

RENTAL HOUSING MARKET IN RIGA: PRICE DETERMINANTS AND LESSON KEYS OF HELSINKI

Sindija BALODE¹, Uldis KAMOLS²

^{1,2}Riga Technical University, Riga, Latvia
Corresponding author's e-mail: Uldis.Kamols@rtu.lv

Abstract. The research focuses on the rental housing market in Riga and reveals that among factors that affect the rent level in neighbourhoods of Riga the most are distance from the city centre, neighbourhood safety, quality of housing and transport infrastructure, access to shopping malls, and employment opportunities. The aim of the research is to analyse the housing market in Riga, by putting a special focus on price determinants and lesson keys of Helsinki. Quantitative and qualitative research methods are used in the paper with the biggest contribution being extraction and analysis of data about more than 1800 rental apartments in Riga from the largest Latvian online real estate advertisement platform. Quantitative analysis is based on investigating relationships between average rent levels in different neighbourhoods of Riga and index values of 23 urban environment factors. In addition, the rental housing market in Helsinki is researched, emphasising few guidelines for rental housing market improvements in Riga, such as introducing government subsidies.

Keywords: *Helsinki, neighbourhoods, rent determinants, rental housing market, Riga*

INTRODUCTION

Cities are extremely diverse places, offering home to more than 54 % of world's population: more than four billion people live in urban environment today. In Latvia, the level of urbanization reached 67 % in 2016, which is still significantly lower than in most developed countries; however, just the capital of Latvia, Riga, hosts 33 % of country's population.

One of the very basic human needs is decent housing, and, in large cities, there are always minor and major issues when satisfying this need. A city never offers a homogenous housing market; urban dwellers have different needs, so they are offered different types of accommodation in rather contrasting neighbourhoods of the city. While many prefer to own apartments*, significant fraction is either not able to afford an apartment or not solvent enough to be granted a loan from a bank. For some, their individual preferences determine their inclination towards rental apartments, especially for younger people who prefer mobility. As a result, around 25 % to 30 % of people in the European Union rent their apartments.

Among and within neighbourhoods there are several factors that determine the rent level of a dwelling, to name a few: quality of housing, proximity of

* this share is especially high in Latvia due to historical reasons such as privatization boom

employment and educational institutions, access to social services, development of transport infrastructure, etc. Shortage of housing, overpriced rent/unaffordable housing, as well as imbalances between the quality of housing, its surroundings and rent are among the many issues city residents face when looking for accommodation.

The authors have had an opportunity to get to know the situation of the rental market of Helsinki more closely; the situation has aroused interest in getting to know, analysing and comparing the situation in Riga. This paper focuses on the rental market in Riga, Latvia, with the purpose of analysis of the main determinants of rent levels in Riga and possible directions of rental housing market development based on the example of Helsinki.

1. METHODS AND PROCEDURES

One of the most significant data shortcomings in the research was a lack of comprehensive official data about rental prices in Riga. For research purposes, data from the largest Latvian online real estate advertisement platform (Rent prices, 2018) were extracted, containing 1805 advertisements about rental apartments in 41 administrative areas of Riga. Data included 13 6-room apartments, 41 5-room apartment, 101 4-room apartment, 406 3-room apartments, 689 2-room apartments, 548 1-room apartments with the average size of 61.14 m² and median size of 51.00 m².

Unreasonably low or high-priced offers were excluded from the dataset with assumption that the advertiser was giving false and/or inaccurate information, which would distort the dataset. Some advertisements had inaccurate information, e.g., giving the rental price for one room, while stating the whole apartment area; all such advertisements were excluded from the dataset. In few advertisements, rent was given per day, not month; monthly rent calculations were done for all such advertisements. Afterwards, for each listed rental apartment, price per square meter per month was calculated. The following calculations and correlations are based on these data.

