

The Current Approaches of Land Evaluation

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Abstract: Land evaluation is a topical issue, especially now when people speak increasingly more about population growth and its need for new living spaces. In this sense the land evaluation methodology direct comparison and extraction method, always remain timeless. The two methods were aimed for more accurate determination of assessed land value. Following application of the two methods, respecting International Valuation Standards, recommendations and work methodology recommended by ANEVAR, it was concluded that the best method of valuing land in question is the direct comparison method.

Keywords: direct comparison method; method of extraction; evaluation; market value; price

JEL Classification: G32; G33; C39

1. Introduction

Market value is estimated by analyzing the market to find similar properties and then comparing these with the properties under evaluation. The major premise of this method is that the market value of a property can be directly related to some competitive and comparable property prices. Comparative analysis focuses on the similarities and differences between properties and transactions that influence value. As a limitation of this method, it rarely applies to special purpose properties because the market also sold fewer properties. However, this limitation is not applicable in the sphere of action of mortgage and / or real estate market where properties are traded to be residential.

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The market value is the most representative concept regarding the evaluation of enterprises and assets. It is also the best known and used standard valuation practice, having a basic role in assessing economic resources on the market.

The market value concept also refers to the fact that when the transaction parties are aware of the characteristics of the property and market conditions on the valuation date. So for establishing market value, representing the most likely price that can be obtained, are taken into account the following elements:

- The concrete existence of the sale at a certain date;
- The existence of an open and competitive market for property assessment;
- Agreement of Parties to participate in the transaction;
- Informing parties in advance about all aspects of the transaction in order to act in their interest;
- The lack of a relationship between the parties or interests is likely to influence the price;
- The existence of appropriate conditions for marketing;

The purpose of the assessment report is the real property - land, located in the city of Galati, Galati County. The aim of the report is to establish the market value of the land plot, in view of the real estate market trading.

2. The Method of Direct Comparison on Assessed Land Value. Development

According to the International Valuation Standards and recommendations accepted by ANEVAR methodological work, properties evaluation can be addressed by direct comparison by which the subject property is compared with similar properties that have sold recently or who know about sale prices or deals price, using data on comparable properties, and comparisons are made to demonstrate the price that would probably sell the property at the price the market would offer.

The base elements of comparison that the direct comparison method proposes regarding land evaluation are:

- Ownership;
- Terms of funding;
- Terms of sale;
- Market Conditions;
- Location;
- Appearance;
- Economic characteristics;
- Use;
- Non-real estate component.

Although these comparison elements cover much of practical situations, direct comparison method can't be limited to them. When setting the price for the sale of land they have an important influence, can take into account the following elements:

- Topography;
- The view;
- Traffic in the area;
- Quality neighbors;
- Access;
- Air pollution.

Assessment procedure:

- market research looking for similar transactions with the real estate assessment;
- check transactions to determine whether they were true and accurate;
- choice of relevant comparative criteria and then applying them to establish the real selling price of the analyzed subject property;
- evaluation analysis resulting in strengthening the market value of the property being valued.

Elements of comparison are features both of the property assessed but also of the comparable, and after applying the evaluation process they will determine the market value of the property.

Table 1. The method of the direct comparison of the land assessed

Feature comparison	Assessed property	Comparable 1	Comparable 2	Comparable 3
Sale price		€ 195,000	€ 60,000	€ 253,450
		390.00	150.00	185.00
Transaction / offer		Offer	Offer	Offer
Corrected		312	135	167
1. Right over property	Integral	Integral	Integral	Integral
Corrected		312	135	167
2. Financial conditions		At the market	At the market	At the market
Corrected		312	135	167
3. Conditions of sale		Exchange / Sale	Real Estate Market	Real Estate Market
Corrected		€ 281	€ 135	€ 167
4. Market conditions	Feb -14	Feb -14	Feb -14	Feb -14
Corrected		€ 280.80	€ 135.00	€ 166.50

