

INFORMATION REQUIRED FOR SINGLE REAL ESTATE VALUATION

INFORMACIJSKE PODLAGE ZA POSAMIČNO VREDNOTENJE NEPREMIČNIN

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ABSTRACT

This article analyses the information required for a single real estate valuation. The Republic of Slovenia has no tradition for this type of information. Only recently, the records and registers required for the mass real estate valuation were set up or updated. The existing data collected for the mass real estate valuation were inadequate for gathering the information required for the single real estate valuation. More adequate information would contribute to greater objectivity, neutrality and independence of reporting on the market value of a particular real estate. The terms of "objectivity", "neutrality" and "independence" are analysed as well as their links to adequate information. The most frequent sources used by valuers in their work and the information required for the particular methods of assessing the market value of real estate are presented. The article shows the methodological approach to gathering adequate information in the Republic of Slovenia and presents a concrete example of creating a system of mean construction costs for typical buildings as a basis for assessing the market value of a single real estate item by the cost method.

KEY WORDS

: real estate valuation, data, adequate information, reporting, mean construction costs

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POVZETEK

Članek analizira potrebne informacijske podlage za posamično tržno vrednotenje nepremičnin. Republika Slovenija na področju tovrstnih informacijskih podlag nima tradicije. V zadnjih letih je vzpostavila oziroma posodobila evidence in registre za namen množičnega vrednotenja nepremičnin. Podatki, zbrani za namene množičnega vrednotenja nepremičnin, niso primerni za oblikovanje ustreznih informacijskih podlag za posamično vrednotenje nepremičnin. Ustrezne informacijske podlage bi pripomogle k večji objektivnosti, nepristranskosti in neodvisnosti pri poročanju o tržni vrednosti nepremičnine. Analizirani so pojmi »objektivnost«, »nepristranskost« in »neodvisnost« ter njihova povezanost z informacijskimi podlagami. Prikazani so najpogostejši viri, ki jih cenilci uporabljajo pri svojem delu, ter potrebne informacijske podlage pri posameznih metodah ocenjevanja tržne vrednosti nepremičnin. Prikazana sta metodološki pristop k oblikovanju ustreznih informacijskih podlag v Republiki Sloveniji in konkreten primer oblikovanja sistema povprečnih stroškov gradnje za tipične objekte kot podlaga za ocenjevanje tržne vrednosti nepremičnine po metodi stroškov.

KLJUČNE BESEDE

vrednotenje nepremičnin, podatki, informacijske podlage, poročanje, povprečni stroški gradnje

1 INTRODUCTION

In valuation report, a valuer cannot indicate any incorrect, inaccurate or biased opinions or analyses (International valuation standards, 2007, hereinafter referred to as IVS). The valuation

task is to be accomplished under the conditions of strict objectivity, neutrality and independence, and without the involvement of whatever personal interests (IVS; Uniform Standards of Professional Appraisal Practice, 2008, hereinafter referred to as USPAP). The prerequisites for ensuring objectivity, neutrality and independence of the valuer in reporting include the adequate information for real estate valuation.

Single real estate valuation has a long standing tradition in the Republic of Slovenia. However, that is not true of the single market valuation of real estate. Important factors maintaining the inertia of the old administrative valuation methods and hindering an effective introduction of real estate market valuation in the Republic of Slovenia in the period after 1990 have been inadequate registers and records and the absence of adequate information required for the single real estate valuation (Šubic Kovač, 1998).

