Abstract. This study is aimed at presenting the role of economic principles in the real estate valuation process raised in appraisal theory. The formulated theses suggest that the reasons for not appreciating economic issues in the appraisal process should be sought in the education system of persons authorised to perform real estate appraisals. In order to research how economy theory was adapted by appraisal theory and practice, several commonly available information sources were reviewed. The table shows the kinds of principles, in the order mentioned by the authors of studies. Some information about education system of property valuers in Poland and Lithuania was discussed. In order to verify how the appraisal principles described herein are used in practice, a survey was conducted among Polish appraisers. The Polish respondents’ answers confirm the diagnosis of the article’s authors as to the necessity to devote more time to these issues when preparing candidates for the profession of property appraiser.

Keywords: economic principles of valuation, real estate, education of real estate appraisers, Poland, Lithuania

JEL classification: R1, R3, A12
INTRODUCTION

The process of real estate appraisal requires interdisciplinary knowledge including, among others, knowledge of law and technical and economical sciences. In some countries such as Germany, more emphasis is put on technical knowledge and appraisal is entrusted mainly to engineers and surveyors. In the United States and in Great Britain, the prevailing role of economic knowledge is underlined in the process of stipulating value.

The importance of economic knowledge in the appraisal process is clearly visible in the significance of market value and in defining so-called principles constituting grounds for appraisal philosophy. The economic dimension of appraisal has been particularly strongly underlined in relevant American literature for many years (i.e. Wilson, 1998; Appraisal Institute, 2013; Rattermann, 2014). Explaining the significance of each method of real estate appraisal is almost always supported by a description of principles significant in the appraisal process. The majority of them have an economic dimension.

PURPOSE AND MOTIVATION OF THE STUDY

The effects of the experts’ work are often subject to criticism from principals as well as professional organisations authorised to verify the quality thereof. Adair and Hutchison (2005) observed that intangible elements of risk and uncertainty are intrinsic and inbuilt parts of the valuation procedure as often the valuer is incapable in identifying and pricing correctly all existing and potential influences on the value of the asset. In recent times, research has concentrated on anticipated risk that could be encountered in carrying out valuations and the way that valuation information is processed (Alyiu et al., 2014).

Analysis of appraisal documents, in Poland called appraisal reports, reveals that the reason for an incorrectly carried-out appraisal comprises an insufficient level of economic knowledge (Kucharska-Stasiak, 2014). This means that knowledge thereof constitutes a necessary condition (yet, insufficient) for the certainty of the appraisal process and proper interpretation of the result obtained – real estate value.

However, in relevant Polish literature, both the considerations regarding the essence of real estate value and the economic principles of stipulating thereof are rarely touched upon. Both theoreticians and practitioners mainly concentrate on learning about and interpreting legal provisions concerning definitions of market value and appraisal technical procedures. However, “value” is an economic, not legal category, and a complex one.

It can be observed that in Lithuanian legislation more economic considerations are included (Property and Business Valuation Methodology 2012 ) but it is insufficient as well.

So, the authors have made the following these:

If value is an economic category then real estate appraisal should represent the market, and valuation literature and teaching programmes should more significantly expose the economic principles of valuation.

ENTITLED TO VALUE – A FEW REMARKS

Becoming a professional valuer in some countries can mean undertaking a demanding process, encompassing a minimum standard of a university degree, followed by a phase of supervised training, additional examinations and peer assessment (Gilbertson and Preston, 2005). In some countries becoming a professional valuer means no more than going through a less complicated licensing procedure. France has an informal training procedure, and at the end of the required period of learning, candidates are still not examined,
but automatically qualify (Adair et al., 2012). There are several countries where a good diploma is accepted, such as in Australia, Great Britain, New Zealand, Quebec, Sweden (Mooya, 2015).

Requirements for qualification of real estate valuers differ also in the new EU member states. According to the Polish law, a real estate appraiser shall meet many requirements (The Act on Real Property Management, 1997).