Separate average and median rent price calculations per square meter per month were done for each neighbourhood in Riga. Areas that had less than 10 apartment listings were excluded from the dataset and correlations to increase data reliability. Fewer listings are not credible enough since few very highly priced listings can significantly distort the average rent for that area. This is also the reason why median rent was calculated, as it gives a more true 'average' by mitigating the effect of outliers that are distant from the rest of the data and skew the average.

Data from the Development Department of Riga City were used to rate neighbourhoods (Stratēģijas uzraudzības sistēma, 2008). They provide a comprehensive overview of 60 neighbourhoods in Riga with ratings from 0 to 5 for such factors as housing quality, water, heating, gas and electricity supply, sewerage, waste management, green area, playgrounds, public sports and cultural facilities, bike lanes, public transportation, parking, education institutions and libraries, health care and social care centres, shopping malls, employment opportunities, and neighbourhood safety.

The first correlation analysed relationship between neighbourhood distance from the central business district and rent level in the respective neighbourhood. For this analysis, additional data about distances were extracted from Google Maps. The following correlations were calculated to explore relationship between factor ratings mentioned above and rent levels to further analyse which of these factors had the most significant effect on the rent level. Calculations covered obtaining the correlation coefficient and coefficient of determination (R^2).

Correlation coefficient R shows how strong is the linear relationship between two variables, and the coefficient of determination R^2 shows what part of differences in one variable is explainable by differences in another variable; the percent value represents how much of the data will fall within the line of regression equation; however, not always this proves causality, so both quantitative and qualitative data analyses are necessary.

To get a more thorough understanding of the rental market in Riga, this paper briefly looks at forthcoming changes in rental market regulation, OECD (Organisation for Economic Co-operation and Development) recommendations for rental housing, and social housing situation in Riga.

In the last chapter, the rental housing market and its characteristics in Helsinki, Finland are explored; data from national statistics agencies of Latvia and Finland are used to calculate money spent on rental housing as a share of household's disposable income.

2. RENTAL HOUSING MARKET IN RIGA

According to the calculations from the dataset, in Riga, the average rent per square meter of all listed offers was 9.25 EUR/month, while the median rent per square meter was 7.35 EUR/month. Median rent is also closer to the average rent when calculated as an average of sum of each neighbourhood's average rent – 7.77 EUR/month. 366 or 20.28 % of listed apartments were in new buildings, where average rent per square meter was 10.44 EUR/month and median rent per square meter – 8.43 EUR/month. In the rental housing market of Riga, the largest demand is for renovated 2- and 3-room apartments, for apartments in new buildings, and 1-room apartments in the city centre (LATIO, 2016).

13 % of the housing stock[†] in Riga is rental dwellings, but there are differences in share of rental housing in different neighbourhoods, which affect rent levels depending on a smaller or larger rental dwelling supply. In the city centre, more than 40 % of rental housing is rental dwellings, in Maskavas forštate and Āgenskalns around 20 %, while in very populous neighbourhoods of Purvciems, Ķengarags, Imanta and Pļavnieki only 5 % to 7 % of housing stock is rental dwellings (Rīgas domes Pilsētas attīstības departaments, 2016).

Table 1 shows average rent per square meter per months in EUR in 27 neighbourhoods of Riga. Calculations reveal that the most expensive areas for rental dwellings are Ķīpsala, Āgenskalns, Vecrīga, and the city centre

[†] according to Central Statistical Bureau, housing stock includes single-dwelling residential buildings, residential premises in multi-dwelling residential buildings, and residential premises in non-residential buildings

(over 10 EUR/m² a month on average). The least expensive areas are Sarkandaugava, Daugavgrīva and Bolderāja (around 5 EUR/m² a month on average). Rental dwellings in other areas cost between 6 and 9 EUR/m² a month.

