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PRICING PECULIARITIES OF APARTMENT HOUSE MANAGEMENT IN LATVIA

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Abstract. Topicality of the mentioned theme is determined by fact that there are no common understanding in Latvia about formation of administration price and its content. Aim of the research is to analyse in common a price formation mechanism in Latvia, to make price comparison between various property managers in Latvia as well as to evaluate the algorithm of debt collection in order to improve the efficiency of collection process. Based on the obtained research results to develop economically based proposals of price determination mechanism in dwelling house management. Results obtained during the research regarding the peculiarities of price formation of apartment house management and clarified costs allow evaluating the implementation process of State's planned reform in 1995 about privatization of state and municipal dwelling houses and its impact on apartment house management field in Latvia. The substantiates mentioned above obtain the proposals in the research process for local apartment house management and development in long term.

Keywords: apartment house, management service fee, management of an apartment house, pricing peculiarities, housing market.

Jel classification: R31, P42

1. Introduction

The right to housing is one of the most important fundamental rights that ensure a wholesome existence of a man.

The aim of this privatization process was to develop the real estate market and to transfer the ownership rights of State or local government owned housing fund to the residents. Much of the Latvian tenants used their rights and privatized apartments they were renting together with the deemed share of the property (house). Consequently, the tenant became the owner of his apartment and the co-owner of a multi-storey apartment house.

Since 1995, when the law "On Privatization of the State and Local Government Owned Houses" was issued, it can be evaluated whether the proposed reform has been successful. According to the data of the Central Statistical Bureau, 20753 multi-storey apartment houses owned by the State or local government that make 53 % of the total numbers of multi-storey residential houses in Latvia were placed under the privatization process (Kučinskis 2006; Liepa 2011; Magone 2011).

Huge number of tenants has privatized their apartments but in general this aim has failed, it might be even said – it has lead to the deadlock because in the law "On Privatization of the State and Local Government Owned Houses" the proce-

dure how the owners of the privatized apartments should organize the transfer of the possession rights of the residential houses and choose the way of administration and facility management of the co-owned property. Particularly, in Riga the property owner has not been chosen, namely, some of the apartments are privatized but the house has not been taken in the possession.

The topic of the study has been chosen in order to provide information on the price formation principles of multi-storey apartment house management and costs, except for single-dwelling houses, as well as a comparison with the Estonian experience in this field is provided.

The aim of the presented study is to analyze the entire mechanism of price formation in Latvia and, on the basis of the results obtained, by assessing the legal and economic reasons for formation of the facility management fee and the need, to develop proposals for development of effective facility management pricing system in Latvia.

In developing the study, different methods were used, such as the exponential smoothing method and the moving average method for predicting the facility management price in 2011 as well as the correlation matrix and the regression model were used for predicting accounts receivable balance by the end of 2011.

The study is based on both published and unpublished sources of information, books on pricing principles and real estate management, publications, scientific articles of international conferences, laws and regulations of the European Union, laws and other documents related to the economy and construction industry of Latvia, Cabinet of Ministers (hereinafter referred to as the Cabinet) Regulations, sources of the Central Statistical Bureau of Latvia and the Ministry of Economy of Latvia (hereinafter referred to as the Ministry of Economy), different internet sources as well as interviews of different experts.

The objectives of the study were determined as follows:

- Facility management market and its types in Latvia are analyzed.
- The nature of price formation and economic importance is assessed.
- Price formation peculiarities and cost development principles in Latvia are compared.
- Legal and regulatory framework of the price calculation principles of facility management fee is evaluated.
- Analysis of debt recovery algorithm and its qualitative and quantitative indicators was provided.
- Occupational safety and work environment protection requirements for office workers were investigated.
- Based on the results of the studies performed, conclusions and recommendations were developed.

The following restrictions of the study were defined: in the statistic database of the Republic of Latvia there is no data regarding facility management fee for 2010 available; and facility management fee for 2010 was determined by the authors of this study who determined it according to the data received from the questionnaires which were provided to 20 different facility management companies in Latvia.

