PROBLEMS OF REAL PROPERTY TAXATION IN LITHUANIA

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Abstract
There are three main real property taxes in Lithuania and all of them are applied to different persons and are calculated using different methodology. The revenue from real property taxes in different countries varies from 0.1% to 3% of GDP but in Lithuania it is even less than 0.1%. This revenue is allocated to municipal budget. Improvement of real property taxation system, changes in taxable value or introduction of new real property tax can increase revenue from taxation and encourage municipalities to improve living surrounding and infrastructure. Recent discussions in Lithuania about changes in real property taxation system show that new property tax for natural persons and changes of land taxable value can be introduced.
The aim of this article is to analyze real property taxation trends in Lithuania and accuracy of mass appraisal. Comparison of mass valuation and real market prices in two municipalities was accomplished. Real market price and average market price of agricultural land were compared in Rokiskis municipality, apartments market prices and average market prices were compared in Kaunas city.
The results of comparison in Rokiskis municipality show, that average market price calculated by mass appraisal is much less than real market value, therefore shifting to average market price as a taxable value will not harm land owners. Analysis of apartments average market price by mass appraisal and real market price in Kaunas city showed, that difference of values fluctuates from 7% to 98%. In all cases average market value was lower than real market value, so if the new real property tax was introduced, owners would not feel unjust because of wrong evaluation of their property.
Key words: real property, taxation system, mass appraisal

Introduction

Taxes on real property exist everywhere in one or another form. Such taxes may have negative fiscal effect on real property owners, but it also can be an efficient tool for economic stabilization, income redistribution and development of new activities in certain municipalities. Historically taxes on real property have made a great impact on development of all activities related with land and buildings, e.g. development of land survey, valuations techniques, cadastre and land registration. Governors of different countries understood land taxation as one of stabile income sources. For collecting these revenues accurately land and real property cadastre had to be created. The first well organized cadastre was created in France by Napoleon Bonaparte as a base for land taxation (Larsson G., 1996). Land plots in different regions gradually were surveyed and evaluated. This cadastre was a base of information who and how much had to pay to the state. Successful example of French experience inspired other countries to create their own land and real property cadastres and develop land or legal registers in other European countries.
Each country has its own different legal and taxation system, but in most European countries revenue from real property taxation is allocated to municipal or local budget. This is a case of Lithuania as well. Municipality can allocate these funds for most actual problems within its territory: development and improvement of roads, sewage and water supply systems, planning of better living and working environment, recreational spaces, land development for constructions, environment etc. This would help to increase real property values, which again will raise revenue from real property tax.
(Rural property tax…, 2002).
The variety of property taxation systems in different countries is huge – determination of tax base, assessment methods, tax rates are quite different (Eckert J.K., 1990). Some countries have only real estate tax, some only taxation of land, the taxable value can be based on market price, quality of soil, etc. (Land (Real Estate)…, 2001). There are three main real property taxes in Lithuania:

- Real estate tax of enterprises and organizations;
- Tax on inherited property;
- Land tax;

Property taxes are applied to different persons and are calculated using different methodology. Real estate tax is paid by enterprises and organizations for buildings, which they have registered in Real property register. Natural persons must also pay this tax if they use their real estate for business (The

tax on the immovable…, 1994). The annual tax rate varies from 0.3 to 1 percent of taxable real estate value depending on municipality. Taxable value is an average market value of real estate which is calculated by Center of registers using mass appraisal. The first market based mass appraisal was introduced in 2006.

Natural persons, who have inherited property, also have to pay tax. The object of taxation can be land and buildings on it (Law on taxation…, 1996). The taxable value of property is average land or real estate market value, calculated using mass appraisal. However, there are some exceptions when inherited property shall not be taxed - property or a part of it inherited by the children, parents, grandparents, grandchildren, brothers and sisters shall not be taxed.

The object of land tax is private land (Law on land…, 1992). Taxpayers are legal and natural persons, owners of this land. Comparing land and real estate tax we can find, that taxable object is different - land taxpayers pay only for land and don't have to pay for the buildings they built on the land plot. The land tax is paid yearly and the annual rate of land tax is 1.5 percent. Taxable value is 50 – 35 percent of nominal land value (Decision of Lithuanian Government…, 1993). The nominal value is calculated by specialists of Land Survey Institute when they are preparing documents for legal registration of land plot. Real property register has nominal values for each registered land plot.

