

The Concept of Market Value in Thin Markets and its Implications for Accounting Rules

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Abstract

- The purpose of this Viewpoint is to discuss how the concepts market value and exit price should be interpreted in thin markets and how accounting rules may need to change to take this into account.
- This is a conceptual paper using hypothetical examples as the base for the conclusions.
- In a thin market where actors have reservation prices that can be rather different. The price will then set through bargaining and if the parties are not relatively well-informed the agreed price could be considerable above the reservation price of the actor with the second highest reservation price. The exit price should then be below the market value before the transaction and the entry price, and according to the current accounting rules, the value in the balance sheet should then be below the price paid. Our experience is however that this does not happen in practice.
- The limitation of the paper is that it is a Viewpoint and not based a systematic empirical study of accounting practices.
- The results of the paper indicate that there is a need to revise the current accounting rules. Possible changes are discussed.
- Originality/value: As far as we know this is the first paper that looks at problems in the current value concepts related to differences in reservation prices in thin markets.

Introduction

In practice there seems to be lacking consensus what the definition of a Market Value (MV) really means in some situations in the real estate market. This is especially the case when the real estate market is a thin market in terms of number of transactions and number of potential buyers and sellers. In this Viewpoint we will discuss how market value can be interpreted in such a market and also implications for accounting rules.

The International Valuation Standards defines market value (MV) as follows.

"The estimated amount for which a property should exchange on the date of valuation between a willing buyer and a willing seller in an arm's-length transaction after proper marketing wherein the parties had each acted knowledgeably, prudently, and without compulsion."

This definition is also the official one in the UK and accepted by RICS (Wyatt 2013). Many contributions have been made on this topic, see e.g Sanders (2018), Lusht (1983). Lind (1998) e.g. discusses whether it is necessary to include conditions referring to willing buyer and willing seller. Lind also discuss if there is any difference if the definition of MV refers to most probable price or highest price. French (1997) argues that the role of the valuer in assessing MV is to model the likely market thinking and estimate the point at which the sale will take place. French clearly states that estimation of MV is to estimate the "best" bid and that the degree of repeatability is less important in this process.

In the accounting literature the concept of fair value is central. IFRS 13 (2018), produced by International Accounting Standards Board (IASB), defines the Fair Value (FV) for the purposes of financial reporting. In our opinion there is no fundamental difference between MV and FV. Value assessment in accordance with the definition of MV should in all essential aspects work as estimation of FV according to IFRS 13, and the other way around. The FV is defined as an exit price in IFRS 13 and this standard make a distinction between entry price (value at acquisition) and exit price (value in a sale)¹.

At a first glance, the distinction between entry price and exit price may seem unproblematic. However, there is also a debate about components in the FV definition. Benston (2008) discuss FV defined as exit prices from the point of view of the standard SFAS 157 – Fair Value Measurements². Benston e.g questions the use of exit prices for all types of assets and also draw attention to that many of the examples of exit prices in SFAS 157 employ values in use or entry prices. In other words, the clear distinction between entry and exit prices seems to be hard to interpret in practice as it seems that even Financial Accounting Standards Board (FASB) has problems making this distinction, at least the way Benston interpreted the situation.

The note focuses on what seems to be an underlying assumption in the general discussions about market value and that there is a depth in the market with a number of actors with

¹ IFRS 13 p 24 & p 57

² SFAS 157 is the US GAAP equivalent to IASBs IFRS 13 when it comes to definition of FV

similar reservation prices. Behind this may also be assumptions that the actors have similar "rational" expectations about the property and about the external market affecting the property value. In our opinion, these presumptions seldom hold in practice in the real estate market for investment properties. On many occasions the real estate market could be categorized as a thin market, i.e. few transactions and heterogenous actors with rather different reservations prices.

The main thesis argued for in this note is that on a thin market with heterogenous actors, *exit price should be expected to be lower than entry price, or in other words: The fair value of the property is lower after a transaction has been carried out than it was before the transaction.* In a thin market the winning price bid is not automatically an expression of fair value defined as an exit price.