Setting up the real estate taxation system in the Republic of Slovenia was prerequisite for setting up the mass real estate valuation system and for updating and/or setting up the registers and records to provide an adequate database for designing the mass real estate valuation models (Real Estate Record-Keeping Updating Project, 2005). Newly established are the Real Estate Market Records (Real Estate Recording Act - ZEN, UL RS 47/2006, 65/2007 - Decision by Constitutional Court of RS, Rules on keeping and maintaining the records on real estate and data submission deadlines, UL RS 134/2006) and the Real Estate Register (Real Estate Recording Act - ZEN, UL RS 47/2006, 65/2007 - Decision by Constitutional Court of RS). Usability of thus collected data for the mass real estate valuation only is not economic and therefore a question poses itself on their usability for other purposes (Public Invitation for Selection of Research Projects of Targeted Research Programme of "Slovenia's Competitiveness 2006-2013" in 2008). We maintain that the data collected for the purposes of mass real estate valuation are inappropriate for creating adequate information for the single real estate valuation. Adequate information would contribute to better objectivity, neutrality and independence of reporting on real estate market value.

To this end, we are first going to define certain basic terms, such as "objectivity", "neutrality" and "independence" of reporting on real estate market value, and their connection to the adequate information as referred to above. Taking into account the information required for the different methods of real estate market valuation, we are going to analyse the usability of data kept in the existing real estate records and registers in the Republic of Slovenia for the purposes of single real estate valuation. And finally, we are going to present the methodology of creating adequate information in the Republic of Slovenia, and show an example of mean construction costs for typical real estate as a basis for real estate market value assessment by the cost method.

2 DEFINITION OF SOME BASIC TERMS

To maintain that a valuation report is intended for experts only is incorrect. Real estate valuation standards (USPAP, Slovenian business and financial standard 2; UL RS 56/2001) point out in particular that a valuation report shall include sufficient information to enable the person it is intended for, i.e. the client, the full and correct comprehension of its contents.

Argumentation represents an essential component of reporting on real estate market value assessment. Argument is defined as a structure in which a certain statement is substantiated in a comprehensible manner by reasons for its adoption. In an argument, the reasons substantiate (support, justify, prove, demonstrate) the resolution, and this support convinces a rational person to adopt the resolution (Šuster, 1998). Generally speaking, a valuation report consists of a series of facts or premises demonstrating the justification of inference on the market value of real estate under assessment. In principle, an argument is considered valid where its logical form is valid – in such a case, it is impossible for the premises to be true, and the conclusion is untrue (Šuster, 1997). In order to create true premises and true conclusions, adequate information is required in the field of real estate valuation.

The (non)use of adequate information as such is linked to the ethics of the valuer reporting on real estate market value assessment (Slovenian business and financial standard 2: UL RS 56/2001). In this regard, the focus is on the objectivity, neutrality and independence of the valuer conducting the reporting. Disregarding the differences in character between particular valuers, an interesting question poses itself, i.e., whether the state can bring about an improvement in the objectivity, neutrality and independence of a valuer's work. It may be able to achieve this, in part at least, by providing adequate information.

Taking into account the definition of the term in the Slovenian Written Language Dictionary (hereinafter referred to as: SSKJ, 2008), a valuer is objective if in assessing or valuing he or she refrains from following his or her personal inclinations or interests, but sticks to facts. In assessing market value, objectivity is linked to a state that is in compliance with the actual, real state or situation of real estate under assessment. In SSKJ, the term of objectivity is directly linked to the term of neutrality. According to SSKJ, these terms are synonymous. However, in the valuation procedure, the term of neutrality is comprehended in a different way. Here, the term of neutrality is linked to the valuer's manner of making inferences or decisions. The valuer's unprejudiced inferences and decisions only shall be deemed incontestable within the valuation procedure. In order to be able to state facts and to have adequate support in decision-making within the real estate valuation procedure, a valuer shall have access to adequate information. However, the information that is made accessible is not necessarily adequate. In order to create real and verifiable premises, methodologically transparent and public information needs to be provided by independent institutions.

In philosophy, dependence (SSKJ, 2008) is defined as the characteristic of a phenomenon as being a condition for another phenomenon, as in case of dependence between objects and/or subjects. The result of real estate valuation cannot be dependent on the interests of clients. And it shall not depend on the mere effectiveness of endeavours and inventiveness of the valuer in gathering adequate information. A valuer shall have access to the official information representing the framework of valuation and enabling the verifiability of his/her result. Experiences in the Federal Republic of Germany have shown that such information has a directive-like character only and does not oblige the valuer to use it directly. Such information may contribute only to a more objective real estate value assessment (Kroell, 2008).