The nominal land value has no relationship with market value, because it is based on quality of soil (Decision of Lithuanian Government…, 2002). Although there are coefficients for main use of land (agricultural, commercial, etc.), distance from towns, land use conditions and cultivation restrictions and so on, the difference of nominal and market value varies significantly in both directions (Aleknavicius A., 2001). Near big towns or in recreation territories near water bodies agricultural land nominal value is less as market value from 20 to 100 times (Aleknavicius M., 2004). Could it be that even average market value, determined by mass appraisal technique would differ in so big amount?

First market oriented mass valuation of land was accomplished in 2003 and it was intended to change nominal price of land with average market price for taxation purposes. There is a huge difference comparing these two values, e.g. on average nominal price of land was 5 time less than mass appraisal value in 2007 (Raslanas S. et al. 2010) and real market value can be higher than mass appraisal value. Now the difference can be even higher due to increased land market prices. The changes of valuation method and the use of mass appraisal for land taxation can considerably increase revenue from land taxation (Raslanas S. et al. 2010). In the European context we can see similar situation – the revenue from property taxation is low. Improving property taxation system and mass appraisal can lead to improvement of property registration system (Joumard I., 2001).

Revenue from land and real property taxation in Lithuania was 354 millions LTL in 2010 (Lithuanian department of statistics…, 2011):

- Land tax – 52.3 mln LTL;
- Inherited property tax – 3.8 mln LTL;
- Real property tax – 298.5 mln LTL.

The revenue form real property taxes in OECD countries vary from 0.1% to 3% as a percentage of total country GDP but in Lithuania it is even less than 0.1% (Organisation for Economic Co-operation…, 2011). The improvement of real property taxation system, changes in taxable value or introduction of new real property tax can increase revenue from taxation and encourage municipalities improve living surrounding and infrastructure.

There are many speculations in Lithuania concerning changes in taxable value but the Government still has not done any steps and politics probably want to earn political score discussing that issue without accepting one or another solution.

From other hand – land owners will have to pay more and their dissatisfaction may not overcome economical revenue from changed land taxation. Another problem – is mass appraisal accurate enough – will it be fair to pay average market price determined by mass appraisal which does not correspond to real market prices?

Discussions about changes in land taxable value were recently overridden by discussions about taxation of natural persons real estate (buildings and apartments). The economy crises lead to ideas of new financial sources and one of them can be introduction of new tax. The society disagrees about this issue. Some researches have noted that real estate tax will widen inequality of taxes between natural persons and enterprises (Maliene V. et al., 2005). In this case the poor people will loose even more, some of them may have to sell their houses in good districts with higher market value and move to

those with lower (Shan H., 2010). Other researches affirm, that property tax is an effective mean for achievement of fiscal and non-fiscal goals if the tax base or taxable value has certain exemptions (Sulija V., 2009).

The aim of this article is to analyze real property taxation trends in Lithuania and accuracy of mass appraisal. Legal acts, literature, descriptive and statistical analysis was used in the article. Comparison of mass valuation and real market prices in two municipalities was accomplished to achieve the results. Real market price and average market price of agricultural land were compared in Rokiskis municipality, where agricultural lands are of average fertility and corresponds to similar indicators of Lithuania. Apartments market prices and average market prices were compared in Kaunas city, to investigate the accuracy of possible natural persons taxation.

Discussions and results

The discussions about what kind of real property should be taxed and what should be the taxable value have one aim – to achieve efficient real property tax system. The characteristics of efficient tax system is unified, therefore we should analyze property taxation issues from their perspective.

First of all taxes must be economically efficient. The tax system should not confront too much with the efficient allocation of resources or profit maximization. The effect of property tax can be different. High taxes on commercial or industrial properties may give decrease in production. Difference of tax level or exemptions in different municipalities or urban-rural areas may cause reallocation of services, increased production in lower tax areas and decreased in high tax areas. High transaction stamp duties may affect the way how deal is done: gift procedure or non-real prices will be instead. Right now in Lithuania land and real property taxes have different tax rate which is decided by municipality. Different owners must pay different taxes and even more – the taxable value is determined by different methodology.

