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Preface

This book presents the results of Polish-Ukrainian scientific cooperation. It contains the papers prepared for the 10th international conference “Quantitative Methods in Accounting and Finance”. Accounting and finance face nowadays many challenges. They require both an international and local approach, they need to be considered from the theoretical and practical point of view, and they also encourage general and specific analysis.

Support from quantitative methods is needed in order to discover, implement and verify new finance and accounting trends, methods and instruments. The research papers which are part of this book present different aspects of accounting and finance combined with a quantitative, in particular Econometric, approach.

Some of the papers focus on methodology of measurement, estimation and forecasting of financial phenomena, especially those related to investment processes. Others address specific problems of accounting such as accounting solutions for different branches, legal issues of accounting, responsibility and reporting. An alternative approach was also undertaken and the roles of a narrative and culture in accounting were presented.

The variety of papers selected for this issue ensures the complexity of the book. It provides theoretical as well as empirical material which can be used in further research and in business practice, particularly in accounting and finance. We hope that the content of the book provides a starting point for scientific discussion and practical changes.

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VALUATION MODELS OF INVESTMENT PROPERTY

MODELE OCENY NIERUCHOMOŚCI INWESTYCYJNYCH

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Summary: Investment Property (hereinafter called IP) are real estate objects, which are used to earn profit from leasing out or capital gain. The relevant estimation of IP is important because it allows a higher quality of representing information of the financial reporting in relation to fixed assets, structures of assets and value of an enterprise as a whole, and also gives more exact information for the analysis of efficiency of the use of IP. The status of IP is considered in the first part of the article, along with a description of the objects which can be included in IP, and also an analysis of statistical data, in relation to the share of the investment real estate in the asset structure of enterprises of different types of activity. Furthermore, the models of estimation of IP are considered in accordance with IAS 40 “Investment Property” – by fair value and by historical cost, complemented with their comparative description, and conclusions are made in relation to the expedience of the application of these models in certain economic conditions.

Keywords: Investment Property, estimation, fair value, historical cost.

Streszczenie: Nieruchomości inwestycyjne (zwane dalej IP) to obiekty, które są wykorzystywane do osiągnięcia dochodów z wynajmu lub dochodów kapitałowych. Odpowiednie oszacowanie wartości IP jest istotne, ponieważ umożliwia uzyskanie wyższej jakości i warygodności informacji prezentowanych w sprawozdaniach finansowych. Status IP został zdefiniowany w jednym z punktów artykułu wraz z opisem obiektów, które mogą być zawarte w IP, a także analizą danych statystycznych w związku z udziałem nieruchomości inwestycyjnych w strukturze aktywów zakładów o różnych rodzajach działalności. Zastosowane modele szacowania wartości IP są zgodne z MSR 40 „Nieruchomości inwestycyjne”.

Słowa kluczowe: nieruchomości inwestycyjne, ocena, wartość godziwa, koszt historyczny.

1. Introduction

Investing money in property has always been an important and relevant aspect of entrepreneurship, because such operations can bring both a significant profit and a loss. Obviously, the higher the value of investment property (IP) the higher the value of assets as a whole. At the same time the real value of IP is constantly changing both under the influence of inflation factor and general market conditions. Therefore, such objects need not only a one-time estimation, but a periodic adjustment of this estimation.

In accounting, the issues related to investment property are subject to IAS 40, but for enterprises in Ukraine, which, according to the national law should not use IAS 40 but П(С)БО 32 «Investment Property». According to IAS 40 Investment Property – this is property (land or a building, or part of a building or both), held (by the owner or the lessee under a finance lease) to earn rentals or for capital appreciation or both. IP is not applied for use in production, supply of goods, etc. and is not for sale [1]. Similarly, this subject is presented in П(С)БО 32.

Examples of investing property:

- land held for long-term capital appreciation,
- land held for a currently underlined future use,
- building leased out under an operating lease,
- property that is being constructed or developed for future use as investment property.

2. Status of IP

According to the State Statistics Service, Real Estate occupies a significant part of all fixed assets: the percentage of residential and non-residential buildings, engineering structures and land in fixed assets was: in 2010 – 58.0%, in 2011 – 58.0%, in 2012 – 55.1%, in 2013 – 55.8%, and for the 1st half of 2014 – 53.9% [State Statistics Service]. Taking into consideration the pattern of utilization, part of these fixed assets can be recognized as IP. Having reviewed the structure of fixed assets of the Ukrainian enterprises in 2014 (Table 1), we see that the IP share in the total value of fixed assets is insignificant, but there is a tendency to grow. Also, we see the differentiation depending on types of activity – the most significant is the share of investment property for activity concerning the operations with real estate, which is logical.

Sometimes it is difficult to assign a particular object to IP despite the ease of identifying it. Thus, if land and the assets on it are usually presented separately, in some cases a building will be considered as an integral part of the relevant piece of land – and therefore will be considered as IP (for example, a playground, etc.). At this point, it is necessary to estimate whether these objects are subject to amortization.