In curricula for property appraisers, Polish universities must put in place the so-called minimum curriculum for property appraisers established by the ministry relevant for granting licences for real estate appraisal. Currently, this curriculum covers 286 teaching hours and the following topical groups: elements of legal knowledge; elements of technical knowledge; appraisal methodology; and elements of economic knowledge, within which issues concerning economic elements of the real estate market account for only eight hours. Unfortunately there is little room in the curriculum for indicating direct relations between economic theory and the theory and practice of real estate appraisal.

In Lithuania the mandatory certification of valuers has been introduced in 1996 (Galinienė et al., 2005). The valuers’ qualification scheme is based on two main criteria: education and professional experience. Academic education of valuers is provided by Vilnius Gediminas Technical University. There are BSc and MSc Real Estate Management study programmes. MSc study programme is dedicated to the real estate professionals, curriculum includes real estate valuation subject, real estate investment and development, real estate insurance and taxation subjects. However, not all the valuers in Lithuania have graduated such programmes and some of them still lack knowledge on fundamentals of economics.

ECONOMIC PRINCIPLES IN REAL ESTATE VALUATION LITERATURE AND IN PRACTICE

Real estate management acts, laws on property and business valuation as well as other regulations on property valuation and valuation reporting regulate property valuation practice as well in Lithuania, Poland.

Thus, a question arises as to whether the most important category in the appraisal process, that is, “value” is sufficiently exposed in the relevant literature. A lack of reflection on the theory and history of value in real estate appraisal was brought up by J. Cannone in 1991 then elaborated on by researchers in later years (Cannone and Macdonald, 2003). Text analysis disclosed that the authors did not appreciate the significance of value theory.

The results of this research were compared with the results of Polish and Lithuanian literature research. In order to research how economic theory was adapted by appraisal theory and practice several commonly available information sources published by well-known real estate associations and authors of books were reviewed. An analysis of nine sources allowed the researchers to create Table 1.

The rows in Table 1 include 18 appraisal principles arranged in alphabetical order, while the columns stipulate the source of the information.

The numbers 1 to 15 used in the table stand for the order in which a particular appraisal principle was quoted in the publication. This implies that in the context of real estate appraisal theory, various numbers of principles were acknowledged, namely between 8 and 15. Due to the topic of this article, the researchers herein quote concepts of these principles according to the interpretation included in some analysed sources. An analysis of the definitions of like principles implies a certain freedom in the interpretation thereof, although they do express their practical sense. Examples of these definitions are provided below.
Table 1

Type and meaning (importance) of appraisal principles in accordance with the analysed sources

<table>
<thead>
<tr>
<th>Principles</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dearborn Real Estate Education et al. (2003)</td>
</tr>
<tr>
<td>1 Anticipation</td>
<td>2</td>
</tr>
<tr>
<td>2 Balance</td>
<td>3</td>
</tr>
<tr>
<td>3 Change</td>
<td>8</td>
</tr>
<tr>
<td>4 Competition</td>
<td>14</td>
</tr>
<tr>
<td>5 Conformity</td>
<td>4</td>
</tr>
<tr>
<td>6 Consistent Use</td>
<td>10</td>
</tr>
<tr>
<td>7 Contribution</td>
<td>6</td>
</tr>
<tr>
<td>8 Economics of scale</td>
<td>15</td>
</tr>
<tr>
<td>9 Externalities</td>
<td>12</td>
</tr>
<tr>
<td>10 Four stage life cycle</td>
<td>-</td>
</tr>
<tr>
<td>11 Highest and Best Use</td>
<td>13</td>
</tr>
<tr>
<td>12 Increasing and decreasing</td>
<td>7</td>
</tr>
<tr>
<td>13 Opportunity costs</td>
<td>11</td>
</tr>
<tr>
<td>14 Progression</td>
<td>-</td>
</tr>
<tr>
<td>15 Regression</td>
<td>-</td>
</tr>
<tr>
<td>16 Substitution</td>
<td>9</td>
</tr>
<tr>
<td>17 Supply and demand</td>
<td>1</td>
</tr>
<tr>
<td>18 Surplus Productivity</td>
<td>5</td>
</tr>
</tbody>
</table>

Source: own elaboration.