Administration of tax system must be simple and not costly. There are big costs in administering real property tax: direct costs running tax authorities and indirect costs, which taxpayers must bear. The indirect costs mostly associate with time consumption filling the tax forms or in more extreme cases hiring a lawyer. The level of different costs also depends on the tax system chosen. Direct costs for real property tax administration in Lithuania are higher than indirect costs. The direct costs include the process of finding taxable properties, their assessment and collection of tax payments and record keeping. Tax authorities distribute some of their duties to other organizations such as Centre of Registers, which accomplished mass valuation. The real property tax administration should be simple to avoid high costs and effective in the same time. Administration of land and real property tax is encumbered because of different taxes and different assessment methods in Lithuania.

Changes in economic situation require changes in tax rates and certain flexibility of tax system. Legal base of taxes should be constructed in such way, that government do not have to take specific decisions or amendments in crisis. Real property tax system will be flexible if tax base is connected with market value, because the market itself corresponds to changes in economy therefore changes in real property prices will affect real property taxes. Land taxable value has not changed for many years in Lithuania. That means that it is impossible to achieve certain goals connected to land tax – improvement of infrastructure, roads, etc. Municipalities would be able to raise market value of land within the territory and achieve positive effects only if improvements raise taxable value and taxes will rise as well. Therefore the use of market oriented land taxable value should be introduced.

The decisions related to property tax must be politically responsible. Political system has to reflect the preferences and choices of individuals. Each person have to understand what tax he is paying and why. The real property owner in general can assume that he pays for some public goods, which gives higher value to his property. So politicians in municipal level should establish some exemptions or reduce of tax if they can not give to the property enough. Otherwise they do not reflect the needs and choices of individuals and their decisions will punish them on next elections. The land and real property taxes are allocated to municipal budget in Lithuania. Municipality may reduce tax rate and influence the development of new real properties or agricultural structures in its locality. Recent discussions about changes of land taxable value to market oriented or taxation of natural persons buildings and apartments must be well discussed in society, economic and social aspects have to be presented.

Vision or thinking of fairness in society can determine efficiency of certain taxes. The tax system has to be fair treating different individuals and properties. There are two concepts of fairness: horizontal

equity and vertical equity. Horizontal equity says that equal-valued certain kind of properties must have the same assessed value. Horizontal inequity means that the difference in the assessed value based on some other criteria than market value of properties. Vertical equity occurs when property tax rates are systematically different for properties with different value. Taking in mind that in Lithuania exist three land and real property taxes with its own taxable base, assessment methods and tax rate we can not agree that we achieved fairness in property tax system. Similar buildings can be appraised in the same average market value, although they can be installed and equipped differently and its real market value is different. This is a case of discussions in Lithuania – can we trust mass appraisal, how is it accurate?

Raised problems and recent discussions in society show that property taxation system is not very efficient in Lithuania. There are two sides and effects – one is introduction of new tax for natural persons and changing the land taxable value, other is fairness and efficiency of tax system.

Analyzing these statements we can go deep into social and economical discussions. First of all – what should be taxed? The proposals were:

- certain area of residential real property if it exceeds an established amount;
- the main living property should not be taxed, only additional if an owner has more than one;
- the property for which market value is more than determined amount;
- the sum which is above the determined amount of owners properties market values should be taxed.

These proposals and ideas are dominating in discussions about establishing real estate tax for natural persons. However, in this article I will not discuss the efficiency or justice of these choices. I will rather investigate the accuracy of mass appraisal for residential real estate and land.

Mass appraisal technique

New market oriented mass appraisal technique for average land market value calculation was introduced in 2003, for real estate (buildings and fixtures) – in 2006. Every year mass appraisal is corrected taking into account market tendencies and transaction price changes (Aleknavicius A., 2005).

Mass appraisal method consists of valuation models and land or building value maps. The system of model creation is similar in both land and real estate mass appraisal. Valuation model is a formula for average market value calculation created for certain value zone. Land or building value zones are created on a map using market data on land sales. Main stages for preparation of the method are the following:

- Market data checking;
- Model specification;
- Model calibration;
- Model verification.

The valuation models are based on market data using sales comparison, income value and cost approach. The last two approaches are used for certain buildings; however in most cases sales comparison approach is used according to mass appraisal reports. The sales data used for models development must be checked because quite a large percent of transactions are registered with incorrect price. The criteria for checking are the following:

- same commercial (market) conditions;
- same payment conditions;
- absence of any movable property (buildings, other constructions);
- time factor.

