Land Use Policy 78 (2018) 104–115

Contents lists available at ScienceDirect

Land Use Policy

journal homepage: www.elsevier.com/locate/landusepol

Forced sale discount on property market – How to assess it?

Małgorzata Renigier-Biłozor[a], Marek Walacik[a,*], Sabina Źróbek[a], Maurizio d'Amato[b]

[a] University of Warmia and Mazury in Olsztyn, Poland, ul. Prawochenskiego 15, 10-720 Olsztyn, Poland

[b] Property Valuation and Investment DICATECh Department, Technical University Politecnico di Bari, Via Calefati 272, 70122 Bari, Italy

ARTICLE INFO

Keywords:
Real estate valuation
Forced sale value
AVM
Rough set theory
Valued tolerance relation

ABSTRACT

The aim of the article is to reduce the gap in the lack of tools dedicated to determining forced sale value. It is focused on the development of a methodology that takes into account the procedures used in property valuation with the use of automated valuation methods based on rough set theory and fuzzy logic. The authors propose an alternative method serving as an alternative to individual/human valuation, which may not be objective and reliable for such purpose. The method gives more accurate results than hedonic models in the face of qualitatively and quantitatively ambiguous, imprecise and vague data, which is commonly found in the real estate market, especially regarding not typical/market sales. The methodology was verified on the basis of data collected on two property markets: city of Bari (Italy) and city of Olsztyn (Poland). The achieved results indicated that value regarding forced sale is about 22% lower in the case of Olsztyn when compared to average market value of the used sample, whereas in the case of Bari – about 45% lower.

1. Introduction

The contemporary economy of every country involving, in particular, optimal land management, requires knowledge concerning real estate value. This is due to the fact that real estate (land, buildings) constitute a significant share in the total value of national assets. The value of real estate often forms the basis or is an instrument supporting decision-making processes by various public and private entities (Kucharska-Stasiak, 2017). Different purposes for which the value is applied require the adoption of particular assumptions under which it is determined. Knowledge of the real estate market value in its classic (standard) interpretation is most often needed. However, due to the significant development of the mortgage market, there is an increasing demand of creditors (primarily banks) for knowledge regarding the expected price that a property will achieve if the debtor does not repay the loan (Źróbek et al., 2013). This is seeing as how such a situation most often necessitates the selling of the debtor's real estate. The notion of real estate forced sale value functions as a special category of real estate values in the minds of market participants. Generally speaking "…*The term "forced sale" is often used in circumstances where a seller is under compulsion to sell and that, as a consequence, a proper marketing period is not possible and buyers may not be able to undertake adequate due diligence. The price that could be obtained in these circumstances will depend upon the nature of the pressure on the seller and the reasons why proper marketing cannot be undertaken*…" (IVS, 2017; *General Standards* IVS, 2016). The valuation problem is focused mainly on the determination of specific conditions of sales. The sale occurs in a hurried manner and there is no opportunity to carry out appropriate marketing activity by the seller. It is worth noticing that this kind of situation does not represent a new basis of value. The valuation standards state that "…*A forced sale is a description of the situation under which the exchange takes place, not a distinct basis of value*…" (IVS, 2017; *General Standards* IVS, 2016). When comparing the description of liquidation value with the basis of Market Value, there are three main differences (among others) that may be helpful to understanding these specific conditions of sale: "*(a) consummation of sale within a short-term period …(d) the seller is under compulsion to sell … (g) a normal marketing effort is not possible due to the brief exposure time* (IVS, 2017; *General Standards* IVS, 2016). In this specific case, the price is normally influenced not only by the interaction of supply and demand in the specific market segment but also by other important factors influencing the sale, such as the urgency to sell (Campbell et al., 2011). A further aspect of foreclosure is the spill over effect of foreclosures. In fact, foreclosure may have a potential impact on the value of properties in the surroundings, creating a disequilibrium between supply and demand. "…*In some studies, foreclosure on a home has been found to reduce the prices of nearby homes by as much as 9 percent*…" (United States Treasury, 2009). From the lenders point of view, a liquidating discount forecast is a way to address risk. The process of forced sell of a property is an aspect of real estate market risk. "*Risk may be thought of as a measure of future uncertainties that may*

* Corresponding author.
E-mail addresses: malgorzata.renigier@uwm.edu.pl (M. Renigier-Biłozor), marek.walacik@uwm.edu.pl (M. Walacik), zrobek@uwm.edu.pl (S. Źróbek), madamato@fastwebnet.it (M. d'Amato).

https://doi.org/10.1016/j.landusepol.2018.06.026
Received 19 January 2018; Received in revised form 8 June 2018; Accepted 16 June 2018
0264-8377/

result in a fall in the price or value of an asset" (*Valuation Uncertainty*, 2013).

The aim of this paper is to develop a methodology that takes into account the procedures used in property valuation with the use of Automated Valuation Methods (further called AVMs) to determine the approximate (rough) change in property values at forced conditions, with particular emphasis placed on the time of market exposure. The aim of the article is to reduce the gap in the lack of tools dedicated to determining value under such special conditions.

The research was based on the following two theses: 1. The price obtained from forced sales is lower than its market value and 2. The existing methods for determining the value for forced sales do not allow a reliable valuation result to be achieved.

The authors of the article put forward a research hypothesis that: "Real estate valuation based on the assumptions of Automated Valuation Methods using rough set theory and valued tolerance relation enables the determination of property value for sales in shortened/inadequate exposure time at a satisfactory level of credibility".