The topicality of the afore-mentioned issue is determined by the fact that in Latvia there is no common understanding of the pricing principles of facility management fee and its content. Price calculation is very complicated and difficult issue because the price is set for at least 1 year and the real estate manager, offering pricing offer to the owner of the multi-storey apartment house should consider all potential risks a year ahead. Although the legislature has set the minimum requirements referring to residential building management, many of the managers of companies providing facility management services on the market do not respect them, thus offering very low prices, which, of course, are favorable for property owners of the

multi-storey apartment houses. Taking into account the current economic situation in the country and low solvency of inhabitants, the choice of the residential apartment building owners in favor to the cheapest facility management offer can be understood (Saeima of the Republic of Latvia 2010; Kalns 2010).

Although it should be recognized that apartment owners of multi-storey residential house with shared ownership do not understand the responsibility of the facility management and are not aware of the consequences of not complying with the set requirements.

2. The Apartment housing management market quantities and its types in Latvia

Property management involves the processes, systems and manpower required to manage the life cycle of all acquired property as defined above including acquisition, control, accountability, responsibility, maintenance, utilization, and disposition.

An apartment property is one of the most common types of the real estate in Latvia. It has appeared as a result both of the privatization of state or local government owned residential buildings as well as from 2006 to 2008 when people very actively purchased real estate properties for the mortgage loans (Vanags 2010; Vanags, Geipele 2008).

Persons with different understanding of property and economic approach became owners of multi-storey apartment houses both as a result of privatization and mortgage lending process. For the part of the former tenants, the legal status of the apartment owner is associated more with exclusive benefits and less with property-related duties and responsibilities.

According to the data, as at 1 January 2010, in Latvia in total there were 352 087 residential houses including 39 106 houses with 3 or more apartments. In percentage this makes 11.1% of the total number of houses. In Riga, as of 1 January 2010 there were 4178 houses with 3 or more apartments which account for 35% of the total number of houses (from 11 913 houses with 3 or more apartments) were not privatized. The authors conclude that it is quite large percentage to affect the development of real estate management market (Database of the Central Statistical Bureau 2010; Building maintence rules and regulations for territory maintenance of the Riga City 2011).

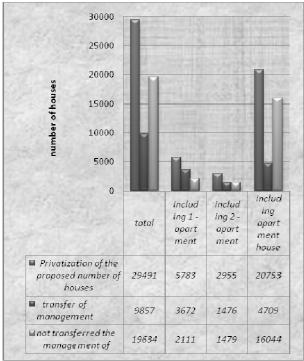


Fig.1. Number of the residential houses owned by the State or local government offered for privatization and the management status of these houses as at 1 January 2010 (Source: Database of the Central Statistical Bureau 2010)

Multi-storey apartment buildings with 3 or more apartments, altogether 20753 houses, from which to only 4709 or 20 % of total number of houses facility management service is provided. If 86% of the apartments are privatized, then it should be highlighted that only 20% of residential buildings are privatized (Report of the Ministry of Economy 2009).

This indicates that the apartment owners who have purchased these apartments as a property is either very inactive or there is nothing that motivates them to take over the house in their possession, or they are satisfied with the current situation when the apartment owners may apply to the local municipality and request the repair of the deemed share of their house and require to provide facility management services at the expenses of the municipality.

Paragraph 1 of Article 15 of the law "On Residential Property" determines that the apartment owner community is an administrative body of a residential building. From which it follows, that apartment owner community is responsible for all decisions and actions relating to this property. This provision is reinforced by Paragraph 1 of Article 5 of the Law "On Residential House Management" which states that the apartment owner is responsible for ensuring residential house management services (Law on Residential House Management 2010; Apartment Property Law 2010).

Consequently, this community has to decide whom the facility management tasks will be delegated to. There may be different solutions to this issue.

In figure 2 the possible forms of the management of a multi-storey residential house are shown.

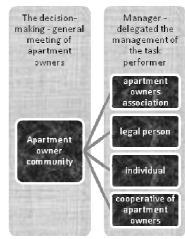


Fig.2. Possible forms of the management of a multistorey apartment house (Source: Law on the Privatization of State and Municipal Property 2009; Law on Residential House Management 2010)

These institutions are often mixed up, namely, the apartment owner association or the board of the cooperative of the apartment owners is entitled to decide upon all questions in the name of apartment owners and thus, a general meeting of apartment owners is replaced. It's the biggest mistake that owners do not understand.

The difference can be only in the case if the apartment owners in their first general meeting have decided that in future the full range of decisions related to the house management and its maintenance can be made by the administrator who is entrusted with the management task. This situation may arise when owners do not want to deal with issues regarding their property and they have it fully delegated to the authorized person.