Table 1. Share of investment property in the structure of assets depending on types of activity

Types of activity	Non-current assets – Total		Including investment property		Share I in the assets structure	
	on 01.01. 2014	on 31.12. 2014	on 01.01. 2014	on 31.12 2014	on 01.01. 2014	on 31.12 2014
Total	2,422,073.5	2,717,620.4	32,754.8	45,339.5	1.35%	1.67%
Agriculture, forestry and fishing industries	108,796.4	123,008.8	14.4	14.9	0.01%	0.01%
Manufacturing industry	953,182.5	1,068,053.3	2,983.7	2,621.9	0.31%	0.25%
Building industry	87,057.5	95,954.5	371.0	2,416.0	0.43%	2.52%
Wholesale and retail trade; transport repair	189,336.2	202,201.2	1,453.8	2,001.2	0.77%	0.99%
Transport warehousing, post	230,524.5	234,921.7	584.2	607.3	0.25%	0.26%
Temporary accommodation and catering	18,632.4	19,211.0	134.1	156.6	0.72%	0.82%
Information and telecommunications	48,256.5	47,588.2	11.6	1.9	0.02%	0.00%
Financial and insurance activity	85,785.5	102,372.9	680.7	2,361.9	0.79%	2.31%
Real estate operations	280,013.0	290,723.2	25,178.6	33,787.0	8.99%	11.62%
Professional, scientific and engineering activity	215,471.1	332,516.8	344.0	359.6	0.16%	0.11%
Activity in administrative and supportive servicing	170,540.4	164,566.6	984.8	995.0	0.58%	0.60%
Education	1,561.6	1,670.9	0.0	0.0	0.00%	0.00%
Health and social support	6,634.7	7,086.9	2.2	0.5	0.03%	0.01%
Art, sport, etc.	23,526.9	24,948.0	11.7	11.2	0.05%	0.04%
Provision of other services	2,754.3	2,796.4	0.0	4.5	0.00%	0.16%

Source: State Statistics Service.

Another controversial issue concerning the assignment of the object to a category of inventories comes up, because in some cases it is difficult to differentiate the real estate object intended to be sold in the ordinary course of business (inventories) from the real estate object that is held to get income from capital gain (IP). To the experts' mind [1], the model for the business building, which represents the entity's expectations concerning the use of the real estate object, is the main criterion to classify the given real estate object. In other words, the entity which trades the real

estate objects will classify its objects as inventories, if it intends to sell these objects within the framework of its regular operating cycle. However, if the purpose of land is not defined, then it is classified as IP.

Objects, of which the construction is completed and which are held for sale in the ordinary operating cycle are classified as inventories. But, if there is the plan to hold this object and lease it out, then the company should consider the reclassification of that object to the category of IP.

Objects of dual purpose are worthy of special consideration – objects which are partially used in economic activity (as capital assets) and partially – as IP. For instance, a hotel will be accounted as capital assets in the part of hotel rooms, restaurant and others, but office building and certain premises of retailing should be related to IP.

In particular cases, the solution of the issue concerning the significance of additional services provided by a lessor is the key factor in the assigning of objects to IP. The standard contains two examples of real estate objects in relation to which the additional services are provided:

- a hotel managed by the owner is not the object of IP, because the provided additional services are a significant constituent of the whole contract;
- an office building where the owner provides the security services – is IP, because these additional services, as a rule, are an insignificant part of the whole contract.

As understood from the standard 40, the issue concerning the relation of the object to IP requires professional estimation. Consequently, the entity should develop the criteria which will be consistently applied while solving these issues.

3. Historical cost

Initially the IP object is estimated at actual value except in the following cases:

- 1) if there is a state subsidy;
- 2) removal of assets into other category in the report about the financial state (balance sheet);
- 3) buying in the result of business incorporation or associated with payments based on shares;

The historical cost of IP objects includes the expenses related to the contract signing and expenses directly related with the preparation of the object for the intended use. The principles to include these costs are similar to the principles of inclusion to the historical cost of the objects of fixed assets. In some cases, it is not always possible to determine the buying cost and historical cost of the IP object identically.

Example 1. At the beginning of the year the entity buys an asset (building) to lease out, pays its cost according to a contract – 100 USD. But in view of the peculiarities which are associated with the registration of property rights, that agreement is approved only in the middle of the year. In fact, the change of control of that building (receiving ownership) takes place at the end of the year. But the entity has already earned revenue from the lease for half a year – in the amount of 15 USD. Therefore, we can assume that the value of IP recognized in the middle of the year will be $100 - 15 = 85$ (USD).

4. Subsequent cost

Valuation model at fair value

After initial recognition, the entity chooses and confirms in its accounting policy either of the following IP accounting models:

- 1) at fair value model;
- 2) at cost model (according to П(С)БО 32 – cost model less accumulated depreciation and less accumulated impairment losses.