An average unit prices (per ha, square meter or similar) are compared for the first three criteria. Transaction which selling price is much more or less than average or median price is not taken into account.

Sales date analysis is very important applying comparable sales approach. There are different methods to determine the time adjustment:

1. Pair sales analysis. Similar objects sold at different time are compared and the adjustment is calculated for certain period of time;
2. Re-sale analysis. Different transactions of the same object accomplished at different time are analyzed;

3. Sales price analysis using approximation curve. The sales data is put into the chart and approximation curve is drawn automatically.
4. Using multiple regression analysis.

Each year more and more transactions are taken into consideration when preparing valuation models, therefore their price must be corrected due to changes of market price.

Model specification is determination of factors influencing market value. First of all different categories of real property or markets are separated according to its use. Different market or real property use may be influenced by different factors, so this step is crucial for constructing valuation models for each of them. Land mass appraisal models are divided by

1. Agricultural land;
2. Residential plots of multi – apartment buildings;
3. Residential plots;
4. Industrial use;
5. Commercial use;
6. Gardening association plots.

Building mass appraisal models are divided by:

1. Administrative use;
2. Dormitories;
3. Apartments;
4. Garages;
5. Culture, education and scientific use;
6. Additional structures;
7. Additional rooms;
8. Recreation and sport use;
9. Constructions in gardening association;
10. Individual houses;
11. Hotels, shops, services, restaurants.

For these different markets or uses of real property factors, influencing the value are determined. The correlation is made among the pairs of factors and in those which correlation coefficient is big one factor is rejected.

The location factor is expressed by drawing land value zones. It is recommended that new value zone should be defined if the difference of real property market value is more than 15%.

The following stage is model calibration – determination of correlation coefficients in valuation models. Multiple regression analysis is accomplished to determine these coefficients in different value zones. Model verification is the last stage of the whole mass appraisal process. It is accomplished by statistical (mean, median, dispersion, standard deviation, correlation coefficient, Student criteria, etc) and graphical methods. The outputs are formulas for certain type of land in different value zones.

Each year a number of value zones are increasing, e.g. during 2003 – 2005 land value zones increased more than twice (Bagdonavicius A., et al., 2006). The increase in value zones burden the whole mass appraisal system, but it gives more accurate appraisal of average market value. More developed mass appraisal system will not result in large growth of value zones but it may result in growing types of valuation models and more factors affecting real property value included in to the models.

Analysis of different real property market prices and average market prices, which could be used as taxable value

There is a possibility that land or real estate taxable value determined by mass appraisal is different from real market value. Should we use market oriented approach for land taxation? What can be the consequences of that? Should we introduce new property taxes for buildings, apartments and other real estate for natural persons? Will these taxes be just in comparison with other taxes and will the average real property market value (taxable value) correspond to real market value?

The comparison of real market prices and average market value were accomplished in order to get answers to these questions. Agricultural land market prices in Rokiskis district and apartment market prices in Kaunas city were compared with average market.

The data on 70 agricultural land parcels market prices from transactions and advertisements were collected during 2008 – 2010. Agricultural land soils quality and land market activity is similar to average indicators of Lithuania. Land market activity due to real property crisis was lower in 2009 – 3% of all registered agricultural land plots, however it increased to 3.1% in 2010.
An average market value was calculated by mass appraisal formulas for the largest value zone, where agricultural activity is predominating. The changes of average market value during analyzed years are very different and vary from 29% to 3%. These fluctuations were the consequence of uncertain situation in the whole Lithuanian real property market. The real market prices of agricultural land during 2008 – 2010 shifted even more – 47% and 24%. But the level of market prices and average market prices according to mass appraisal is different (fig.1).