The structure of this note is the following. In the following section we clarify the relation between standard definitions of market value, entry price and exit price in a "thick" market. Thereafter examples are presented that illustrate that on a thin market exit price should be lower than entry price. Accounting rules are then discussed before the arguments are summarized in the conclusion.

Market value, exit price and entry price on a "thick" market

From the perspective of economic theory, prices are determined by "demand and supply". In introductory courses demand and supply curves are drawn, and the intersection between demand and supply curves determines the equilibrium price. The equilibrium price can be seen as the market value, the most probable price.

On a market with a large number of similar properties and many well-informed actors it should be expected that the demand curve is almost horizontal (up to certain transaction volume) at the price that is rational to pay. The actors on the market know the market value of the property and no one would be willing to pay more than this expected market value. When new information arrives the demand curve shifts, but still all (active) participants on the market would be willing to pay about the same price.

In such markets the concept of market value, and accounting rules linked to market value or exit price, seem rather unproblematic. If someone buys a property at the market value 1000 it would be no problem for that actor to sell the property for approximately 1000 the next day, unless new information has arrived during the day. Entry price and exit price would then be the same, and the most probable price when selling the property is the price that the rational actor just paid.

The problem of interpretation on a thin market with heterogenous actors

An example can illustrate the problem. If a company has bought a property for 1000 on a market with many participants with similar expectations and many transactions, there should be another potential buyer willing to pay $1000-\epsilon$ where ϵ is arbitrarily small. As argued in the last section, on such a "thick" market entry price, exit price and market value would for all practical purposes be the same assuming reasonably rational actors.

Let us however now assume that Company S is planning to sell a large commercial property. The company believes that there are four potential buyers and estimates that these companies have the following reservation prices.

Table 1 Assumed reservation prices

<i>Company</i>	<i>Reservation price as estimated by the seller</i>
A	1200
B	1000
C	900
D	800

These differences in reservation prices for a specific object are not unreasonable. If all actors calculate the investment value of the property but use somewhat different estimates of the discount rate (risk), or about how the net operating income (or of the value of options to transform the building in one way or the other) then such differences in reservation prices should be expected. Differences in reservation prices of around 20% around a mean of the reservation price should not be surprising.

Let us furthermore assume that these estimated reservation prices are correct. The case where this is not true will be commented on below. If the seller auctioned the property with a standard English auction, or with a second-price auction, the price would be $1000+\epsilon$ given the reservation prices in Table 1.

The first thing we can note here, in line with e.g. the discussion about auctions in Klemperer (1999), is that in a thin market a rational and well-informed seller would not use a standard English auction or a second price auction. If the selling company believes that company A is willing to pay 1200, the seller would not be satisfied with a price of 1000. If the reservation prices in practice are common knowledge, and if the buyer and seller bargain in line with Nash theory, they would split the 200 of added value if the property is sold to A in half. The most probable price - the market value - would then be 1100.

If company S has underestimated the reservation price of Company A, the result would be that a larger share of the value added would go to the buyer. If Company S has overestimated the reservation price of the potential buyers it could be difficult to come to an agreement. If the true reservation price for company A is only 1100, while the other reservation prices are assumed to be correct, the seller might not be willing to accept a price of 1050 - which is a reasonable price from the buyers perspective - as the seller then thinks that a too large part of the value added goes to the buyer.

Assuming now that company A, after buying the property for 1100, shall estimate the value of the property for balance sheet purposes. If the property was auctioned off with an English auction, the price would be 900+€. If the seller used the information/estimation of the reservation prices in the way Company S did, then Company A could through bargaining get a price of 950.

It might, however, be the case that when companies B, C and D observe that company A paid 1100 for the property, the other companies see this as new information indicating that maybe they underestimated the value. If these other companies increased their reservation prices by 50, then the auction would yield a price of 950 and a bargaining procedure might lead to a price of 1000, as the reservation price of company B would now be 1050.

The conclusion so far would be that in a rational thin market where the transaction as such does not give (much) new information, *the exit price immediately after the transaction should be lower than the price that the current owner paid*. The value for accounting purposes should then be set below the price that the company paid for the property.