Notwithstanding the relatively good practice, the German judges in courts still follow the valuers' work rather closely, and thus, there occur practically no major differences in value assessments of the same real estate (Krenzler, 2005). However, in the Republic of Slovenia it is all but normal that relatively great differences in value assessments of the same real estate occur, which tends to complicate and prolong the legal proceedings in cases taken to court. The following two cases of valuation recorded in the court practice of the Republic of Slovenia can by no means be considered objective, neutral or independent:

Case A:

Case A concerned the value assessment of a single family house for the purpose of repurchasing instead of expropriation. Up to a certain valuation date, three different valuers had assessed the same single family house within a period of less than one year. All three valuers applied the administrative method laid down in the Rules on the uniform methodology for the calculation of turnover value of residential premises and apartments and other real estate (UL RS 8/1987; hereinafter referred to as: PEM). The difference in the values assessed amounted to approximately 20 (index = 120) index points, or approximately EUR 85,000. The client within the proceedings questioned the objectivity of valuers and valuations, and required a new valuer. Therefore, the case in court was prolonged.

Case B:

On the same date of valuation, three different valuations were conducted for the same real estate. Two valuations were conducted by the PEM method and one valuation by the real estate market valuation method. The difference in value assessment according to the market method and the PEM method amounted to 140 (index = 240) or 280 (index = 380) index points. Clients in proceedings, each for their own reasons, suspected the objectivity, neutrality and independence of valuers and their valuations. Legal proceedings have therefore not been concluded yet.

The above two cases show the urgency of appropriate regulation in the field of single real estate valuation, and in particular as regards the provision of adequate information.

Why is adequate information so important? In order to prepare a value assessment, a valuer does not need the raw data, but rather, in a concrete valuation, the information on the mean adaptation value of a particular factor. He/she may assess the value himself/herself. However, the probability of assessing it incorrectly is relatively high. And the error in the end result may be even higher. The valuer disposes neither of adequate information nor of a full insight into the data, nor conducts the analyses required on a regular basis. And therefore, adequate information is needed. In case of data from the raw, unorganised, unconsolidated and non-assessed material, the information means the data organised to a degree that enables the formation of sentences. Such sentences may be true or false, coherent or incoherent with other information (Berlinger *et al.*, 2008). Information therefore means usable data, giving some response to the questions of "Who?", "What?", "Where?" and "When?". As these pieces of information represent the basis for the assessment of the particular elements in the valuation or real estate value, they are called adequate information in this article.

3 SOURCES OF DATA IN REAL ESTATE MARKET VALUE ASSESSMENT

Valuers in the Republic of Slovenia gather data required for real estate market value assessment from different sources: from the land register in particular (material rights on real estate), land cadastre (surface, size, plot position), cadastre of buildings, location information, or attestation on land use designation (designated use of land, including restrictions), real estate market records (characteristics of sold real estate and of real estate sales), real estate register, advertisements, real estate agency databases (characteristics of real estate offered for sale), and field inspections (detailed data on physical characteristics of real estate and information provided by real estate proprietor). Analysis has shown that valuers do not normally make use of the data entered in the new registers and records, but rather refer to the data collected by the real estate agencies and to their own databases (Tušek, 2007).

Since 2007, the Geodetic Administration of the Republic of Slovenia has been publishing inter alia the periodic reports on the Slovenian real estate market. These reports show the scope of real estate sales in the Slovenian real estate market and movements of prices of real estate sold. However, they do not provide the valuers with adequate information required for the single real estate valuation. Adequate information, as required by a valuer for the single real estate valuation, should include the directive values required for the assessment of the particular elements of valuation. Most frequently, these are the mean values of the particular characteristic groups of real estate and of typical regions. Thus, for instance, the recommended values could refer to: (a) in case of the method of direct comparison of prices of similar real estate, to land price indices and to the directive values of land at a certain level of development; to the influence of land size to real estate market value, and other adaptations which frequently and characteristically influence the real estate market value in free trade; (b) in case of the method of yield per mean real-estate yield (gross rentals), mean outgoings, and mean capitalisation level and/or discount rate; (c) in case of the cost method, the mean cost of construction of a new building at a particular level of standard, mean value of physical deterioration (depreciation) of a building, indexes for the revalorisation of mean costs, and in particular, the factor of adaptation to the market conditions.

