes that he may do so by orderly transactions.

Thus concentrating on economic resources and claims by accounting for value means that one has to renounce the information on profits which are useful for the estimation of future cash flows and on the risk of a going concern. In a stochastic world information on profit is incompatible with information on value.\(^{20}\) Fair value accounting therefore can only inform on value – if at all.

### 3. Inconsistencies between valuation under real and ideal conditions

\(^{17}\) All quotations are taken from Nissim and Penman (2008, 13).
\(^{18}\) Discussed also as “permanent earnings” Beaver (1998, 48-49).
\(^{19}\) Nissim and Penman (2008, 13).
\(^{20}\) See Schmalenbach (1926, 79-86) and Moxter (1984, 6): “If you want to determine profit correctly you will have to determine net assets the wrong way.” (translated from German by the author).
Valuation under ideal conditions is characterized by some important features which can not be found in reality. In an ideal world of perfect and complete markets for example it is very easy to identify assets because all of them are traded in perfect markets where they have definite prices. Every price will exactly tally the additional value resulting from the use of the asset. Since both the way the asset is used and the appreciation of value induced by the asset are identical for all individuals there is even one “general” value for every asset which is valid universally. Values of asset combinations moreover can be determined very easily by simply adding the individual values of the assets forming the combination (“additivity”21).

The ideal features of values described before are not valid in reality. This is even true in case of financial instruments. As the value of an asset depends not only on the amount and timing of future cash flows but also on their uncertainty and as the uncertainty of joint future cash flows is influenced by the way assets are combined there is neither one general value for every financial instrument independent of the way it is combined nor value additivity. If we assume – in accordance with CAPM – that market price as the most reliable evidence of fair value will compensate only for bearing systematic risk22 fair valuation and value additivity is restricted to be applied to efficient portfolios of financial instruments. Both the values of individual financial instruments and of the rich variety of not perfectly diversified portfolios we experience in reality can not be expressed by such fair values and additivity. The efficient combination-based values have to be adjusted by something like an individual “inefficiency badwill” representing the unsystematic risk that has not been diversified. Additional investments however reducing unsystematic risk will also reduce the badwill. Any other valuation concept will get involved in similar problems as long as various combinations of financial instruments will affect risk differently and as long as value depends on risk.

The values of operative assets combined according to a business model are even manifold in real world since they depend on the assets they are combined with, the way they are used to serve the business model selected and the entrepreneurial spirit behind the combination. The important influence of entrepreneurial spirit on value is illustrated by the big tycoons in business – recently by the part Steve Jobs played in the history of Apple. The two other reasons for value ambiguity mentioned are even confirmed by the promoters of fair value FASB and IASB. SFAS 157A10 and A11 for instance deal with the valuation of land currently used as a site for manufacturing which might have a higher value if it is converted to residential use even if costs to convert the land to a vacant site are taken into consideration. The combination – either with complementary manufacturing assets or with a high rise condominium – which leads to the highest value of the land determines fair value.23 The value of an asset group of three assets which can be used differently by financial or strategic buyers is discussed in SFAS 157A7 to A9. The different ways of using the three assets affect both the values of the asset group and of the assets in the group. Synergy24 is another way of describing the fact that special ways of using or combining assets in a group lead to positive or negative differences of the resulting overall value compared with the simple sum of the individual values of the assets. A third indicator of variety in values is the existence of “values in use”25 or “entity-specific values”26 in contrast to fair value. The differences can be material as SFAS 157A6 concedes that “application of the highest-and-best-use concept could have a

24 See, e.g., IASB (2010a, IAS 36.80 and BCZ43) and IASB (2011, IFRS 13.89, B3(a) and BC174).
25 IASB (2010a, IAS 36.30-.57 and IAS 36BCZ11(c)).
26 IASB (2010a, IAS 16.6 and IAS 38.8).
significant effect on the fair value measurement.” Diversity in individual values of assets coupled with manifold values of asset combinations depending on combination, use and management has serious consequences for valuation. There can be no unambiguous set of “general” values for every asset at every instant of time which is consistent with the idea of reproducing the innumerable values of asset combinations by pure aggregation of these values. Ambiguous values or additional assets (goodwill or badwill) are necessary to reproduce the special values of the combinations. The alternative approach to appoint one of the values to be the “fair” one will restrict feasible aggregations to replicate values of idealized entities but not those of the asset combinations actually realized by the reporting entities and run by their managements.