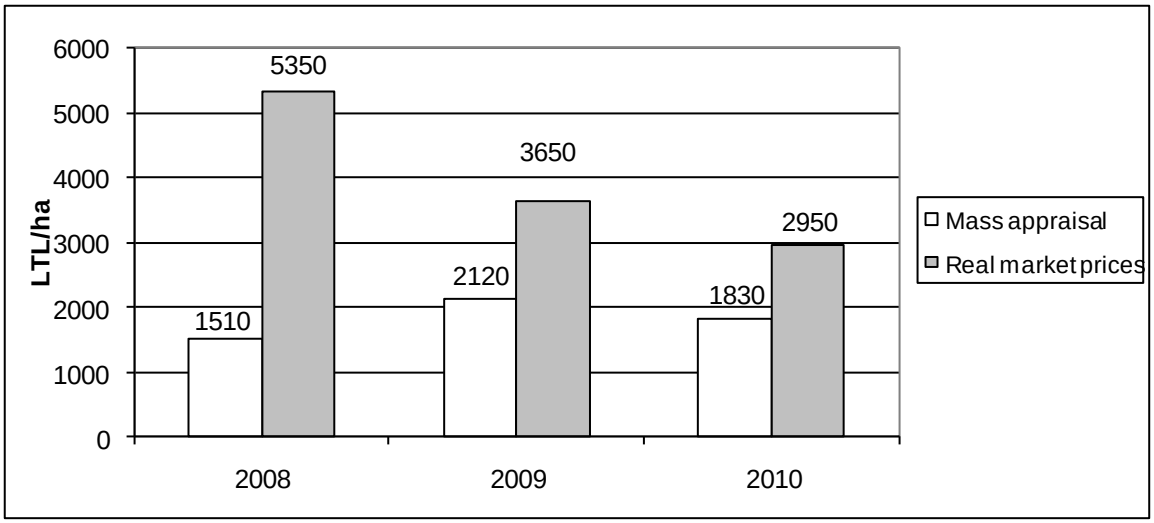

Fig.1. Comparison of agricultural land real market prices and average market prices

The biggest difference between real market price and average market prices can be noticed in 2008 – more than 2.5 times, but gradually in 2009 and 2010 this difference is diminishing – 72% and 61%. There is a reason to anticipate that improving mass appraisal models and technique determined average market prices to come closer to real market prices. The results of comparison shows, that even if land tax is calculated using average market price, agricultural land owners will not be discriminated and pay more than their land is worth on the market.
Introduction of new real property tax for natural persons can bring much dissatisfaction from property owners, but it can also significantly increase the revenue from taxes. There are many ways or models how such tax can be introduced and who will be obliged to pay, but is average market price of property correspond to real market value. There were appeals on more than 2000 mass appraised real property objects in 2006 when mass appraisal of real property was introduced and enterprises had to pay real property tax from average market value (Bagdonavicius A., et al., 2006). Therefore the accuracy of mass appraisal would be very important if the new tax for natural persons was introduced.
70 apartments in different places of Kaunas which were sold in 2010 were analyzed in order to evaluate the accuracy of residential real properties mass appraisal. Room number, area, location and construction material were different; therefore different mass appraisal coefficients were applied. Calculations of average market value by mass appraisal and real market value were compared (fig.2).