5.Location	Central	Downtown	Similar	Similar
Correction		€ 252.72	€ 135.00	€ 166.50
6. Physical features				
6.1. Land Surface	686.00	500.00	400.00	1,370.00
Correction for the area - sqm		€ 253	€ 135	€ 166
6.2.Construction on land	Not	Not	Yes	Yes
Correction Construction		0	9000	12000
6.3.Open	14	-	12.00	23.00
Correction for opening		€ 252.72	€ 112.50	€ 154.97
6.4. Utilities	All	Identical	Identical	Identical
Correction for utilities		253	113	155
7. Economic features		Identically	Identically	Identically
Correction to the economic characteristics		253	113	155
8. Use (HABU)	Residential	Residential	Residential	Residential
Correction to use		€ 253	€ 113	€ 155
9. Non-real estate components	Not applicable	Not applicable	Not applicable	Not applicable
Corrected Price		€ 253	€ 113 €	€ 155
Total net Correction		€ 137	€ 38	€ 30
Total net correction (% of sale price)		35%	25%	16%
Total gross Correction		€ 137.28	€ 37.50	€ 30.03
Total gross correction (% of sale price)		35%	25%	16%
Number adjustments		3	2	3

€ 106,307.47	477,841.45	
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Euro exchange rate= 4, 4949 RON

155 EU / sqm

The value of land owned by the company, in the evaluator's opinion, on 20 March 2014, estimated by direct comparison approach method:

$V_{\text{Land (M. comparison)}} = 477,841.45 \text{ lei, equivalent to } 106\,300 \text{ euro}$

Explaining corrections:

- Apply a correction of 10% for offers, representing average margin;
- Comparable 1 was corrected by 10% for the offered price - exchange broker, to sell, following a further negotiations;
- Comparable 1 was corrected by 10% in the downtown location;

- Comparable 3 was corrected with 800 euro, respectively localization cost of land - an additional benefit; represents the sale of two plots of land, 800 euros are needed for the work of cadaster and notary;
- 2nd and 3rd comparable were corrected with 9000, respectively 12,000 euro - demolition construction value placed on them- about 50 euro/sqm.

3. Valuation of Land Extraction Technique

In the case of evaluation by indirect comparison method - extraction technique, the land value is determined by the difference between the selling price of comparable properties and the total arrangement value estimated by third parties and building replacement cost net.

Extraction method is recommended to be used in the following situations: when the property includes newer construction; when on the real estate market are not enough offers free land but in exchange there are many information about the properties built. According to the “cost of reconstruction - RESIDENTIAL BUILDINGS replacement cost” replacement cost for villa P + M and uninhabitable basement, concrete floor, roof framing, roofing sheets Lindab, brick masonry, all facilities - gas central heating natural is 526 euro / mpSdc (value including VAT), which developed area for this type of house is 480 square meters (POT = 35% recommended under construction P + M). Therefore, the net replacement cost of the building is 252,500 euro.

From the information obtained by value, trading value of the buildings designated for Individual Home by property developers stands in the value range of 750 euro / sqm - 800 euro / sqm Su. Considering the central position of the building is estimated trading value of EUR 360,000 Residential Housing. Decreasing gross replacement cost of the building - 252 490 euro, result: land value, property of the company, in the evaluator's opinion, on 20 March 2014, estimated the extraction technique: V_{Land} (M. Extraction) = 107.500 Euro, equivalent to 483,201.75 RON.

Table 2. Extraction method of land assessed

No. Item	Property valued	Specifications	Euro
1.	Surface built	480 sqm	
2.	Replacement cost net	526/sqm	€ 252.500
3.	Market value		€360.000
4.	Residual value of the land		€107.500

4. Reconciliation values, assessor's opinion

For the reconciliation it was proceeded to review the entire results of assessments in order to have the certainty that the available data, analytical techniques, reasoning and logic applied, leading to consistent judgments. The results obtained.

4.1. The property value located within the city of Galati, Galati County, the valuation date is estimated by the direct comparison approach, the sum of: V field (M. comparison) = 477.841,45ron, equivalent to 106 300 euro

4.2. The property value located within the city of Galati, Galati County, the valuation date is estimated through the extraction technique: V field (M. extraction) = 107,500 euros, equivalent to 483,201.75 Ron.

For real estate properties of this type and destination, the most appropriate approach for determining the market value is direct sales comparison method/offers, considering the amount of information that formed the basis of applying the methods, and the low demand for similar properties.