Piece-meal valuation causes yet other serious problems if it is applied to combination-use assets. Combination-use assets do not give rise to cash inflows individually so there is no basis for individual cash flow-founded valuations. As cash inflows result from joint effort future cash flow-based values can be determined directly just for the combinations as a whole. Serious attempts to distribute the joint values of asset combinations to the well defined assets involved which do not include any combination-specific differences (goodwill or badwill) are bound to fail. As we have seen before there can be no set of general values for every asset which is able to replicate all the values of asset combinations marked by the specific combination, use and management of the assets. Also the problem of distributing joint values of input combinations to the specific inputs engaged is well known in economics to be insoluble. Since individual values representing the specific expected future cash flows can not be found pure arbitrariness is required to determine both the contributing objects regarded as assets and liabilities engaged in the combination and their individual values. It also does not make much sense really to split up joint values of asset combinations to the assets engaged. This procedure serves just a convention of presenting assets as line items of a balance sheet. Since the only purpose of the individual values is to be aggregated to net assets again the procedure is even senseless. On the other hand the capability to measure the joint value of “the smallest identifiable group of assets that generates cash inflows which are largely independent of the cash inflows from other assets or groups of assets” – the logical basis of value distribution – comes very close to the final solution intended by the full fair value concept. These smallest identifiable groups of assets called “cash-generating units” will often comprise material parts of the reporting entity. In the examples of IAS 36.67 and .68 dealing with a mining and a bus company the cash generating units even correspond to the particular entities so that the values of the cash-generating units tally with those of the entities. Thus at least as far as combination-use assets are concerned an asset and liability concept of financial reporting trying to present the value of net assets will reasonably be founded on the values of cash-generating units. While further aggregation to net assets of the entity makes sense as long as synergies are taken into account top down distribution of values in order to enable bottom up aggregation is inexpedient.

4. Inconsistencies between fair value measurement and relevant information for allocation or stewardship decisions

People deciding on investment or stewardship are primarily interested in the returns they can expect to receive according to the amount, timing und uncertainty of the future cash flows probably provided by the reporting entity. Since the information intended is a – perfect if

27 See IASB (2010b, OB14).
30 IASB (2010a, IAS 36.6).
possible – substitute of expected future cash flows the value presented must at least try to be equivalent to the expected future cash flows of the entity capitalized by the appropriate rate of return. The entity-specific value will determine the future benefits of all investors which – due to lack of control – are committed to the specific use of the assets intended by the entity. It also characterizes the object of stewardship – the actual result of the efforts of management.

At first sight fair value accounting seems to conform to this objective as “fair value reflects the market’s expectation of the present value of the future cash flows to be derived from the asset.”\(^{31}\) Due to confidence in market efficiency moreover “A quoted price in an active market provides the most reliable evidence of fair value and shall be used without adjustment to measure fair value whenever available”\(^{32}\). Entity-specific valuation however is not really the vision of fair value accounting. “Fair value is a market-based measurement, not an entity-specific measurement.”\(^{33}\) Measurement is founded on “the assumptions that market participants would use when pricing the asset or liability, including assumptions about risk.”\(^{34}\) In a world of course where assets are combined, used and managed differently – which is the reason for the need of stewardship actually – it will be even hard to find “the assumptions” of market participants if one does not know the assumptions of all participants and the way these assumptions should be aggregated to result in a fair value. In reality a quoted price in an active market – the most reliable evidence of fair value – does neither represent a valuation of market participants generally nor of the reporting entity. It marks the amount the marginal buyer of the asset is prepared to pay for the asset and the marginal seller is prepared to accept. Compared to the amounts that all other parties engaged in the transactions and holding the asset after the transactions were prepared to pay or accept market price stands for the lowest amount. This means that market price-based net assets will need a supplementary goodwill to tally with the specific values of non-marginal entities holding the asset.