The entity should develop an accounting policy concerning the estimation of IP after its initial recognition. It should be understood that the IP estimation at fair value means its constant updating on every balance sheet date. If the entity decided to estimate one object at fair value, then all the others should be estimated at fair value too.

In accordance with IAS 40, fair value is the amount for which an asset could be exchanged between knowledgeable, willing parties in an arm's length transaction. The notion of fair value is also developed in IFRS 13, which provides the following definition: fair value estimates the price at which an orderly transaction to sell the asset or to transfer the liability would take place between market participants at the measurement date under current market conditions (i.e. an exit price at the measurement date from the perspective of a market participant that holds the asset or owes the liability).

According to IFRS 13 the following approaches to estimate fair value are considered:

Market approach uses prices and other relevant information generated by market transactions involving identical or comparable (similar) assets, liabilities, or a group of assets and liabilities (e.g. a business).

Cost approach reflects the amount that would be required currently to replace the service capacity of an asset (current replacement cost).

Income approach converts future amounts (cash flows or income and expenses) to a single current (discounted) amount, reflecting current market expectations about those future amounts.

Consequently, the criterion of fair value is current market prices that are on an active market for similar real properties in the same area and of a similar state, under similar lease conditions or other contracts for the balance date, adjusted with consideration of the expenditures for the transactions. If there is no active market, the determination of IP fair value is done according to additional information. If there is no information about the IP market prices, its fair value will be determined by the present value of net cash flows from the asset.

Costs incurred during the purchase of IP are included in the historical cost of this object, but later, when determining the fair value of the object, the estimated sum of expenditures for its selling is not deducted. Consider the example of buying and estimation of IP object at fair value.

Example 2. The entity buys IP at the cost of 500 USD and acquisition costs are 10 USD. That object is entered in the books at the historical cost – 510 USD. At the end of the reporting period, the market conditions have not changed and the cost of the object remains constant – 500 USD. Consequently, expenses for buying of the object belong to losses – 10 USD and are registered in the report about the financial results. If the fair value at the end of the period was 600 USD, the financial result as a profit will be 90 USD, i.e. 600 USD-510 USD.

International Standards recommend hiring the company valuers for estimation but this is not obligatory. These services are necessary if the IP share in the assets structure is considerable, if there is difficulty to substantiate the estimation on its own or there are price changes on the market.

One more approach is the estimation of fair value using the method of discounted cash flows. This is appropriate when there is a lack of available information on the active market of similar objects in similar regions, as well as when future cash flows can be more or less predictable.

5. Cost model

After initial recognition, the IP is accounted in accordance with the cost model as set out in IAS 16 Property, Plant and Equipment – cost less accumulated depreciation and less accumulated impairment losses [IAS 40.56]. However, these objects will continue to be classified in the report of financial status as investment property.

Under this estimation model the entity should also disclose information about the fair value of these objects in the same manner as when using the fair value model. If the property object that is accounted for at fair value is classified in the category of assets held for sale, then it is estimated in accordance with the requirements of IFRS 5 from the date of achieving the criteria for a specified classification. In particular, this asset is not depreciated.

When there is a need to estimate the IP object at historical cost, the entity continues to represent all other IP objects at fair value. Although the model can be used for cost accounting in relation to one aspect of IP, taking into account all the other properties this should be carried out by following the fair value model. Despite the fact that the cost model can be used for one IP object, the accounting of all the other property should be carried out with the help of the fair value model.

Example 3. The company owns a building estimated in order to form the financial reporting of IAS as the IP object. Accounting for investment property is carried out at fair value. A decision to buy a new building for further leasing out was made. The acquirable building is located in an area where at the time of buying there was no active real estate market. Consequently, the entity decides to recognize the new IP object at historical cost - provided that the accounting of other IP object remains the same.

6. Conclusions

IP is an important constituent of the assets of many entities, especially for those entities which are engaged in operations with real property, assuming that the share of this asset in the real estate structure has been increasing in recent years.

IAS 40 would rather estimate the IP objects at the fair value. This estimation model is described and explained in more detail, as well as various situations and peculiarities of estimation at fair value are developed. IFRS 13 is also concerned with estimation at fair value, which develops three approaches to estimation at fair value: market, cost and income approaches.

As to the cost estimation model, it is recommended to use it mainly in cases when there are difficulties with the estimation at fair value.

To estimate IP at fair value is more complicated and there is a risk of false estimation. However, under inflation, permanent changes in exchange rates, and as a consequence change of market conjuncture, the remaining value of IP can significantly differ from its real market value, generally it is lower. This leads to the incorrect representation of the assets' amount, lowering their cost and the incorrect estimation of the financial situation. That it is why in a volatile economic environment the use of the fair value model makes more economic sense.

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