Benston (2008) discusses another problem with using exit prices and that is the risk for manipulation. In the case above company A may, after they have bought the property for 1100 (with a reservation price of 1200), argue that there "now" are several other companies who realize the high value of the property, and that these other companies now also have a reservation price of 1200. If there are two such companies, the exit price would be 1200-€. Company A could therefore argue that the value of the property in the accounts should be increased to 1200 and that the company then can report a profit of 100.

For illustrative purposes we could also look at a situation that happens now and then in practice. A participant (P) applying IFRS 13 has made a winning price bid and acquired an investment property at, say 2,200. However, all the other participants in the market were only willing/able to make bids in a range of about 1,500 to 1,600. One of the reasons that the winning bid went as high as 2,200 is the lack of market information that can occur in thin markets. If all participants had roughly the same information, there is no rational argument why P should outperform the other participants with such a wide margin. And at a later stage, trying to find empirical evidence for an exit price in accordance with IFRS 13, it may be hard to find such evidence if the market has not moved upwards since the acquisition. The result could very well be an essential FV-downgrade if there is lack of market evidence supporting the high acquisition value of 2,200. According to IVS, the present owner is included among those who constitute the market, but the restrictions are for example that effects of atypical financing, synergies only available to the specific actor etc should not be allowed to affect the hypothetical price bid at market terms made by this "hypothetical

current owner". And, the current owner must be hypothetically able to transact at market terms under the current market conditions, not the conditions that applied when the current owner acquired the investment property.

The general conclusion from this section is that the current rules, focusing on exit price, imply that downgrades of property values in balance sheets should be rather common in a stable market. Our experience is however that such downgrades are rare, and a first step in trying to understand this possible contradiction is to look closer at the accounting rules which will be done in the next section.

A closer look at value concepts and accounting and valuation standards

The definition of MV according to IVS 104 Bases of Value (IVS 2017) makes it clear that the estimate of MV specifically excludes an estimated price inflated or deflated by special terms or circumstances connected to a specific participant. Such impacts on a specific participants price bid could for example be atypical finance, special considerations or concessions granted by anyone associated with the sale, or any element of value available only to a specific owner or purchaser. Elements of value available only to a specific owner could be e.g synergies not available to market participants in general. MV requires the disregard of any such element of value because, at any given date, it is only assumed that there is a willing buyer, not a particular willing buyer.

IFRS 13 (2018) defines FV as an exit price³. In para 58 of IFRS 13 it is argued that in many cases the transaction price will equal the fair value, but in our opinion this statement only holds when it comes to so called "equilibrium prices" formed in a way as discussed above in section 2. It is also important to note that IFRS 13 make a clear distinction between entry price (the price paid to acquire an asset) and exit price (the price that would be received to sell the asset)⁴. This standard also makes it clear that a buyer would have to consider at the initial recognition whether the transaction price is in line with the definition of FV, and refers to paragraph B4 in the standard to make this determination. In para B4 there are examples of factors specific to the transaction to be considered when determining whether the price equals the definition of FV. Example of such factors needed to consider are if the transaction takes place under duress or the seller is forced to accept the price, the transaction is between related parties, the transaction was entered into at market terms etc.

When applying IFRS 13, the valuer has to pay attention to the fair value hierarchy in this standard. The hierarchy concerns inputs in valuation models. These inputs are divided into different levels which are dependent on the quality of the input. The IFRS 13 gives no preference for certain methods over others, but it clarifies that the inputs can be divided into observable and unobservable inputs; and that a company as far as possible should use relevant observable inputs in the valuation and minimise the use of inputs that are more difficult to observe. The hierarchy is summarised below:

³ IFRS 13 p 24

⁴ IFRS 13 p 57

Level 1 = Inputs require no adjustments, based on quoted prices (for example, if the valuation object is a share in a listed company, it can be monitored on the stock exchange. It can be observed what exactly the same instrument is worth on the market).

Level 2 = Inputs which are directly or indirectly observable from the market and require different degrees of adjustments (e.g. comparable objects sold in the property market, close in time in relation to the value date and sold objects whose other characteristics⁵ are not significantly different from the valuation object). Level 2 inputs require less significant adjustments to be relevant.