The above directive values cannot be appropriately assessed at present from the data on real estate from the existing registers and records. The data will need to be supplemented.

4 METHODOLOGICAL APPROACHES TO CREATING ADEQUATE INFORMATION FOR SINGLE REAL ESTATE VALUATION

Practice in the field of single real estate valuation shows the inadequacy of the past mentality that exclusively the (international) real estate valuation standards may contribute to objective, neutral and independent real estate valuation in the Republic of Slovenia, considering the real estate sales data collection sufficient for market value assessment. However, taking into consideration the concrete circumstances, a system of single real estate market valuation would need to be created, which would be based on the generally applicable real estate market valuation principles, and supported by the required legislation and adequate information.

In the Federal Republic of Germany, where real estate valuation has centuries long tradition, the

field of single real estate valuation has been regulated in the form of the Building Code (Baugesetzbuch, 2004), and the more detailed valuation methodology within the Regulation Laying Down Value Assessment (Wertermittlungsverordnung, 1988 hereinafter referred to as: WertV 1988) and in a legal regulation, Directives on the directive values for real estate market value assessment (Wertermittlungsrichtlinien, 2006, hereinafter referred to as WertR 2006), laying down also the normal building costs (Normalherstellungskosten 2005, hereinafter referred to as: NHK 2005). In this way, greater objectivity of market value assessment shall be ensured, which will be based on the uniform and market oriented adequate information and methods (Kleiber, *et al*, 1994).

SINGLE FAMILY HOUSE; DETACHED								Type 1.01-1.03
Compensational costs (without additional costs) in accordance with the 300 and 400 DIN 276/1993 cost groups, including 16 % VAT, of 2000.							NHK 2000 WertR	
Standard for equipment, additional costs and the entire period of use are presented in the "Standard for Equipment" Table.								
Type 1.01 Cellar, ground floor, furnished attic								
Costs per gross surface in EUR/m ² , mean storey height 2.85 m								
Standard of equipment	before 1925	from 1925 to 1945	from 1946 to 1959	from 1960 to 1969	from 1970 to 1974	from 1983 to 1999	2000	
Simple	410-425	430-440	440-475	475-500	505-530	535-580	580	
Medium	470-485	490-500	500-540	540-575	575-605	610-660	660	
High	540-560	565-580	580-625	625-660	665-700	700-760	760	
Topmost	740-765	770-785	790-850	855-900	905-955	955-1035	1040	
Type 1.02 Cellar, ground floor, unfurnished attic								
Costs per gross surface in EUR/m ² , mean storey height 2.70 m								
Standard of equipment	before 1925	from 1925 to 1945	from 1946 to 1959	from 1960 to 1969	from 1970 to 1974	from 1983 to 1999	2000	
Simple	340-350	355-360	365-390	390-415	415-435	440-475	475	
Medium	385-400	400-410	415-440	445-470	470-495	500-540	540	
High	440-455	460-470	470-505	510-540	540-570	575-620	625	
Topmost	590-610	615-625	630-675	680-715	720-760	760-825	830	
Type 1.03 Cellar, ground floor, flat roof								
Costs per gross surface in EUR/m ² , mean storey height 2.90 m								
Standard of equipment	before 1925	from 1925 to 1945	from 1946 to 1959	from 1960 to 1969	from 1970 to 1974	from 1983 to 1999	2000	
Simple	420-435	440-450	450-485	485-515	515-545	550-595	595	
Medium	475-490	495-505	505-545	550-580	580-615	615-665	670	
High	535-555	560-570	575-615	620-650	655-690	690-750	750	
Topmost	695-720	725-740	740-800	800-850	850-895	900-975	975	

Figure 1: Specimen Table of normal building costs from 2000 according to WertR.