According to the shortage of quoted prices in active markets characteristic of our world of imperfection fair value measurement has to be mainly based on a hypothetical orderly transaction\(^{35}\). FASB and IASB try to reduce the imminent diversity of hypothetical prices by an additional assumption for non-financial assets. Though under realistic conditions this assumption is not simply synonymous with pure rationality valuation shall be based on the “highest and best use” of the asset from the perspective of market participants\(^{36}\). In this spirit synergies which would be available to market participants have to be considered in fair value\(^{37}\) while entity-specific synergy has to be eliminated from the value\(^{38}\) – if the entity is not a best user. Important details of this assumption are obscure however. According both to the definition in SFAS 157.12\(^{39}\) and to some examples in this Standard it is not clear whether it is the value of the asset or of the asset group that has to be maximized. The figures in SFAS 157A8 prove that there can be a material difference. And the idea of maximizing the value of an asset group will lead to strange results if assets are used in different groups – a piece of land for instance together with a skyscraper or a building of few stories only where both buildings are in line with market requirements. In any case though values measured according to the highest-and-best-use assumption are quite different from quoted prices in active markets. Instead of the small amounts marginal buyers and sellers are prepared to pay or to

\(^{31}\) IASB (2010a, IAS 36BCZ11(a)).
\(^{32}\) IASB (2011, IFRS 13.77).
\(^{33}\) IASB (2011, IFRS 13.2).
\(^{34}\) IASB (2011, IFRS 13.3).
\(^{35}\) See IASB (2011, IFRS 13BC30 and BC42).
\(^{36}\) See FASB (2008, SFAS 157.12) and IASB 2011, IFRS 13.27-.30).
\(^{37}\) See IASB (2011, IFRS 13B3(a)).
\(^{38}\) See IASB (2011, IFRS 13.89 and BC174).
\(^{39}\) See also IASB (2011, IFRS 13 Appendix A “highest and best use”).
accept they mark the highest values of the assets or asset groups attainable by market participants. Thus while under market price-based valuation net assets of non marginal users of the assets had to be supplemented by a goodwill under highest and best use valuation net assets of non-champion users of the assets will need a supplementary badwill.

Fair value accounting presenting opaque mixtures of both positions is not really useful for suppliers of capital and supervisors of management. The value according to the actual use of the assets intended by the entity resulting from entity-specific measurement is relevant both for investors lacking control and for supervisors monitoring the efficiency of management in charge. The intended use of the assets by the reporting entity determines the probable future benefits for existing and potential investors and probable future benefits are the central criteria for the efficiency of management. Value measurements on the other hand referring to the entity using its assets in the way they would be used by marginal holders or by champions present irrelevant benefits that are not desirable or not attainable by investment in the entity – at least without control. Such values are also not relevant for stewardship decisions. They neither indicate actual efficiency of management nor – in case of best use – an attainable target if it is hard to find the corresponding managers. Moreover a general switch to best use by all holders of the assets – impossible anyway – would impair the best use-benefits. Finally the impenetrable mixture of values for marginal holders and for champions – the two extreme positions – results in completely opaque figures which are also unsuitable to provide a basis for any kind of adjustments according to superior private information from other sources.\(^40\)

5. Inconsistencies of fair value accounting due to its inability to extend verifiable knowledge

Fair value measurement has established a three level hierarchy of inputs to valuation\(^41\) based on specific combinations of two different kinds of information: observable inputs with market origin and unobservable inputs with non market origin selected by the entity.