Principle of **anticipation** is the appraisal principle that value depends on the expectation of benefits to be derived in the future. Principle of **supply and demand** holds that price varies directly, but not necessarily proportionately, with demand, and inversely, but not necessarily proportionately, with supply. A principle that must be included in the appraisal process is **change**. In the real estate market they can concern real estate itself, which by being subject to depreciation loses value, and also the broadly understood environment, comprising economic, financial-political, legal or demographic surrounding. **Competition** is created where substantial profits are being made, thus it stimulates supply and demand.
The principle of **balance** as used in appraising is that the greatest value in property will occur when the type and size of improvements and uses are proportional to each other as well as to the land. The principle of **contribution** holds that the value of a particular component is a function of its contribution to the whole rather than as a separate component.

This principle **increasing and decreasing returns** holds that as capital units are added, a certain point is reached where the added units do not contribute value commensurate with their costs. The level of real estate value and maintenance is decided by the relation between real estate and its surroundings. This constitutes grounds for establishing the principle of **conformity**, which can be also called the “external balance” principle. The principle of **progression** holds that the worth of a greater-valued object is reduced by association with many lesser-valued objects of the same type. The principle of **substitution** states that no buyer will pay more for a good than he or she would have to pay to acquire an acceptable substitute of equal utility in an equivalent amount of time. The principle of **opportunity costs** holds that money allocated to a certain use cannot be used for an alternative. The principle of **externalities** means that external factors can influence value in a positive or negative manner.

A fundamental principle of real estate is **highest and best use**, which means the use of an asset that maximises its productivity and is possible, legally permissible and financially feasible. The principle of **consistent use** involves the concept that land cannot be valued under one highest and best use while the improvements are valued based on another highest and best use. **Surplus productivity** means that its use in developed real estate appraisal enables the stipulation of the value of the land itself. The concept of the principle of **four-stage life cycle** holds that all property should be characterized by four distinct stages: growth, stability, decline and revitalization. The principle of **economics of scale** with regard to real estate means, for example, that the larger the real estate item the lower the value per square metre. Some principles have meaning for all traditional approaches to stipulating value, such as the “substitution” principle, others only to selected approaches, such as the “alternative cost” principle, which is mainly used in an appraisal with an income approach.

In this context, the question arises as to whether relevant Polish literature granted a sufficient place to the main category in the appraisal process, that is, to value. In order to answer this question, the authors of this article analysed 27 books (Kucharska-Stasiak, 2014) regarding real estate appraisal published in Poland by Polish authors. Unfortunately, the analysed sources did not return a positive answer. This means that the authors of Polish textbooks also did not consider the value conception as worthy of deeper reflection and that it was sufficiently defined on legal grounds. However, a growing understanding among the authors of the necessity to explain the essence of value constitutes a positive phenomenon. After the year 2000, providing a definition of value became a rule. However, it is a pity that the authors confined themselves to giving proper definitions without explaining the essence of value (Kucharska-Stasiak and Źróbek, 2015). In Lithuania development of valuer profession and market value definition had its own historic context and it was inseparable from the changes in the political and economic life (Deveikis and Bagdonavicius, 2002; Galinienė et al., 2005).

Number of Lithuanian books on valuation issues is still limited; however, there can be 5 the most popular books distinguished. Economic considerations as well as value definitions are in detail analysed by all of the authors (Galinienė, 2004, 2015; Aleknavičius, 2007; Kaklauskas et al., 2012; Tupenaite et al., 2015).

Despite of still limited economic considerations in appraisal literature, globalisation of the property and capital markets, as well as investments, imposes new requirements and arouses new trends in the valuation practice in Poland, Lithuania (Aleskienė et al., 2012).
In order to verify how the appraisal principles described herein are used in practice, a survey was conducted among Polish appraisers. Some 96 people participated in the survey. They were asked 15 questions concerning various aspects of their professional activity. Below, the results summing up the answers given in response to selected questions closely related to the subject matter of this article are given. For 50% of respondents, real estate appraisal constitutes basic employment, while the remaining 50% of appraisers treat real estate appraisal as additional work, performed “after hours”. All respondents have higher education, including:

- 53% technical (e.g., construction engineer, surveyor, agricultural engineer);
- 33% economic;
- 8.5% other (e.g., humanities, journalism).