Figure 1 shows a specimen NHK Table of a single family detached house. All the elements of the Table and the methodology are specifically defined.

The system of single real estate valuation in Germany is a dynamic one. It is permanently improved on the basis of reasoned proposals. Kroell (2008), for instance, critically analysed the NHK development in Germany in the years of 2000 and 2005, proposing a methodological correction in NHK, which would bring about a better price of normal building costs and, thereby, a better approximation of market value assessment to the real estate sales price. The result of developing such a system of real estate valuation is in the relatively small differences in the assessed market values between different valuations. There applies a rule in the German practice, i.e. that the differences between the assessed values in the valuation report cannot exceed 35 % (Vogels, 1989). In the opposite case, the selected method and/or the input data are inappropriate.

In order to create an appropriate system, the situation in the field of single real estate valuation in the Republic of Slovenia should be analysed in detail and, on this basis, the appropriate bases should be planned for creating adequate information, selecting the most appropriate valuation model and assessing its value. Such a method of adequate information assessment is transparent and enables the valuer to perform value adaptation in a concrete case. Making the adequate information accessible to the public would contribute to better verifiability of a particular assessment.

In order to establish adequate information for the needs of single real estate valuation, quality input data are required. Minor errors in input data may significantly affect the decisions, which have been made on their basis, thus affecting the quality of assessed adequate information. Therefore, Epley (2006) proposes a method of managing and constantly verifying such data for the particular purpose of single real estate valuation, so as to enable the setting up of adequate information and, consequently, the quality assessment of real estate market value.

The system of adequate information, once set up and intended for the single real estate valuation, shall be constantly upgraded so as to take into account the concrete conditions in the real estate market. Records on assessed values and sales prices of the same real estate, on which basis the methodological deficiencies in the particular adequate information assessment could be analysed, would contribute to effective development of the system.

Mean building costs for characteristic real estate types represent the adequate information for real estate market value assessment according to the cost method. Setting up the system of mean building costs poses a relatively demanding task and, therefore, a question poses itself, i.e. to what degree a system that has been proven abroad can be directly transferred to the Slovenian practice of single real estate valuation.

5 MEAN BUILDING COST CREATION SPECIMEN FOR CHARACTERISTIC REAL ESTATE TYPES

In the Republic of Slovenia methods were applied, and have been applicable, ensuing from the calculation of construction works. Such a method, for instance, has been laid down in the Rules

on the uniform methodology for the calculation of turnover value of residential premises and apartments and other real estate (hereinafter referred to as PEM) (UL RS 8/1987), the method presented in the FIABCI Manual (Žemva *et al*, 1995), the damages assessment method (UL RS 33/2005), and similar. However, such methods have not been created, and are not usable, for single real estate market valuation. In the FIABCI Manual, for instance, the characteristic buildings have to date become rather obsolete, or been inappropriately selected, the procedures of table creation have been non-transparent or unverifiable, all of which is rendering them unusable.

In the Republic of Slovenia, therefore, adequate information required by valuers for assessing market value by the cost method has not been established yet. Such information on the mean costs of (new) construction of characteristic types of real estate, by year of construction and by a particular standard of equipment, and the method of assessing the physical degradation of real estate under assessment would be required in particular.

Kern (2004) and Močnik (2006) established that for the price of mean costs of construction in the Republic of Slovenia similar tables as available in the Federal Republic of Germany could be created, taking into account the concrete circumstances regarding the structure of construction costs, typical real estate, and real estate market. This finding was substantiated by concrete examples. On this basis, the methodology was created, and the first trial of creating tables on the mean costs of construction of a multi-apartment building. The age of the building was classified into equal classes as in the German tables. Standard of equipment was set on the basis of results of a survey conducted among experts in seven construction companies in the Republic of Slovenia and divided into three classes: simple, medium, and high. The mean costs of construction were assessed taking into account the age and standard of the building, based on a construction cost calculation for a multi-apartment house situated in Vrhnika – the Vrtnarija project.