Table 1. Average Rent per m² per Month in EUR in 27 Administrative Areas of Riga, Latvia (developed by the authors, based on Renting prices, 2018)

Area	Average rent per m ² , EUR	Area	Average rent per m ² , EUR	Area	Average rent per m ² , EUR
Āgenskalns	11.13	Jugla	6.43	Purvciems	8.41
Bolderāja	5.01	Kļīversala	9.45	Sarkandaugava	5.84
Centrs	10.44	Krasta rajons	7.96	Vecmīlgrāvis	7.35
Čiekurkalns	6.74	Ķengarags	7.34	Teika	7.95
Daugavgrīva	5.06	Ķīpsala	12.33	Torņakalns	6.76
Dārziems	6.03	Maskavas priekšpilsēta	7.48	Šampēteris-Pleskodāle	8.25
Dzegužkalns	6.56	Mežaparks	7.22	Vecrīga	11.89
Ilģuciems	6.35	Mežciems	7.31	Ziepniekkalns	7.03
Imanta	8.28	Pļavnieki	9.21	Zolitūde	6.75

According to the bid rent theory, all employment opportunities are located in the city centre or central business district (CBD), so different types of land use, which depend on proximity to the CBD, determine the rent: the closer the area to the CBD, the larger the land rent (Kauko, 2005).

Figure 1 shows correlation between the area proximity to the CBD and the rent level in neighbourhoods of Riga. Correlation coefficient is -0.645 , which is a moderate (but close to strong) negative relationship, i.e., the further away an area from the CBD, the lower the rent per square meter. Coefficient of determination is 0.416 , thus indicating that 41.60 % of variations in rent can be explained by variations in proximity to the CBD.

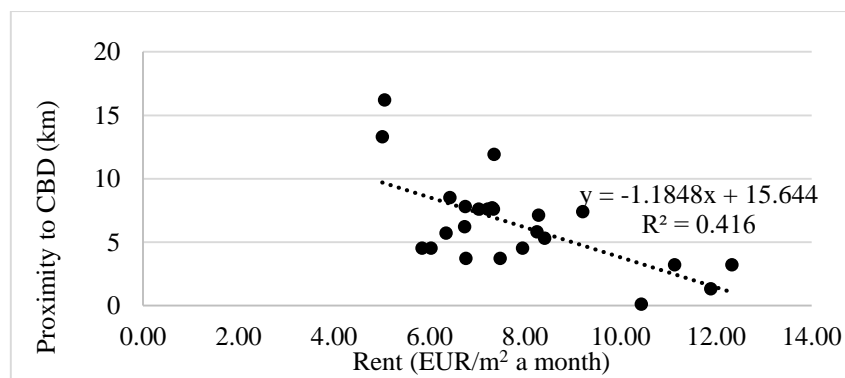


Fig. 1. Correlation between the rent and proximity to the CBD (developed by the authors, based on Renting Prices, 2018).

Proximity to the CBD and minimization of travel costs are significant factors in decision making regarding accommodation location, but this decision is far more complicated and affected by a larger group of factors. Urban dwellers care about green surrounding, architecture, and many social factors that do not always directly depend on distance to the CBD.

Hedonic price theory puts emphasis on quantitative and qualitative characteristics of property in determining price/rent levels, and the rent determination becomes even more complicated when decentralization of employment is considered.

Figure 2 shows the relationship between the neighbourhood overall quality index and rent level; the correlation coefficient is 0.33. It is a weak positive linear relationship.