The majority of them report much experience in the appraisal practice, with more than 60% working as appraisers for more than five years. Thus, it can be assumed that the respondents are professionally active and experienced practitioners and their answers may represent the opinions of the majority of the appraiser community.

The question “What economic factors do you pay attention to during appraisal?” was answered, among others, as follows: real estate surroundings, access, real estate surface, standard of premises, level of vacant spaces, change in the level of prices, inhabitant incomes. Only two of those surveyed mentioned principles by name, namely “anticipation” and “supply and demand”. It is distinctive that only the question about giving a list of appraisal principles obtained the following answer structure (Table 2):

<table>
<thead>
<tr>
<th>Principle of valuation</th>
<th>Responses in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anticipation</td>
<td>21.5</td>
</tr>
<tr>
<td>Substitution</td>
<td>19</td>
</tr>
<tr>
<td>Change</td>
<td>20</td>
</tr>
<tr>
<td>Supply and Demand</td>
<td>42</td>
</tr>
<tr>
<td>Externalities</td>
<td>35</td>
</tr>
<tr>
<td>Highest and Best Use</td>
<td>26</td>
</tr>
<tr>
<td>Others</td>
<td>11</td>
</tr>
</tbody>
</table>

Source: own elaboration

Table 2 implies that every second appraisal analysed supply and demand, followed by external factors. However, the answers given seem not to reflect the facts. There is also concern that there is insufficient understanding of the essence of the particular appraisal principles by the respondents. The respondents answered that in 26% of appraisals they included the principle of the “highest and best use” and, as has already been mentioned herein, the issue of including this principle is not yet commonly accepted in Poland. What is comforting is the fact that 97% of respondents feel the need to supplement and extend their knowledge. They want to improve mainly in the following areas: appraisal methodology, application of the theory of economics in real estate appraisal procedures, assessment of the technical condition of buildings and construction, use of statistics and financial mathematics and interpretation of obtained results, and assessment of the effectiveness of investing in the real estate market. The majority of those surveyed prefer direct training, courses, then individual study of the literature, as the best forms for gaining knowledge.
SUMMARY AND CONCLUSIONS

It is worth underlining again that economics is a social science. As such it has a number of functions: explanatory, diagnostic, prognostic and practical. As for the explanatory function, it indicates hidden reasons for the state of affairs and phenomena. Unfortunately, a lack of understanding of the value category as an economic category means a lack of understanding of the market participants’ behaviours, which, in turn, can lead to an improperly stipulated value. Property appraiser is a regulated profession in Poland and in Lithuania. Academia engaged in the process of preparing valuation practitioners in these countries should be aware of their role in indicating the direction of upcoming changes in factors of the real estate market and creation of value. A misunderstanding of the role of assumptions used in an appraisal also results in not appreciating the need for searching for value based on the most beneficial way of using real estate. As a result, it leads to significant differences between the assessed values of the same piece of real estate as stipulated by different appraisers. Therefore, the economic principles must be included in teaching programmes with an indication of their application values.

Emphasis should be placed in particular on a closer relationship between economic theory and the everyday practice of real estate appraisers. The respondents’ answers confirm the diagnosis of the article’s authors as to the necessity to devote more time to these issues when preparing candidates for the profession of property appraiser. Due to progressing globalisation, including in the real estate sector, it becomes important to include behavioural aspects of the real estate market with elements of the characteristics of various countries in the curricula. Universities in the world should also harmonize their syllabus in training of specialist of property market and property valuers. Prospects exist for property valuers to expand their current skill to entirely new disciplines, such as in the field of business valuations, with their expertise being utilised for business mergers, purchases and disposals (Gilbertson and Preston, 2005, Žróbek and Grzesik, 2013). Thus the importance of economic knowledge and integrated understanding of property value is increasing.

REFERENCES

Appraisal Institute. 2007. Appraising residential properties. 4th ed. Taylor & Francis, USA, pp. 120.


Property and Business Valuation Methodology, approved by the order of the Minister of Finance of the Republic of Lithuania, 27 April 2012, no 1k-159, Official Gazette Valstybės Žinios, 2012-04-28, No 50-2502.