Differences between the two countries presented in this article exist on the level and structure of construction costs as well as in the standard of equipment and in the characteristic real estate types. Seeing that the system in place and operating in the Federal Republic of Germany cannot simply be transposed, a unique system of adequate information will need to be set up in Slovenia.

6 CONCLUSION

Great differences, at times by a 100 % and more, in the assessed market values for the same real estate in the Republic of Slovenia are *inter alia* due to the unavailability of adequate information. We find that setting up adequate information for the single market value assessment would significantly improve the objectivity, neutrality and independence of the valuer in reporting.

In order to obtain quality information, quality data available in the real estate records, registers and other databases are required. However, the data available in the existing real estate records, registers and other databases do not suffice for creating adequate information required in the Republic of Slovenia. Based on a detailed analysis of quantity and quality of such data, a concrete proposal for their improvement will need to be prepared, and thereafter only a system of adequate information required for the single real estate valuation will need to be set up.

Setting up the system of adequate information shall require a detailed analysis of the state in the field of single real estate valuation in the Republic of Slovenia, a selection of the information required, and a most appropriate valuation model. Methodological transparency of adequate information evaluation shall have a significant role in the applicability of such information in concrete valuations. The verifiability of a valuation shall be facilitated by making such information available to the public. For developing the above system, the records on assessed values and sales prices of the same real estate need to be set up. Such records will facilitate the analysing of deficiencies in the methodology of valuation within a particular piece of adequate information.

The trial of setting up the system of mean construction costs of the characteristic real estate types, as adequate information required for real estate market value assessment by the cost method in the Republic of Slovenia confirms the need for a systematic collection of adequate information. And, as always in the field of real estate valuation: foreign experience, i.e. adequate information, cannot directly be transposed into the Republic of Slovenia for the purposes of real estate market value assessment.

Literature and sources:

Baugesetzbuch – BauGB (2004). Obtained on 21. 9. 2008 at <http://bundesrecht.juris.de/bundesrecht/bbaug/gesamt.pdf>

Bellinger, G., Durval Castro, D., Mills, A. (2008). *Data, Information, Knowledge and Wisdom*. Obtained on 10. 10. 2008 at <http://www.systems-thinking.org/dikw/dikw.htm>

Epley, D.B. (2006). *Data Management and Continual Verification for Accurate Appraisal Reports*, *The Appraisal Journal*, Appraisal Institute, Volume LXXIV, N. 1.

International Valuation Standards, Eighth Edition (2007). 8th Edition, International Valuation Standards Committee, London.

Kern, J. (2004). *Cost Method in Real Estate Valuation in Germany*, Graduation Thesis, University of Ljubljana, Faculty of Civil Construction and Geodesy, Ljubljana.

Kleiber, W., Simon, J., Weyers, G. (1994). *Verkehrswertermittlung von Grundstuecken*, *Bundesanzeiger*, Koeln.

Krenzler, M. (2005). *An der Grenze der Legalitaet: Wertermittler in der Zwickmuehle rechtsbesorgender Taetigkeit?* Obtained on 5. 10. 2008 at <http://www.bodenseeforum.net/files/referenten/Krenzler%20Manuskript%202005.pdf>

Kroell, R. (2008). *Neue Normalherstellungskosten - eine kritische Anmerkungen*. Obtained on 2. 10. 2008 at <http://www.wertprofis.de/resources/Kritische+Anmerkungen+zu+den+NHK+2005.pdf>

Mean prices as basis for the partial damage assessment on buildings, *Official Gazette of the Republic of Slovenia*, No. 33/2005.

Močnik, C. (2005). *Certain Elements of Real Estate Market Valuation by the Cost Method in the Republic of Slovenia*, Graduation Thesis, University of Ljubljana, Faculty of Civil Construction and Geodesy, Ljubljana.