In particular, in the case of co-operatives the property owners believe that they cannot change anything because the board of the co-operative and its owners are the ones who make decisions on all issues. At any time the owners may convene a general meeting and make decisions who will continue to administer their property and what rights are delegated to the administrator and this authorization issue is stipulated in the facility management contract.

3. Legislation framework for price formation in Latvia

Last years in the field of multi-storey residential house management have been very important, as practically the entire legislative basis that has to be followed when providing facility management services for multi-storey residential houses has been re-established.

In Figure 3 legislative framework of the Republic of Latvia which determines the price formation principles of the facility management is summarized.



Fig.3. Legislative framework of the Republic of Latvia that determines the price formation of the facility management (Source: Cabinet Regulations No.1014. 2010)

Article 13 of the Apartment Property Law states that apartment owners are responsible for covering of the facility management expenses and the cost which is determined by the community of apartment owners. While one of the goals of the law "On Residential Housing Management" requires that facility management process of each residential building should be continuous and this continuity shall be ensured by residential house owners, meaning, that this is the responsibility of apartment owners to provide facility management services. According to Article 927 of the Civil Law, the ownership shall be the full right of control over the property, i.e., the right to possess, use it and obtain all possible benefit from it, dispose of it and, according to the prescribed procedures, claim its return from any third party by way of the ownership requirement (Civil Law. Part 3. 2010; Civil Law. Part 4. 2010; Civil Procedure Law 2010).

The facility management activities which are compulsory and the other activities that must be carried out are clearly determined by the Law "On Residential Housing Management". The failure of providing minimum residential building facility

management services or improper activities might cause danger to human life, health, safety, property or the environment (Saeima of the Republic of Latvia 2010; Oša *et al.* 2010).

4. The nature of price formation and its impact on economy and house management

At the beginning of price-setting process, one must first be aware of what are the business objectives of the company, for example, to gain market share or to compete with others. When the objectives are identified, all data referring to the expenses which are included in the calculation of the service price should be compiled in order to determine the zero point. In calculation of the zero point a market research on consumer demand should be conducted in order to assess the existing situation of the zero point calculation (Дейли 2004).

In addition to the market research, competitor prices must be taken into account in order to be able to analyze and plan the marketing strategy of price promotion in the market — whether this price is lower than the prices offered by the competitors, how may this affect the service price and similar forecasts and predictions regarding marketing issues should also be considered (Генцлер, Лыкова 2009; Крэстрем *et al.* 2001).

Taking into consideration the data of the performed analysis, the strategy of the service price can be chosen, namely, it can be decided whether the price will be set at a level as the service cost is or it will be determined to be the same level as the competitors have, or a decision to work below the service cost for a particular time period in order to enter the market can be made. This type of strategy is very widely used in the management of multi-storey apartment houses, when competitors purposefully are marketing themselves by offering very attractive low prices for customers. In this case the clients must be very careful, because for a while this price may work, but at one moment the service can become worse and then from the effective service price offer can very rapidly transfer to a defect and the set objectives may not be met.

Following this price setting process, the company can very precisely determine the desired price for the provided services which is the basis of achieved the chosen objectives and customers have a demand for a service.

The last step that has to be performed in the price determining process is setting of the actual price. This price is set taking into account the analysis of all relevant factors that were in place during the price determination process.



Fig.4. Price setting process (Source: Marketing basics 2007; Praude 2009)

Omitting some of the process steps, the business operator, if the price of the provided service is determined incorrectly, can either incur losses or do not have sufficient demand from customers if the price is set too high. Complying with this process is particularly important in provision of the facility management services of the residential houses because the administrator is responsible for determining the service price for one fiscal year. If all the costs are not taken into account, the administrator may incur a loss. In recent years it is not an easy task to be completed because the government quite frequently changes the tax application system that is difficult to predict.

5. Apartment house management and mainteance costs and peculiarities of price formation

In order the apartment owner is able to assess property maintenance costs of his apartment and to understand price formation mechanism, the owner should be aware of the activities that are necessary to be provided in order to ensure the facility management and maintenance of the multi-storey apartment house and understand the development of costs.

The residential property maintenance costs, which consist of three parts. The first of which are the actual shares of the residential property including maintenance costs of a particular apartment marked in the inventory file, the other is the utility services and the third – maintenance costs of the shares of co-ownership of the residential property or the price formation mechanism of the facility management service.