<table>
<thead>
<tr>
<th>Level</th>
<th>Observable inputs with market origin</th>
<th>Unobservable inputs with non market origin selected by the entity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Unadjusted quoted prices in active markets for identical assets and liabilities</td>
<td>Decisions not to adjust but to put full weight on the quoted market price</td>
</tr>
<tr>
<td>2</td>
<td>Other directly or indirectly observable market data taken into account by market participants</td>
<td>Selection of market data and valuation models, measurement of fair value or analysis whether the value is fair and – on this Level – adjustment</td>
</tr>
<tr>
<td>3</td>
<td>Assumptions that market participants would use in pricing the asset or liability</td>
<td>Best information and valuation technique available in the absence of observable market data including the entities own data in form of e.g. a financial forecast of cash flows or profit or loss</td>
</tr>
</tbody>
</table>

Within this hierarchy fair value measurement “shall maximise the use of relevant observable inputs and minimise the use of unobservable inputs.”\(^42\) Strangely enough diminishing quality of information with market origin can always be fully compensated by use of information with non market origin which is also exclusively geared towards presentation of market

\(^{40}\) Thus the idea of general purpose financial reports which only “help” to estimate the value of the reporting entity (IASB 2010b, OB7) is hardly consistent with full fair value accounting in a world of imperfection.

\(^{41}\) See FASB (2008, SFAS 157.21-.30) and IASB (2011, IFRS 13.72-.90).

\(^{42}\) IASB (2011, IFRS 13.67) and FASB (2008, SFAS 157.21 with “maximize” and “minimize”).
values in order to ensure universal availability of fair value. Both information components – different only in their origination – raise the question however whether fair value accounting can serve the information function in providing additional and verifiable information. Market-based and perfectly market-oriented values will not improve the knowledge of the market – where the information comes from – or of the individuals as long as they are assumed to be capable of estimating market values by use or approximation of market data only. If value estimation depends materially on subjective opinions about market valuation Level 2 and 3 fair value measurement and non adjustment of Level 1 values is guesswork and not verifiable.

Level 1 inputs are used in case of a bank for example holding quoted financial instruments whose fair values can be observed easily and daily. Apart from probably imperfect diversification of the financial instruments with influence on value the bank as a corporation will cause additional costs which have to be compensated by an additional return on these investments. Otherwise financial instruments will be held privately only. The value of the bank then depends on the values of the financial instruments, the value reduction caused by the additional costs and the value enhancement due to the special activities of the bank. The fair values of the financial instruments as elements of the value just reflect information which was provided to accounting by the market. Market has informed accounting and not vice versa. Aggregation of these values with data on quantities of financial instruments held by the bank adds information of course. Since the values used are not adjusted to the actual portfolio diversification by the bank and since the other two value components – costs und enhancements – are omitted the substance of the news is doubtful however.

A market-oriented valuation of a production entity with combination-use assets which are not traded in active markets shall be based on observable market data (Level 2) if possible. Since combination-use assets do not cause individual cash inflows valuation has at least to start with the values of the cash-generating units. If values of cash-generating units can be measured by use of observable market data only with no material need for any kind of data with non market origin fair value accounting will definitely provide no new information. The figures presented by fair value accounting are based exclusively on information supplied by market. Financial accounting is reduced to a pure echo of knowledge available to everybody. Without any contribution of financial accounting however the derivation of market information on the asset combination is a complete mystery. Perfect information of markets and market participants must be the prerequisite of fair value accounting leaving no scope for any additional information objective. Fair value accounting will even not make things easier. It’s true that fair value has to be measured only once by the reporting entity. But without fair value accounting the values of the cash-generating units do not have to be allocated to individual assets and liabilities – impossible anyway – just in order to be aggregated again afterwards.

Irrespective of the input level fair value measurement will at least partly depend on inputs with non market origin selected and interpreted by the reporting entity. Even quoted prices in active markets do not necessarily represent fair values. If an entity comes to the conclusion that a quoted price is not orderly – and there are different possible causes for suspicion like a decreased level of market activity or indicators for a forced liquidation or distress sale – it has to be adjusted. Fair value measurement depends on the ability of the reporting entity to find out whether a quoted market price is orderly or not and to adjust it to fair value if necessary.

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43 If the entity considers the financial assets held to be underpriced fair value does not represent their value to the reporting entity. A corresponding value enhancement according to the expected gain would be needed to present the value to the entity. See, e.g., Nissim and Penman (2008, 23).