Level 3 = Unobservable inputs. This group may also include input from the market that requires significant adjustments. Examples of the latter might be comparable objects sold on the property market which occurred further back in time or when the sold objects' other characteristics differ significantly from the valuation object. Level 3 inputs are usually determined based on management's assumptions.

In a European Real Estate IFRS 13-survey performed by PWC (2014) 97 % of the reviewed companies identified inputs in the valuation of investment properties as falling within Level 3 of the fair value hierarchy.

As explained in IVS 104, the MV is a hypothetical price formed by, among others, a willing buyer and a willing seller. Both the willing buyer and willing seller are hypothetical actors. The willing buyer would not pay a higher price than the market requires, and the willing seller is prepared to transact at the best price currently available in the market. The factual circumstances of the actual owner are not a part of this consideration. Expressed in another way, the current owner of an investment property could have a higher reservation price than what is possible to get from a willing buyer in a market-based transaction at a certain point in time. If so, this doesn't mean that the current owner can't be a willing seller according to IVS 104. And the current owner can not reject a lower valuation (MV) than his reservation price just based on the fact that the market-participants are not willing or able to pay a price that aligns with that reservation price. According to IFRS 13 buyers and sellers must be able to enter into a transaction for the asset under FV-assessment. So, if the probable buyer (-s) in the market is not willing, or able, to meet the wish for a reservation price from a particular seller, there could be no transaction, and the definition of FV or MV is not fulfilled. In such a case the hypothetical price forming MV or FV should be lower than the actual owner's reservation price.

It has sometimes been argued from a potential seller perspective that they are not a willing seller when it comes to estimation of MV or FV after a market turns down, or that the seller paid an essentially higher price in a transaction (entry price) than other market participants were willing, or able, to pay (as in the example in section 3). Because they are not a "willing seller" the estimation of an essentially lower MV or FV in situations just described is not relevant from their point of view. The following statement in IVSC response to IASB Fair Value Measurement Exposure Draft (IVSC, 2009) makes an interesting standpoint concerning such situations:

⁵ For instance - site/location, type of property, rental income level, vacancy level, technical condition etc.

“The focus on “exit price” actually reinforces the impression that fair value is something that is determined by the seller’s intentions, as it is the seller who is exiting. However, the price obtainable by a seller in the market is determined by the amount that a willing buyer is prepared to pay, not just by what the seller is prepared to accept. In the falling markets that have been prevalent for the past two years, many commentators claim they are not willing to sell at the reduced price and therefore market values (AKA “fair values”) are not relevant to them. However, as is clear from IVS, a willing seller is simply one willing to transact at the price currently available. Since we believe that the objective of the Board is that fair value should be a price that would be obtainable in the market, it is more appropriate to focus on the price that a buyer would pay rather than focus on the seller’s motivation.”⁶

Thorne⁷ (2009) also makes interesting comments on a similar issue:

“The job of the valuer is to understand the market in which they operate. When transactions are thin on the ground, this means understanding the collective mindsets of would-be buyers and sellers, and of the fundamental economic drivers of that market. It means understanding why property that is being offered is not selling and at what price level buyers would enter the market.”⁸

This is also in line with the argument in Lind (1996) that the condition of willing seller could be deleted from the market value definition without any loss of meaning.

Another issue of interest in situations described above, e.g downturns in the market, is that many investment property owners require market evidence from valuers in the form of transactions that prove the new lower MV or FV-estimate. Thorne (2009) comments that “a figure arrived at using a robust rationale based on thorough market understanding is generally more reliable than one based on a stale comparable transaction”⁹. In our view, evidence from prices in transactions is desirable when considering value downgrades of MV or FV, but such evidence is far from an absolute requirement, especially in smaller markets where actors for strategic reason may not carry out any transactions when demand has fell. The market for commercial properties in Sweden in the fall of 2008 and beginning of 2009 is a good example of this.