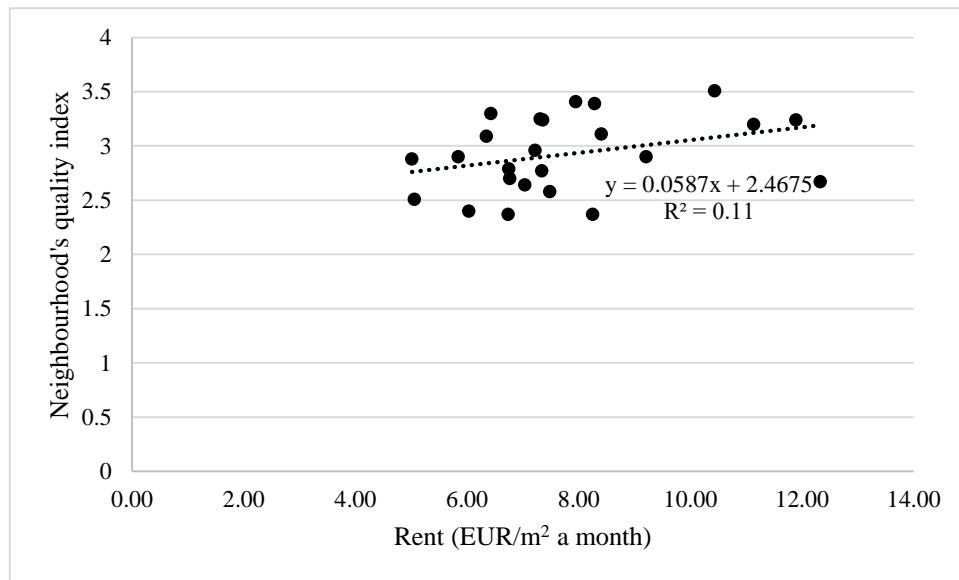


Fig. 2. Correlation between average rent per m² a month in EUR and neighbourhood quality index
(developed by the authors, based on Renting prices, 2018).

While the overall neighbourhood quality to some extent definitely affects rental prices, in order to achieve a more detailed and trustworthy analysis, it is necessary to analyse relationships between rent levels and separate urban factors that the overall index consists of. Table 2 represents six (out of 23) separate factors that had the strongest correlation with the rent level.

According to the data, neighbourhood security has the strongest relationship with the rent level. It makes sense that people value their safety highly, and one must also consider that affluent neighbourhoods normally attract people of higher social status, creating a relatively safe environment. Quality of streets/infrastructure, housing quality, employment opportunities in the area, proximity of shopping malls, and availability of public transportation are among other factors that are likely to determine the rent level in the neighbourhood.

Table 2. Six Factors Most Affecting Rental Levels in Neighbourhoods of Riga (developed by the authors, based on Renting prices, Riga City Council City Development Department, 2016)

Factors	R	R ²
Neighbourhood safety	0.578	0.333583
Infrastructure	0.503	0.253125
Housing quality	0.489	0.238839
Employment opportunities	0.484	0.234295
Shopping malls	0.426	0.181646
Public transportation	0.348	0.120921

Rental market regulation aspects in Riga are analysed in the next part of the article.

3. RENTAL MARKET REGULATION IN RIGA AND ITS FURTHER DEVELOPMENT

The Ministry of Economics has offered a new regulation framework to develop the rental housing market and increase the accessibility and affordability of rental housing, as well as protection of tenants. In future, all rental agreements will have to be registered in the land register, or they will not be binding. This will increase information transparency and speed of dispute resolution (currently dispute resolution on average takes about 2 years). Registration in land register is also planned to be an administrative fee free process.

The new regulation will facilitate moving out of bad tenants and thus decrease risks for investors. Rental agreements will have to have defined rental periods in future (after termination a new agreement will have to be made), and rise of rent will be possible only if such point is clearly defined in an agreement (Ekonomikas Ministrija, 2017).

If the plan is successful, among possible benefits are more affordable housing, increase in investment and development of new rental housing, increase in efficiency of legal proceeding/dispute mechanism, decrease in grey economy (lately, tax authorities have been more effective in collecting rental taxes).

Social housing situation in Riga is another troubling issue. There are only 60 social houses in Riga for families with low income. While queues for municipal apartments in Riga have reduced twice since 2010, 3479 families were in the queue in 2016. Rent in these apartments per month is only 0.06 to 0.60 EUR/m². However, these queues move very slowly, and often social apartments do not offer decent living conditions (Rīgas domes Mājokļu un vides departaments, 2017).