44 See, e.g., IASB (2011, IFRS 13.79 and B37-B44).
Both activities require judgement\textsuperscript{45} to find and process information with non market origin which is market-oriented and superior to available information with market origin. Thus even a Level 1 input is partly based on subjective non observable information leading to the decision to accept market price as a result of an orderly transaction. Not only “The distinction between Levels 2 and 3 is inevitably subjective.”\textsuperscript{46}

Adjusted market prices as well as fair values estimated by use of observable market data characterize the Level 2 input-based fair value measurement: entities are supposed to be able to remedy a defect of a market price or to finish the imperfect valuation by the market. In case of a fair value measurement based on Level 3 inputs entities are even able to estimate market-oriented fair values without substantial support by market data. Input with market origin is restricted to appropriate ideas of fair value measurement especially its dependence on “assumptions that market participants would use when pricing the asset or liability”\textsuperscript{47}. If as a result efficient market prices are expected every preparer of fair value accounting must have the capabilities of an excellent central planning authority – an ideal Gosplan allocating resources by perfect prices. Alternatively entities are expected to be able to determine hypothetical market prices. This capability either implies great chances of gaining from arbitrage by few entities having this ability and keeping their superior knowledge a secret or it will lead to an immediate adjustment of prices towards the estimated values putting an end to the need of Level 2 and 3 inputs. Both alternatives are not very realistic.

Even less likely is the possibility to develop substantial guidance allowing to find out whether a Level 1 market price does not need adjustment and to infer fair value measurements from Level 2 or 3 inputs. Existence of this kind of guidance would enable everybody to turn inferior Level 1 to 3 inputs into figures similar to superior Level 1 prices – synonymous with creating additional information by just following definite rules. Indeed promoters of fair value accounting either just offer idealizing features which can all not be verified in a world of imperfection or they resort to circular reasoning. As far as features like “orderly” for a transaction,\textsuperscript{48} “independent”, “knowledgeable”, “able” and “willing to enter into a transaction” for market participants\textsuperscript{49} or “assumptions that market participants would use when pricing the asset or liability” for market-oriented valuation\textsuperscript{50} are comprehensible they are also self-evident. Guidelines like “A fair value measurement is the point within that range that is most representative of fair value in the circumstances”\textsuperscript{51} or to adjust a price that “does not represent fair value at the measurement date”\textsuperscript{52} are examples of circular reasoning. One needs to know fair value in order to choose the appropriate valuation technique and to decide on the need of an adjustment. Additional guidance on adjustment needs is restricted to some possible but neither exhaustive nor reliable indicators. It leaves the adjustment methods open too: “This IFRS does not prescribe a methodology for making significant adjustments to transactions or quoted prices.”\textsuperscript{53}

In fact guidance referring to the idea of highest and best use causes additional information inconsistencies instead of redressing them. It is hard to imagine that inferior users of assets know the different users of all their assets, the ways the others use the assets and the values of

\textsuperscript{45} See IASB (2011, IFRS 13B42).
\textsuperscript{46} IASB (2011, IFRS 13BC173(b)).
\textsuperscript{47} IASB (2011, IFRS 13.87).
\textsuperscript{48} IASB (2011, IFRS 13.9 and .15).
\textsuperscript{49} IASB (2011, IFRS 13 Appendix A “market participants”).
\textsuperscript{50} IASB (2011, IFRS 13.3, .22 and .87).
\textsuperscript{51} IASB (2011, IFRS 13.63).
\textsuperscript{52} IASB (2011, IFRS 13.79(b)).
\textsuperscript{53} IASB (2011, IFRS 13B39).
the assets and asset combinations resulting from all these ways of using the assets while they are unable to implement the best use-strategy or unwilling to cash the value difference which should be easily attainable if market prices accord to highest and best use. The consequences of fair value accounting based on highest and best use depend on assumptions concerning the spreading of the extensive information just discussed. If all market participants have comprehensive information about users, ways of using assets and the resulting values best use-based fair value accounting by inferior users becomes a farce. Everybody not only knows the values of the assets according to the intended inferior use by the entity but also the accurate amount net assets have been glossed over. If comprehensive information is restricted to the entities using the assets and the individuals involved in the preparation of financial reports fair value accounting will be misleading because addressees of financial reporting will be unable to distinguish inferior from best users though their expected future cash flows and cash flow-based values are different. This will obstruct capital allocation and stewardship rather than support it.