Residential property maintenance cost consists of the expenses of services which the apartment owner according to the individual order requires from the service provider. The apartment owner can use these services and can also refuse from them of his own free will.

While the expenses for the utility services and the maintenance cost of the shares of joint ownership of the residential property are the cost upon which multi-storey apartment house owners should decide. If an apartment owner does not agree with any of these services, in any case, he shall be binding on all charges for which 50 % + 1 vote of the residential home owners have voted (Cabinet Regulations No.906. 2009; Cabinet Regulations No.907. 2010; Real estate maintenance 2004; Rupkus *et al.* 2007).

If the maintenance and improvement of individual property is the responsibility of each owner, then qualitative facility management and administration of the residential house already depend on the interest and collaboration of all apartment owners. In many cases, the chosen form of the facility management and disagreement among the owners on deciding upon important issues is one of the reasons for the failure of successful facility management.

To compare the prices among different companies in Latvia providing facility management services the survey, in which the March 2011 invoices issued to the apartment owners were examined, was carried out. Two types of houses were compared - one type - with the manageable facility area over 1000 m² and the other with the manageable facility area over 3000 m².

Each city may have different experience regarding provision of utility services, for example, in Ventspils the real estate management company provides only facility management services, all other utility services are charged separately to a particular apartment owner. The similar situation is also in Jelgava - "Jelgava Real Estate Management Board" Ltd. does not provide apartment owners with an invoice for providing heating services and hot water (Real estate management in KSA 2011).

Summarizing the data regarding the expenses included in the facility management service the authors of this study conclude that different real estate managers in different cities show and account in the invoice this facility management fee differently - in accordance with their own developed methodology and experience. For example, the municipal limited company "Ventspils Real Estate" shows the facility management fee in one position, whereas the facility management fee in the invoices issued by the "CDzP" Ltd. are identified in several positions. The charge either for cost savings reserve fund or for renovation or repair work costs, which result in the increase of the facility management service fee per 1 m² are accounted separately (Geipele et al. 2011).

Consequently, the authors conclude that management fees among different providers of facility management cannot be compared. In order to do so, the cost items of which the facility management fee consists of and the aim of the offered service should be known.

Therefore, comparing invoices of different multi-story residential house facility management, apartment owners and competitors must be aware enough of what factors are taken into account when the prices for facility management are compared. In determining the price of the facility management service, regardless of the set objective, competitor activities and market price should be taken into consideration. It is important to consider what items are included in the competitors' offer a service basket - is it just a marketing tool and afterwards apartment house owners are overcharged for this service, or the price is appropriate for the particular service offer. If the determined price and the offered service package are similar, then the company can work on the development of its image and improvement of quality of the provided service.

Since 2002 in Latvia in average there has been an increase in facility management fee per 1 m². A very significant increase has been observed from 2007 till 2008 - an average of 42 %.

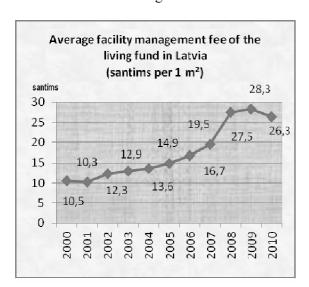


Fig.5. Average facility management fee of the living fund in Latvia (santims per 1 m²) (Source: Database of the Central Statistical Bureau 2010)

Since 2000 in Ventspils there has been the highest facility management fee. Till 2004, comparing facility management fee to the average level of this fee in Latvia, in Ventspils it has been 51 % higher than in other cities. From 2005 onwards Ventspils has lost its leader position and is replaced by other cities like Liepaja and Jurmala and only in 2009 the highest facility management

fee was in Riga (Facility management of the living fund in Riga: Riga City Council 2011).

Regarding the facility management fee in Riga, it is important to be mentioned that till 2007 Riga municipal administrations of housing maintained very low facility management fee, for which the facility management services, mainly ensuring provision of minimum requirements of house improvement and not taking into account the depreciation of constructions and communications and protection of the environment, were provided.

In Riga there is quite large percentage of buildings to which facility management services are provided by Riga municipal administrations of housing (35 %). As in the Cabinet Regulations No.1014 of 2008 establishing the procedures of calculation of the management fee, Riga Municipal House Administrations began to include in the invoices not only facility management fee but also the costs of repair and reconstruction work that are required for house improvement. The authors conclude that due to the afore-mentioned Regulations in 2008 in Riga the facility management fees increased on average by 48 % (Cabinet Regulations No.1014, 2008).