According to the OECD, officially, only 13 % of Latvians live in rental dwellings. While the actual share is larger, there is still a gap between European Union's average of 25 % to 30 %. People in Riga more often prefer to rent rather than take loans either because of doubt about paying back the loan or because the bank does not grant it. The OECD recommends increasing funds for low-cost rental

housing in areas with increasing employment, creating a national database for individuals to apply for housing support in areas with better employment opportunities, and to require rental housing developers to ensure a share of apartments for decent pricing (Urpena, 2017).

Nevertheless, the state should take a more active role in developing rental housing, considering such options as long-term loans for building/renovating the housing stock, as well as grants and real estate tax discounts. In Riga, 45 % of apartment buildings were built before 1941 and only 2 % of the buildings have been built since 1993. In 2016, average living space per person in Riga is 30 m² (38 m² in Latvia), and since 2010 it has increased only by 3 m² (Ekonomikas Ministrija, 2017). This also signals for a need of investments in building maintenance and renovation. In areas where economy and entrepreneurship are growing, one of the basic conditions is decent rental housing.

4. KEY OF HELSINKI

Helsinki is a decent example that Riga can be compared to because of a similar geographical location and size of population. Researching the rental market of Helsinki was based on the publicly available information from online local database website etuovi.com to be similar to ss.com. In general, Helsinki has four housing clusters: inner city/old Helsinki, both affluent and deprived multi-storey suburbs close to inner city, multi-storey suburbs built in the 1960s and 1970s, and single-family housing areas. 60 % to 70 % of price variation in Helsinki is explained by distance to the CBD, income and status (Kauko, 2005). 25 % of Finns live in rented dwellings but this number is a lot higher for younger people – about 55 % of 20–29-year-olds (Statistics Finland, 2016). What highlights a bigger contrast between the two capitals and countries is housing deprivation: on average 5 % of the EU population suffers from severe housing deprivation but this share reaches 15.5 % in Latvia, while in Finland it is less than 1 % (EUROSTAT, 2017).

2/3 of building land in Helsinki is owned by the municipality, enabling usage of pro-active measures and creating a supply of housing that is elastic, and ensuring minor price reactions. Helsinki only leases municipal land, so they have more influence on housing developers and timing, as well as attract less private investment, as investors are willing to own both land and buildings (Andersson, Pettersson, & Strömquist, 2007).

The rental market is divided into two parts: government subsidized and non-subsidized apartments. Government subsidized ones are ARA (Housing Finance and Development Centre of Finland) dwellings (known as ARAVA dwellings) that are built with government loans (also grants for repairs and guarantees on loans), in which the rent is determined by the cost correlation principle; 60 % of these apartments are owned by municipalities and 40 % by non-profit housing organisations but they are competitive with the private rental market (Statistics Finland's PX-Web databases, 2017a).

According to Finland's bureau of statistics, in the third quarter of 2017, the average rent per square meter of a non-subsidized apartment in Helsinki was 19.44 EUR, while rent per square meter of a government subsidized apartment was

on average 34.11 % lower – 12.81 EUR (Statistics Finland's PX-Web databases, 2017b). Thus, rent for a 60-square meter government subsidized apartment would be about 769 EUR/month and 1166 EUR/month for a non-subsidized one.

The Finnish private rental housing market was deregulated in the period from 1990 to 1995 based on promotion of market economy and freedom of choice, while criticized by a need for continued tenant protection and state's involvement in rental housing market regulation (Kettunen & Ruonavaara, 2016). Rental agreements in Finland are liberal and with very few restrictions. "Until further notice" rental agreements are common (although termination notice period is 3 to 12 months beforehand). When the supply exceeds demand, Finns often do not decrease rent levels but offer rent-free periods and some service improvements (Kaleva, 2017).

50 % of housing stock in Helsinki is rental dwellings; within these, half are ARAVA state subsidized and rent-regulated apartments, and the state is active in keeping them affordable. Tenant selection is based on urgency of housing need, income level and assets; homeless people are prioritized (and Finland is the EU champion in tackling homelessness), and the only requirement to apply is having either Finnish citizenship, a registered right of residence, a residence permit card, or a student's residence permit (City of Helsinki, 2017).