Lind & Nordlund (2014) argues that evidence from the transaction market normally should be the starting point when estimating MV (comparable sales method), but considerations based on an Actor-Based Approach (knowledge about actors reasoning in the market) is normally an essential part of the valuation and should be reflected in the valuation when relevant. Lacking evidence from the transaction market only increases the need for more information based on an Actor-Based Approach. The lack of direct market information does not relieve the valuer to examine, and on some occasions execute, the need to reduce the

⁶ IVSC, 2009 p 15

⁷ Chris Thorne was chairman of International Valuation Standards Board (IVSB) at that point in time

⁸ Thorne, 2009, p 14

⁹ Ibid, p 15

value of assets in a balance sheet in accordance with the definitions of MV or FV. In the above-mentioned article it is also argued that in some situations, when the transaction market for investment properties is “extra-thin”, interesting information about underlying (implied) property values could be extracted from the stock-market by analysing a trend in the pricing of equity instruments for property companies with similar assets as the investment property that is to be appraised.

On the other hand, there is the concept of Investment Value (IV)/Worth defined in IVS10. This is the value of an asset to a particular owner, or prospective owner, for an individual investment. This is an entity-specific basis of value. In IFRS 13 the Value in Use is described¹¹ as a value that reflects the effects of factors that may be specific to the entity and not applicable to entities in general.

Lusht (1981) discuss the hierarchy between value concept, e.g MV or IV and valuation Approaches/Methods/Models. One interesting point in the arguments of Lusht is that the data availability could determine the appropriate approach and value definition (concept) instead of the other way around – that the value concept determines the data needs and appropriate approach/models. However, when making value assessments according to IFRS 13, the value concept (FV) is hierarchically put above Approaches/Methods, so the interesting view put forward by Lusht (1981) briefly explained above, is not allowed when measuring investment properties according to IFRS 13.

Conclusion

The price bids, and the entry price as described in IFRS 13, can in a thin market be driven by Investment Value or Value in Use for a particular owner. This makes it problematic to use entry price as a good indicator of exit price (FV), as defined in IFRS 13.

In our opinion, the top bid as discussed above could only be regarded as being in line with the definition of MV/FV in situations where the acquirer can clearly demonstrate that there are no effects of the top bid by e.g. atypical financing, synergies only available to the specific actor or other special circumstances raising the reservation price of this particular actor above other actors. The fact that a specific owner paid at certain price for e.g an investment property is not evidence enough that this price equals market value or fair value according to the standard definitions. We referred to Lusht (1981) above who argued that the availability of data should determine the appropriate approach and value definition (concept) instead of the other way around. In our view this is a relevant issue in thin markets, like many markets for investment properties.

According to a rules- and standards-based interpretation there should be a high risk of MV/FV-downgrades if the entry price was essentially higher than other market participants were willing to bid for the same property, given that the general market has not moved upwards after the initial recognition. Our experience is however that such downgrades almost never occur even though they in theory should be rather common. Instead it seems

¹⁰ IVS 2017

¹¹ IFRS 13 D85

to be common that the buyer soon afterwards makes a new valuation of the property that leads to a higher value than the price paid.

Application of IFRS in European companies are now around 15 years old and our opinion is that it is time for a serious evaluation of whether the system has accomplished the goals that was set up. Our experience, in line with the arguments in Benston (2008), is that the room for manipulation is too large today, and that it could be questioned whether the rules concerning exit price is followed in practice. Maybe some combination of the old and the new rules are possible, e.g. that revaluations should be made with larger intervals and/or that changes in values in the balance sheet should follow some kind of moving average model. In our opinion, it is emphasized in the accounting standard that clear empirical evidence is crucial when a company want to report valuation gains, but it should be interesting to evaluate how this is interpreted in practice in different countries. Another way forward could be that IASB prescribe that only assets valued with level 1-inputs should be allowed to be carried at FV on a continuing basis in the balance sheet (with possible effects in the income statement), and assets valued with level 3-inputs should not be allowed to be continually revalued to FV in the balance sheets. It can be argued that assets valued with level-3 inputs instead need information in the notes to the accounts on assessed FV, which will be the case when applying the cost model in IAS 40 – Investment Property. In our view, asset values estimated from level 3-inputs are not suitable to be carried at FV in the balance sheet, with possible effects in the income statement like valuation gains, which will be the case when applying the option of fair value model in IAS 40. At least not when it comes to real estate assets in thin markets.

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