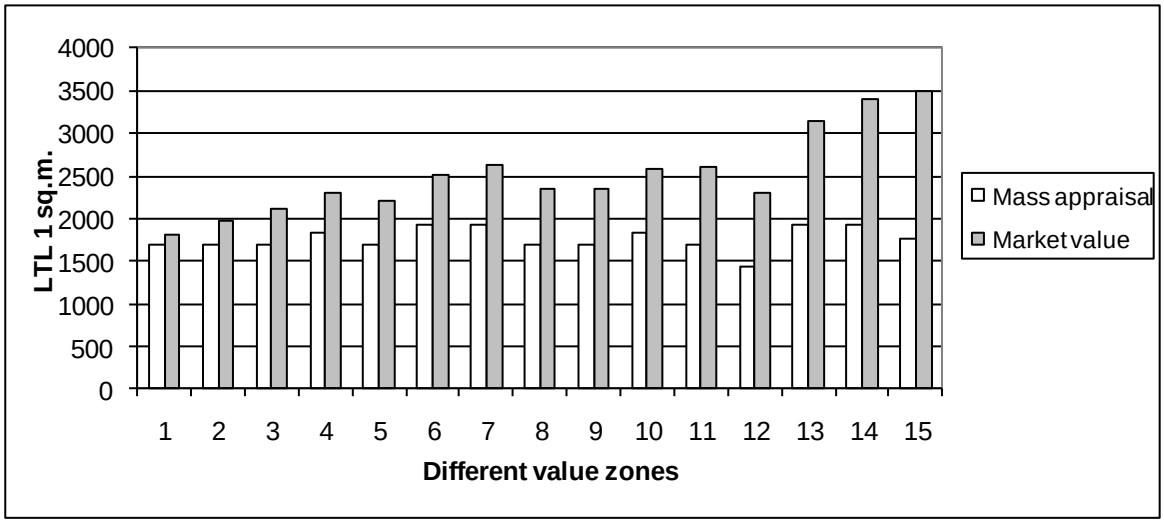

Fig.2. Comparison of apartments real market prices and average market prices

Analysis showed that difference of mass appraised average values and real market values fluctuates from 7% to 98% or 43% on average. In all cases average market value was lower than real market value. It means that even if the new real property tax was introduced, owners would not feel unjust because of wrong evaluation of their property.

Conclusions

1. Real property tax system in Lithuania is not efficient, flexible and fair – there are three different real property taxes with its own taxable base, assessment methods and tax rate. The revenue form real property taxes are less than 0.1% of total country GDP. Improvement of real property taxation system, changes in taxable value or introduction of new real property tax can increase revenue from taxation and encourage municipalities improve living surrounding and infrastructure.
2. Recent discussions in Lithuania about changes in real property taxation system show that new property tax for natural persons and changes of land taxable value can be introduced. The use of market oriented land taxable value would help municipalities to raise market value of land within its territory by developing infrastructure and creating more attractive conditions for living and investments.
3. Shifting to average market price as a taxable value will not harm land owners. The results of comparison in Rokiskis municipality show, that average market price calculated by mass appraisal is less than real market value: in 2008 – more than 2.5 times, in 2009 and 2010 this difference is diminishing – 72% and 61%. Improving mass appraisal models and technique average market prices can come closer to real market prices.
4. The new property tax for natural persons can be introduced soon and its target would be mostly residential properties. Analysis of apartments average market price by mass appraisal and real market price in Kaunas city showed, that difference of mass appraised values and real market values fluctuates from 7% to 98% or 43% on average. In all cases average market value was lower than real market value. It means that even if the new real property tax was introduced, owners would not feel unjust because of wrong evaluation of their property.

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Резюме

АЛЕКНАВИЧЮС АУДРЮС. ПРОБЛЕМЫ НАЛОГООБЛОЖЕНИЯ НЕДВИЖИМОСТИ В ЛИТВЕ

В Литве есть три главные налоги на недвижимость, которые применяются к разным лицам, а методика их вычисления тоже разная. Доходы от налогов на недвижимость в разных странах варьирует от 0.1% до 3% от ВВП, но в Литве доход даже меньше 0.1%. Этот доход распределяется в муниципальный бюджет. Улучшение системы налогообложения недвижимости, изменения в налоговой стоимости или внедрение нового налога на недвижимость может увеличить доходы от налогообложения и поощрять муниципалитеты для улучшения жизни окружающих и инфраструктуры. Недавние дискуссии в Литве об изменениях в налогообложения собственности показывает, что может быть введен новый налог на недвижимость для физических лиц и изменения налогооблагаемой стоимости земли.

Целью данной статьи является анализ тенденции налогообложения недвижимости в Литве и точность массовой оценки. Для этого были сравнены результаты массовой оценки и реальных рыночных цен в двух муниципалитетах. Реальная рыночная цена и средняя рыночная цена на сельскохозяйственные земли были сопоставлены в Рокишкис муниципалитете, рыночные цены на квартиры и средние рыночные цены были сопоставлены в Каунасе.

Результаты сравнения показывают, что средняя рыночная цена сельскохозяйственные земли рассчитана путем массовой оценки значительно меньше реальной рыночной стоимости, поэтому переход к средней рыночной цене, как налогооблагаемой стоимости не будет вредить землевладельцев. Анализ средней рыночной цены рассчитанной путем массовой оценки и реальной рыночной цены квартир в городе Каунас показали, что разница значений колеблется от 7% до 98%. Во всех случаях средняя рыночная стоимость была ниже, чем реальная рыночная стоимость, так что, если новый налог на имущество был бы введен, владельцы не будут чувствовать себя несправедливо из-за неправильной оценки их имущества.

Ключевые слова: недвижимость, система налогообложения, массовая оценка.

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