Facility management fee is calculated according to the definite algorithm that is determined by the law, Cabinet Regulations and the signed contract for providing facility management services in which the facility management task has been agreed and specified and the decision regarding the amount of facility management fee is made by the apartment owners, so the facility management fee for the next period but the final decision is made by the apartment owners.

6. Conclusions

Taking into consideration previously analyzed issues and the summary of the afore-mentioned survey results the following conclusion can be drawn up.

In total there were 20753 multi-storey apartment buildings which must be privatized (in which there are 3 or more apartments), 4709 or 20 % of the total number of residential houses use facility management service. If 86 % of the apartments are privatized, then only 20 % of the residential buildings are privatized (Geipele *et al.* 2011).

In many cases, the chosen form of facility management and disagreement among the apartment owners regarding decision making on important issues is one of the reasons for the failure of the facility management, because qualitative administration and provision of facility management services of multi-storey apartment building

depend on the interest and collaboration of all apartment owners.

The price may have a significant impact on the offered service types, frequency of providing these services, existing situation regarding communications and building structures included in the service offer as well as not only the residential area that has to be taken care of, but also indoor premises and the area of allotted land to be cleaned.

Facility management fee is calculated according to the definite algorithm that is determined by the law, Cabinet Regulations and the signed contract for providing facility management services in which the facility management task has been agreed and specified.

A common template of the invoice, which is issued by the administrator of the residential house to the apartment owners, should be determined by the law.

In Latvia there is different experience regarding the template of the issued invoices – there are invoices in which the facility management fee is identified in one position but at the same time there are also invoices in which this fee is accounted in several positions. This misleads apartment owners on the real amount of the management fee of their property.

In order to assess economic exploitation of an apartment, the apartment owner is advised to take into account the total amount of all invoices and divide this price per 1 m².

Then, relatively, not only the facility management fee relevance can be evaluated but also the percentage of other utility costs can be assessed. This type of analysis for the apartment owner would help to be aware of the need of renovation and provide an opportunity to minimize the total sum to be paid according to the invoices issued on the facility management fee and find an economical and reasonable utility consumption.

Maximum time frame for recovery of the debt can be starting from 10 month up to 36 month.

The findings obtained during the research justify the necessity for further studies regarding development of modern industrial space also in Latvia, for its sustainable development according to the changes in global climate by offering a specific model development.

References

Apartment Property Law: Law of the Republic of Latvia /Latvijas Vēstnesis. [online], [accessed on January 28, 2011]. Available from Internet:

http://www.likumi.lv/doc.php?id=221382

Building maintence rules and regulations for territory maintenance of the Riga City: Binding regulations

of Riga City Council No.125. /Latvijas Vēstnesis. [online], [viewed on January 28, 2011]. Available from Internet:

http://www.likumi.lv/doc.php?id=185097

- Civil Law. Part 4. Liability Rights: Law of the Republic of Latvia. /Latvijas Vēstnesis.- [online], [accessed on January 28, 2011]. Available from Internet: http://www.likumi.lv/doc.php?id=90220
- Civil Law. Part 3. Property Rights: Law of the Republic of Latvia. /Latvijas Vēstnesis [online], [accessed on January 28, 2011]. Available from Internet: http://www.likumi.lv/doc.php?id=90221
- Civil Procedure Law: Law of the Republic of Latvia. / Latvijas Vēstnesis. [Online], [accessed on January 28, 2011]. Available from Internet: http://www.likumi.lv/doc.php?id=50500
- Database of the Central Statistical Bureau .Website of the Central Statistical Bureau. *Review of the Rent Market*, autumn 2010 [online] [accessed on January 28, 2011]. Available from Internet: http://www.csb.gov.lv/dati/statistikas-datubazes-28270.html-0
- Facility management of the living fund in Riga/ Website of the Department of Housing and Department of Riga City Council. [online], [accessed on January 28, 2011]. Available from Internet:
- http://mvd.riga.lv/uploads/free/stat/statdzm07c.xls
 Geipele, I.; Geipele, S.; Plavina, B.; Stamure, I. 2011.
 Pricing Principles of Apartment House Management
 in Latvia., Selected International Proceedings of
 Economics Development and Research: E-business,
 Management and Economics 25: 271–277.
 ISBN978-981-07-1016-3; ISSN2010-4626.
- Kalns, J. Apartment house management in Latvia, Lithuania, Estonia. /Latvijas Vēstnesis. [online], [viewed on January 18, 2011]. Available from Internet: http://lv.lv/?menu=doc&id=199251
- Kučinskis, J. 2006. *Housing Policy and its instruments*. Rīga: AS Lauku avīze 430 pp.
- Law on Residential House Management: Law of the Republic of Latvia /Latvijas Vēstnesis, [online], [accessed on January 28, 2011]. Available from Internet: http://www.likumi.lv/doc.php?id=193573
- Liepa, V. On apartment building management and maintenance fees in the 2011. / Municipal website of the Oline County. [online], [viewed on January 19, 2011]. Available from Internet:
 - http://www.olaine.lv/jaunumi/par-daudzdzivoklumaju-parvaldisanas-un-apsaimniekosanas-maksu-2011gada
- Magone, I. Housing management service and trouble business. /Latvijas Vēstnesis. [online], [viewed on January 18, 2011]. Available from Internet: http://www.lv.lv/?menu=doc&id=204848