5. Arguments Relevant in Determining the Final Value

The arguments that led to the drafting considerations of this opinion and values are:

- The proposed value takes into account both economic elements provided by the customer and market data obtained from the specialized market evaluator;
- the goods were valued in the existing configuration on the date of inspection, considering the proper technical condition at this time;
- the amount proposed takes account only of the assumptions and assessments expressed in the this particular report;
- the amount is a prediction;
- the value is subjective;
- the evaluation is an opinion on a value;
- the amount does not include VAT.

6. Conclusion

The evaluation process that included all research, data, reasoning and analyzes needed to reach the estimated value, ended. Following this result 477,841.45 lei is the value determined by direct comparison method, as the market value of the land assessed, taking into account the current context of the real estate market, an attractive location in the real estate market and the risk of recovery. The method of direct comparison has proven to be the best use for land valuation because it is the most common method of evaluation when there enough firm offers market transactions or, as in this case.

7. References

- Cretu, C. & et al. (2011). *European standards of financial reporting rational sciences*. Galați: Zigotto.
- Cretu, C., Pripoaie, R., & Sirbu, C. G. (2008). Statistical Analysis of the Total Number of Banking Clients Within Territorial Profile During 2002-2007. *International Conference on Finance and Risk, University of Economics in Bratislava, Slovakia, November 24-25, 2008*.
- Dinu E. & Curea S.C. (2009). The relevance of the discriminatory analysis for the evolution of the shares by one issuing on the stock exchange market. *Theoretical and Applied Economics. Economic – Financial Analysis and Property Valuation – Challenges into the Actual Global Context, Scientific Symposium, Bucharest, May 29-31*.
- Ghic, G. (2008). *Economic and Financial Analysis*. Bucharest: University Publishing House.
- Grabowski, R. J. & King, D. (2009). *Risk Premium Report*. Duff & Phelps, LLC.
- Grama, A. & Păvăloaia, V.D. (2008). Comparative Analysis using Bankruptcy Prediction Models. An online computer-based system. *European Computer Conference '08, Organizer WSEAS, Malta, September 2008*.
- Grosman, M. (2012). Evaluating the results of marketing based managerial system implementation indicators. *Journal Economic Studies, ULIM, Year VI, No. 3 - 4 (December)*.
- Hada, T. & Halga, D. (2011). Financial decisions based on diagnosis analysis. *Journal of Applied Research in Finance (JARF) 1(5)*.
- Hristea, A. M. (2013). *Economic and Financial Analysis of Business*, Vol. I. Bucharest: Economic Publishing House.
- Iancu, D. (2012). Managerial leadership from the perspective of environment organizational sports. *International Conference of Scientific Paper AFASES 2012 Brasov, 24-26 May*.
- Iancu, D. (2012). Educational management, a new paradigm in social development. *International Conference of Scientific Paper AFASES 2012 Brasov, 24-26*.
- Isai, V. (2004). Aspects regarding the accounting of reexport and Lohn operations. *The Annals of Dunarea de Jos University. Fascicle I. Economics and Applied Informatics, Galati*.
- Isai, V. (2003). Particularities of the managerial accounting in the companies of import and export. *The Annals of Dunarea de Jos University. Fascicle I. Economics and Applied Informatics, Galati*.
- Isai, V.; Radu, R.I. & Rusu, R. (2014). The biological assets and the crop production – acknowledgement and evaluation possibilities in the agricultural holdings accountancy from Romania. *23rd IBIMA Conference, Valencia, Spain*.

Orac, C. M. (2009). *Criminality and regional economic disparities at the Romanian-Hungarian border, Criminalitatea transfrontalieră la granița dintre prezent și viitor/Cross-border crime at the border between present and future*. Oradea: Fundația AGORA.

Orac, C. M. (2009). The impact of the economic crisis on the unemployment rate in Galati County, measures aimed at its reduction. *Public Administration & Regional Studies*. Galati.

Orac, C. M. (2009). The initiation and management of European Union Regional Partnership, Paradigms of Knowledge Management. *Agora International Journal of Economical Sciences*. Oradea: Editura Universitatii Agora.