Normalherstellungskosten 2005 - NHK (2005). Obtained on 21. 9. 2008 at http://www.bmvbs.de/Anlage/original_965513/Wertermittlungs-richtlinien-2006.pdf

Public Invitation for Selection of Research Projects of Targeted Research Programme of "Slovenia's Competitiveness 2006-2013" in 2008 (2008), 5.2.2. *Multi-purpose usability of the Real Estate Register in support of institutional efficiency and service quality improvement*. Obtained on 1. 10. 2008 at <http://www.arrs.gov.si/sl/progproj/crp/razpisi/08/razp-crp-konkur-08.asp>

Real Estate Mass Appraisal Act – ZMVN. *Official Gazette of the Republic of Slovenia*, No. 50/2006.

Real Estate Recording Act – ZEN. *Official Gazette of the Republic of Slovenia*, No. 47/2006 and 65/2007 – Decision by Constitutional Court of RS.

Real Estate Records Upgrading Project (2005). Obtained on 1. 10. 2008 at <http://www.gu.gov.si>

Richtlinien fuer die Ermittlung der Verkehrswerte (Marktwerte) von Grunstuecken – Wertermittlungsrichtlinien – WertR (2006). Obtained on 21. 9. 2008 at http://www.bmvbs.de/Anlage/original_965513/Wertermittlungs-richtlinien-2006.pdf

Rules on the uniform methodology for the calculation of turnover value of residential premises and apartments and other real estate. Official Gazette of the Republic of Slovenia, No. 8/1987.

Slovenian Written Language Dictionary / Slovar slovenskega knjižnega jezika (2008). Obtained on 1. 10. 2008 at <http://bos.zrc-sazu.si/sskj.html>

Slovenian Business and Financial Standard 2, Slovenian Business and Financial Standards, Official Gazette of the Republic of Slovenia, No. 56/2001.

Šubic Kovač, M. (1998). Real Estate Market Valuation Dilemmas in Slovenia. Geodetic Journal, Volume 42, No. 3. pp. 341-347.

Šuster, D. (1997). Logic and Critical Thinking, Pedagogic Faculty of Maribor, Maribor.

Šuster, D. (1998). The Power of Argument, Pedagogic Faculty of Maribor, Maribor.

Tušek, T. (2007). Usability Of Data on Real Estate for Market Analysis and Single Real Estate Valuation, Graduation Thesis, University of Ljubljana, Faculty of Civil Construction and Geodesy, Ljubljana.

Uniform Standards of Professional Appraisal Practice - USPAP (2008). Appraisal Standards Board, The Appraisal Foundation. Obtained on 1. 10. 2008 at <http://commerce.appraisalfoundation.org/html/USPAP2008/index.htm>

Vogels, M. (1989). Grundstuecks- und Gebaeudebewertungsmarktgerecht, Bauverlag, Wiesbaden und Berlin.

Verordnung ueber Grundsaeetze fuer die Ermittlung der Verkehrswerte von Grundstuecken – Wertermittlungsverordnung - WertV (1988). Obtained on 21. 9. 2008 at [http://www.krefeld.de/kommunen/krefeld/medienGBVI.nsf/files/WertermittlungsVO.pdf/\\$file/WertermittlungsVO.pdf](http://www.krefeld.de/kommunen/krefeld/medienGBVI.nsf/files/WertermittlungsVO.pdf/$file/WertermittlungsVO.pdf)

Ziegenbein, W. (2002). Neue Tendenzen bei der Grundstueckswertermittlung im Zusammenhang mit Erbbaurechten, DVW-AK 9.1.

Žemva, Š., Valant, F., Bertonec, J. (1995). Projections of Structural Portions of Particular Types of Work on Buildings, Association of Real Estate Experts of Slovenia (FIABCI – International Real Estate Federation; FIABCI Chapter of Slovenia), Ljubljana.

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