The ARAVA dwellings primarily host low-income earners or people with no regular income, and they give their dwellers a chance to save up money and take a loan to buy their own apartment. One of the disadvantages is that by offering housing to people with low income and education can promote social exclusion. To avoid that, Finns try to provide maintenance in time and have an on-going dialog with inhabitants, as well as coordinate dwelling allocation regionally (Korhonen, 2004). ARA monitors costs and quality standards and promotes innovation in housing; many projects host a variation of apartments for different users – owner-occupied, non-subsidized and subsidized rentals, cooperative housing, student accommodation, and housing for elderly. For some of ARAVA apartment houses, architecture is quite exceptional. In most areas, ARAVA houses are being renovated, some demolished, transport infrastructure developed, environment and services improved, and some EU funded projects are carried out (Housing Europe, 2017). All these prove to be welcome measures in preventing segregation and social exclusion.

Finland sets another good example with the Finnish Tenants, a nationwide organisation that aids tenants that have issues with their dwellings and provide legal counselling; the organisation also lobbies in the Finnish Housing Ministry (Hammar, 2013). Often individual houses also have housing committees that maintain the environment (Varady & Schulman, 2004). Finally, Finland offers housing allowance programmes for lower-income dwellers in private rental housing, as well as the part-ownership dwellings, where part of a dwelling is owned, and the other part is rented until its value is paid off.

To compare the rental housing situation in Riga and Helsinki, there is a need to see how much is spent on rent if disposable income is taken into account. Comparative price levels show that price levels in Finland are 69 % higher than in Latvia (OECD, 2017), and the difference in rent levels is even larger. However, rent as a share of disposable income per household in Helsinki is significantly lower

(Table 3). In Latvia, the average disposable income per household is 996.92 EUR (CSB, 2015a), while in Finland – 3664.83 EUR (Statistics Finland's PX-Web databases, 2015), but the average rent per 60 m² apartment is only about 32 % of disposable income for non-subsidized apartment and 21 % for a subsidized one, while on average urban dweller in Riga spends more than 44 % of his disposable income on rental housing.

Table 3. Rent as Percentage of Disposable Income per Household (developed by the authors, based on based on CSB, 2015b, Statistics Finland's PX-Web databases, 2015)

	Non-subsidized		Government subsidized	
	1 m ²	60 m ²	1 m ²	60 m ²
Helsinki	0.53 %	31.83 %	0.35 %	20.97 %
Riga	0.74 %	44.25 %	–	–

Poverty risk index in Latvia is significantly higher for those renting apartments – 31 % (compared to 20.5 % for those who own apartments or do not have to pay for rent) (CSB, 2015b). Those who own an apartment spend only about 14 % of their disposable income on their housing. Only 4.9 % of Finns pay more than 40 % of their disposable income for housing; it is among the best indicators in the European Union (EUROSTAT, 2017).

Finland recognises that a lack of affordable rental housing hesitates economic growth. Helsinki is active in boosting construction of new housing, enhancing land use, urban planning and social housing in order to combat high rental prices. Dispute resolution is quick in Finland due to minor procedural formalism. In Latvia, procedural formalism is higher and thus duration of dispute resolution is longer; although in both, Finland and Latvia, dispute resolution is quicker than in most European Union countries. Finland is among countries with lower rent control; the stance in contact regulation is neutral. According to Cuerpo, Kalantaryan, and Pontuch (2014), Latvian regulations are more favourable to landlords.

CONCLUSION

In neighbourhoods of Riga, the rent level is significantly affected by neighbourhood distance from the city centre but among factors that have a moderate effect on the rent level one can also find neighbourhood safety, quality of streets/infrastructure and public transportation, quality of housing, employment opportunities, and access to shopping malls.

In Riga, there is no state initiative in developing the rental housing market (including, building or renovating rental housing), and a lack of understanding that this is one of the necessities for economic growth – new employees require additional rental housing. It is of utmost importance to research the potential of renovating old, abandoned buildings instead of building low-quality new ones for rental purposes. On the positive side, since recently, one of the trends in Riga has

been buying the whole apartment house, renovating and turning it into a rental apartment house.

