

Individual and Mass Valuation – Present and Future Practices

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SUMMARY

The aim of this paper is to demonstrate the relationship and differences between the individual and mass valuation systems, peculiarities of valuation processes and the most modern tendencies as well as the use of GIS in property valuation. Like many other countries, Lithuania strives to assess property taking into consideration in all cases the actual economic potential of property on the market. Application of normative values in the process of restoration and taxation of property had and still has negative effect upon the operation of the real property market; therefore such experience gives impetus to exercise property valuation based on the market principles as soon as possible.

RESUME

Ce rapport a pour l'objectif de démontrer les analogies et les différences entre les systèmes d'évaluation individuelle et évaluation en masse, de présenter les circonstances et les tendances actuelles en utilisant les SIG dans le domaine de l'expertise immobilière. La Lituanie comme les autres pays du marché a pour l'objectif d'évaluer les biens immobiliers selon le potentiel économique dans le marché. Les applications de la valeur normative dans un processus de la restitution des droits privés ainsi que dans le processus de la taxation ont fait l'influence d'une manière négative pour le marché immobilier dans le pays. C'est pourquoi cet expérience promeut promptement les principes du marché dans l'expertise immobilière.

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In 1994 individual valuation system started to develop in Lithuania, which secured application of market principles in assessing property for mortgaging, expropriation of property for public needs as well as for developing business. However, individual valuation is not used for appraisal and other state needs in Lithuania due to a large volume of works and high costs. In 2002, the first attempts to introduce mass valuation system for taxation of land parcels in Lithuania were made. This system received different evaluations.

The paper discusses on the following issues: what interaction is observed between the individual and mass valuation systems; what makes individual and mass valuation similar and in what way they differ from each other; in what way they are applied and what is the future of these methods. The international documents as well as Lithuanian legislation say that the allowable difference between the results of individual and mass valuation should not exceed 20%. The question is what features of valuation cause such differences and in what cases the differences in values are allowed and why.

In case of individual valuation one or some of real property objects are assessed; consequently, such valuation is distinguished for a detailed analysis and description of the subject property, detailed interpretation of legal and economic factors of value. The postulates of the sustainable development are reflected in the territorial planning documents, which become more and more important for describing location and object development circumstances.

The concept of mass valuation somewhat differs from that of individual valuation. In mass valuation the main stresses are laid upon valuation of a large amount of property by applying standardised statistical data processing. Assessing a large amount of property, it is difficult to single out individual features of every property unit; therefore, the main attention is paid to defining what is common to all properties being valued, but not to the specific features characteristic of a single unit.

Grounding valuation on the market principles, mass valuation pays great attention to the selection of comparable objects. If in the process of individual valuation it is important to find at least several comparable objects corresponding to the description of the object under valuation, mass valuation needs greater amount of comparable objects and their diversity in order to apply statistical methods efficiently. Every time one should remember that mass valuation is not a terminative process, and after some time it will have to be repeated and the results obtained should have some relationship with previous data and some rationale for changes.

Though individual and mass valuation has many distinctive features, viewing this process as the standardised procedures one may also find many common features – the same valuation approaches applied, similar need for data on the analysed market and similarity of the processes. Therefore, analysing both individual and mass valuation practices as well as their perspectives it is important to look for links and ways how one valuation system could supplement and optimise activities of other system.

The first and most important point of integration is the development and use of automated system for collection and processing of the data necessary for valuation. Since 1997, an

integrated real property cadastre and register system in Lithuania is in operation. This is one of the most important state registers with fully computerised databases, storing textual and graphical information about property, legal information about property, its owners and users and data on market transactions. Data about the entire registered real property amounting to over 5 million objects is stored in the integrated database. Market transactions are registered as well.

Data collected in a uniform digital format is the basic factor of success in developing an automated mass valuation model based on statistical methods. The developed computer based mechanism for data collection and processing evidenced that having made proper adjustments to the enquiry formats this database can be also successfully used for individual valuation as well as by banking sector in analysing market trends and preparing index studies. Data on market transactions and involved property stored in a uniform format creates possibilities to standardise and automate individual valuation process, to identify main valuation criteria and factors influencing value. Increasing use of the statistical methods for selection and processing of data reduces the potential of mistakes and random factors making influence on the value.

Automated property valuation system is inseparable from the integration of graphical information. Today, the integration of CAMA and GIS is a common and integral process. Article published by German, Robinson and Joungman "Traditional Methods and New Approaches to Land Valuation" (Land lines July 2000) says that "A new approach to location value - the use of GIS tools to develop a response surface that represents the effect of location on land value. The response surface is a fitted three – dimensional surface that represents a percentage adjustment to land and/or improvements based on a parcel's geocode location. Included in the analysis are geographical co-ordinates and distances from important features, such as other recent sales, institutions, amenities, or other value influence centres. This analysis results in a three – dimensional representation, with the height of the surface (z) or any specific x,y co-ordinate indicating the approximated location value of that parcel. This variable is evaluated with other, such as land and building size, quality, condition and depreciation, to produce a total estimated value for the parcel".

This is to remind that the saying "location, location, location" became a traditional mantra in individual valuation. More extensive use of GIS is vital for the improvement of individual valuation. The use of digital maps in its turn becomes an important element for valuation.

To sum up this is to state that individual valuation as well as the mass valuation is developing in similar direction. In both systems the use and integration of GIS and automated valuation systems are playing an increasing role. It is expected that the integration of these systems in the future will be even closer as well as the use and introduction of information systems.

REFERENCES

- Creation of Mass Valuation System to Estimate Market Value for Taxation Purposes // Material of the seminar held in Vilnius on 20-24 October 2003. Lincoln Land Policy Institute, USA, 2003, p.60.
- Glaudemans R. J. Mass Appraisal of Real Property// Chicago: International Association of Assessing Officers. 1999, p. 417.
- Information Technology and Valuation// Material of Baltic Valuation Conference held in Oslo on 24 – 26 September 2004. Norges TakseringsForbund, Norway, 2004,
- Jane Malme. Mass Valuation for Land Taxation in Transitional Economies// Land Lines: April 2004, Volume 16, Number 2
- LeRoyer, Ann and Jane Malme. Property Tax Policies in Transitional Economies// Land Lines: July 1997, Volume 9, Number 4
- Real Property Taxation using Market Value in the Baltic States // Material of the seminar held in Vilnius in November 2001. Lincoln Land Policy Institute, USA, 2001, p. 80
- Towards an Efficient Property Management / Conference proceedings, Vilnius, 7-8 October 2004 // Vilnius: Lithuanian Association of property Valuers, 2004. P.142

BIOGRAPHICAL NOTES

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Professional background - Master degree of economics, Vilnius University, 1995.
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Professional background – Dipl. Eng. of Forestry, Lithuanian Agriculture University, 1978.
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