Markets will at least be partly inefficient. Findings of Behavioral Finance and provisions in IFRS 13 for market price adjustments provide evidence of this. Even more doubtful however is the intended role of reporting entities to adjust defective market prices and to estimate missing ones. Excluding-entity specific inputs from this job – if they are not specific to best users – means that well accessible and interesting knowledge has to be ignored in favour of a search for hardly comprehensible characteristics market participants would take into account. Missing information with market origin is not replaced by non market-oriented information but by the vision of a second source of market-oriented information apart from market. It is already difficult and most uncertain to forecast future cash flows expected from assets or asset groups used by the entity and to determine an appropriate discount rate. Having to take the view of market participants “generally” makes things even more complicated on the one hand and less useful on the other particularly since there is no such view, since observable market data is available to anybody anyhow and since the non directly observable information is curbed to subjective opinions on market valuation.

Under such conditions fair value measurement that depends materially on non observable subjective opinions on market valuation – probably all measurement apart from undisputed Level 1 inputs – is just pure guesswork heavily influenced by accounting policy. “Fair value is what you want the value to be. Pick a number.” Disclosure of details will hardly help to restore verifiability. There are manifold ways of camouflaging empty phrases on market-oriented valuation and too many subjects to be explained – particularly as the individual values of numerous assets and liabilities have to be accounted for instead of just the values of the cash-generating units or the entity.

6. Conclusion

There is a story on scientists – imprisoned and starving – who one day were showered with sardine tins. Engineers and chemists tried to open the tins by the limited mechanical or chemical means available to them. Economists simply assumed that the tins were open and started to eat. Those who propose fair value accounting to inform the public about economic consequences of investments in business enterprises follow the same strategy. Markets and market participants pricing assets and liabilities are assumed to have perfect information which can easily be both used as or converted into values and aggregated to net assets by accounting. As long as this approach works – outside an ideal world of perfect and complete

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54 Craig and Weil (2004, M8 with reference to C. Mulford).
markets a rather small area – the resulting reports are again only echoes providing no additional knowledge. In our world of imperfection assets and liabilities are poorly defined. They have no general and even no individual values and there is no value additivity. Intensive efforts to find substitute conditions creating circumstances similar to those of the perfect model world are doomed to fail. Conditions like orderly transactions, market based measurement or highest and best use together with an insistence on a piece-meal approach will not bring back paradise. Necessarily ill defined they rather cause serious additional problems and significant latitude. Moreover information on the reporting entity is replaced by information on some artificial model-entity which is relevant neither to investors nor to individuals deciding on stewardship. Accounting for value and accounting for earnings which are informative about future cash flows are mutually exclusive. Therefore inability of fair value accounting to inform about value can not be compensated by information on earnings. Full fair value accounting is a poor conceptual vision leading financial reporting astray into irrelevant, impenetrable and predominantly in no way verifiable compilations of figures.

REFERENCES


Abstract

Accounting is faced with a fundamental conceptual issue – the vision of a revolutionary full fair value accounting combining asset and liability view with efficient market hypothesis. The paper is dedicated to work out the main conceptual limits and inconsistencies of this vision. In a stochastic world a presentation of resources and claims leads to a comprehensive income which is not informative on future cash flows or on the risk of the entity as a going concern. Information on value is questionable too. In our world of imperfection assets and liabilities are poorly defined. They also have no general or even individual future cash flow-based values jeopardizing any piece-meal valuation concept. Net assets valued partly by highest and best use values of champions and partly by market prices representing the low limits of marginal buyers and sellers result in an opaque mixture irrelevant for investment decisions or stewardship. Finally the figures presented by fair value accounting will hardly provide markets and investors with additional knowledge if they are based on observable information. Based on unobservable subjective information input and trying to approximate hypothetical market results instead of taking advantage of the entity-specific knowledge the figures will inevitably be neither verifiable nor trustworthy.

Keywords:
Fair value
Financial reporting
Highest and best use
Market-oriented valuation
Piece-meal valuation