The analyses were conducted on the basis of the residential real estate transactions concluded in 2016 on Olsztyn (Poland) and on Bari (Italy) markets, that constitute not only a common element for securing basic existential needs and capital location, but are also an important factor determining the conditions and investment potential of a given region. The research aims to present an analytical algorithm based on AVM that may provide a satisfactory level of credibility for establishing forced sale discount.

The paper is structured in the following way. First, an explanation of the forced sale value definition is provided - Section 1. Section 2 presents an international point of view regarding forced sale value and problems with its interpretation. Section 3 presents research methodology, analytical procedures based on regression and rough set theory and empirical analyses/results. Section 4 presents final remarks, and finally, in Section 5, conclusions and future directions of research are formulated.

2. Literature review

In literature on the subject and in property valuation standards the types of property values are called "bases of value". They describe the fundamental premises on which the reported values will be based. It is essential that the basis (or bases) of value may influence or dictate a valuer's selection of methods, inputs and assumptions, and the ultimate opinion on value (IVS, 2017). Due to the fact that the most desirable basis for valuation is market value, this type of value has a uniform definition according to valuation standards (EVS, 2016; IVS, 2017; RICS, 2017) and the European Directive (*Directive* …, 2006). Also in Poland, this term has been harmonized and introduced by law (*The Real Estate Management Act* …, 1997). This "globally" agreed definition is as follows: Market Value is the estimated amount for which an *asset* or liability *should* exchange on the valuation date between a willing buyer and a willing seller in an arm's length transaction, after proper marketing and where the parties had each acted knowledgeably, prudently and without compulsion. The two fundamental assumptions (premises) where the market value should be determined were explicitly articulated (EVS, 2016): 1**. after proper marketing** – this means that the property had been exposed to the market in the most appropriate manner to affect its disposal at the best price reasonably achievable in accordance with the Market Value definition. The length of exposure on the market must be sufficient to allow the property to be brought to the attention of an adequate number of potential purchasers. 2. **without compulsion** – this establishes that each party is motivated to undertake the transaction but is neither forced nor unduly coerced to complete it. Each freely enters into and completes the business.

Evans and William (2007) distinguish two types of sales: **forced sale** - an involuntary sale resulting from foreclosure, execution on a judgment, partition action by a cotenant wanting to sell the property and divide the money, or a divorce proceeding; **distressed sale -** the sale of real property under circumstances creating great urgency on the part of the seller, such as impending foreclosure, divorce, relocation to another city, or any other such pressure. In valuation practice, the notion of "distressed property" also exists. This term means property that is under a foreclosure order or is advertised for sale by its mortgagee. Distressed property usually fetches a price that is much below its market value (Babineau, 2010). For example: according to data on house transactions in the state of Massachusetts over 20 years, foreclosure discount equaled on average 27% of the value of the house (Campbell et al., 2013).

It should be noted that in most countries, including Poland, the basis for the valuation to secure the creditor's claims is, as a rule, the market value. However, on request of the creditor or the ordering party, other types of values can be determined (*Professional Standard of Property Appraisers* …, 2017) or a mortgage lending value, if this results from legal provisions (*Directive* …, 2006; *Act of 29 August 1997 on Covered Bonds*…, 1997Act of August, 1997b*Act of 29 August 1997 on Covered Bonds*…, 1997). However, the enforceability of debt in banking practice through the sale of real estate has caused these special circumstances of the transaction to be reflected in the valuation standards (EVS, 2016; IVS, 2017; RICS, 2017). EVS introduced the following definition of Forced Sale Value – "A sum that could be obtained for the property where, for whatever reason, the seller is under constraints that require the disposal of the property in conditions that do not conform with the definition of Market Value." However, these standards, at the same time, emphasize that forced sale value is not a basis of value but an example of Market Value under special assumption as to the conditions for marketing. Once all the relevant constraints are identified, it may be seen as a Market Value assessment under Special Assumption of a stated but limited period for marketing the property. Thus, the valuer should not undertake a valuation on a forced sale basis but rather on a Market Value basis under stated specific special assumptions relevant to the case in hand.

IVS introduced the concept of forced transaction (forced sale) as premises which may affect the determined liquidation value (IVS, 2017). It should be emphasized here that liquidation value on the basis of European standards is one of the foundations of valuation as opposed to international standards, where liquidation value can be determined under two different premises of value: (a) an orderly transaction with a typical marketing period, or (b) a forced transaction with a shortened marketing period.

Interpretation of a forced transaction written in IVS and the Red Book is in accordance with the interpretation given in EVS. Everywhere, it is clearly emphasized that "a forced sale is a description of the situation under which the exchange takes place, not a distinct basis of value." Valid for the valuation practice is the fact that real estate sales transactions made on an inactive market should not be automatically considered as forced sales because the seller may conclude this transaction without force (RICS, 2017).

The RICS has written down the recommendations for its members at the end of paragraph 170.1. "The price that a seller will accept in a forced sale will reflect its particular circumstances, rather than those of the hypothetical willing seller in the Market Value definition. In short, an RICS member can provide "forced sale" advice but must be very careful about the terms in which it is reported" (RICS, 2017).

In spite of relatively unambiguous normalization of the definition issue in relation to forced sale, both in literature and in the professional experience of the authors of this paper as real estate appraisers, there is a lack of clear procedures or ways to determine value useful for this type of sale. Property appraisers often encounter barriers in its determination mainly due to the fact that the market of "forced" transactions is opaque and difficult to correctly detect and describe. The basic reason here is the difficulty in identifying the real reasons and conditions of the transactions (motives of the parties), allowing them to be clearly classified as "forced". As a consequence, the appraiser makes