Marketing basics. 2007. Rīga: Jumava. 310 pp.

Real estate maintenance. 2004. Rīga: LNPAA. - 139p.

Oša, I.; Auders, M.; Krauze, I. 2010. Facility Management of Residential Houses. Riga: Zvaigzne ABC. 184 pp.

Provisions of Sanitary Maintenance of Dwelling House: Cabinet Regulations No.906. /Latvijas Vēstnesis.

- [online], [accessed on January 28, 2011]. Available from Internet:
- http://www.likumi.lv/doc.php?id=218830&from=of f
- Provisions for routine repair works, technical maintenance, communication survey and the existing equipment of residential house: Cabinet Regulations No.907. /Latvijas Vēstnesis. [online], [accessed on January 28, 2011]. Available from Internet: http://www.likumi.lv/doc.php?id=218831&from=of f
- Real Estate Management in KSA. / Website of the "Māju serviss KSA". [online], [accessed on January 20, 2011]. Available from Internet: http://www.ksa.lv/lv/par-uznemumu/15-par-mums/33-namu-apsaimniekosana
- On privatization of state and municipal dwelling houses: Law of the Republic of Latvia. / *Latvijas Vēstnesis*. [online], [accessed on January 27, 2011]. Available from Internet:
 - http://www.likumi.lv/doc.php?id=35770&from=of
- Review on process of the housing privatization until December 31, 2009. / Report for the Ministry of Economics. 2010. Rīga: Valsts akciju sabiedrība "Privatizācijas aģentūra". 7 p.
- Rupkus, J.; Zode, L.; Taube, D. 2007. *Apartment house management*. Riga: Zvaigzne. 78 pp.
- Praude, V. 2009. Marketing. Rīga: SIA Jumis. 665 pp.

- The procedure for calculating the facility management and administration fee of a residential house: Cabinet Regulations No.1014. /Latvijas Vēstnesis. [online], [viewed on January 28, 2011]. Available from Internet:
 - http://www.likumi.lv/doc.php?id=185278&from=of
- Strategy for Sustainable Development of Latvia 2030: adopted by the Saeima of the Republic of Latvia. / *RAPLM*. [online], [viewed on April 10, 2011]. Available from Internet:
 - http://www.latvija2030.lv/page/1
- Vanags, J. 2010. *Real estate economy.* Riga: RTU publishing house, 297 p.
- Vanags, J.; Geipele, I. 2008. Latvian economy and the impact of the development of construction sector to the real estate market. / Monograph. Riga: RTU publishing house. 196 pp.
- Генцлер, И. В.; Лыкова, Т. Б.2009. Профессиональн ое управление многоквартирными домами: [en. Professional management of multifamily housing] *Information and methodological manual*. Тверь. 114 pp.
- Дейли, Д. Л. 2004. Эффективное ценообразование основа конкурентного преимущества [Pricing for Profitability: Activity-Based Pricing for Competitive Advantage]. Москва. 304 pp.
- Крэстрем, Ю et al. 2001. Унод за недвижимостью. Справочник для владелца. [Property Maintenance. Owner Manual Book]. Таллин: EKHHL. 61pp.