The present research reveals a lack of statistics about the rental housing market in Riga. However, this is likely to improve with the new rental housing regulation. If the plan is well executed, the new rental housing market environment could attract more investment, facilitate legal proceedings, and decrease grey economy and the results will also serve as a basis for next research about the rental housing market. Among other issues in the rental housing market of Riga are long dispute resolution processes and a lack of public funding in the rental market. In contrast, Helsinki invests large public funds in the rental market. As Helsinki owns 2/3 of land in the city and has created an advanced rental market subsidization scheme, the city has the advantage of controlling the rental housing supply. To have more control of supply and increase the functionality of the rental market and urban planning, the municipality of Riga should facilitate investment in the private rental market, as well as consider subsidizing the rental market; the municipality of Riga owns 7055 houses and 15821 ha of land (Rīgas domes Īpašuma departaments, 2017), which gives a potential of proactive involvement. Currently, a monthly rent is higher than monthly loan payment, and people often get stuck in a vicious circle, where they cannot save up money to buy an apartment because of overpriced rent payments.

Rental market development should not be left in hands of municipal and state authorities alone. Finland sets another good example by introducing a housing organisation that protects the interests of tenants and lobbies their interests in the government, as well as observes cost and quality standards of new rental buildings. This kind of 'outsiders' can significantly improve the development of the rental market for the better.

REFERENCES

- Andersson, A. E., Pettersson, L., & Strömquist, U. (2007). *European Metropolitan Housing Markets*. Springer Science & Business Media. Retrieved from https://books.google.lv/books?id=Zu65-j1CgNEC&pg=PA63&lpg=PA63&dq=finland+regulation+of+rental+housing&source=bl&ots=hwnCPD1Vb7&sig=7AQSDuWmjPOCFVW-zfVrzYIBp_w&hl=lv&sa=X&ved=0ahUKEwi1oaSYsOvXAhWCYpoKHQkpCrUQ6AEIbzAJ#v=onepage&q&f=false
- City of Helsinki. (2017). Rental dwelling. Retrieved September 5, 2018, from <https://www.infopankki.fi/en/living-in-finland/housing/rental-dwelling>
- Central Statistical Bureau of Latvia. Households' incomes. (CSB. (2015a). Mājsaimniecību rīcībā esošie ienākumi.) Retrieved September 1, 2018, from http://data.csb.gov.lv/pxweb/lv/Sociala/Sociala__ikgad__ienemumi/II0040_euro.px/?rxid=ce8aac91-f2b0-4f13-a25d-29f57b1468fb
- Central Statistical Bureau of Latvia. Poverty Risk Index, based on the status of the ownership of the built-up area, gender and age of the population (%) (CSB. (2015b). Nabadzības riska indekss pēc apdzīvotās platības īpašumtiesību statusa, iedzīvotāju dzimuma un vecuma (%).) Retrieved September 1, 2018, from http://data.csb.gov.lv/pxweb/lv/Sociala/Sociala__ikgad__monetara_nab/NI0060.px/table/tableViewLayout2/?rxid=cdbc978c-22b0-416a-aacc-aa650d3e2ce0
- Cuerpo, C., Kalantaryan, S., & Pontuch, P. (2014). *Rental Market Regulation in the European Union*. Brussels. Retrieved from http://ec.europa.eu/economy_finance/publications/economic_paper/2014/pdf/ecp515_en.pdf
- Ministry of Economics. (2017). *Directions of housing policy*. (Ekonomikas Ministrija. (2017). *Mājokļu politikas virzieni*.) Riga. Retrieved from http://www.lps.lv/uploads/docs_module/2_Mājokļu_politikas_virzieni.pdf

- EUROSTAT. (2017). Housing Statistics. Retrieved September 3, 2018, from http://ec.europa.eu/eurostat/statistics-explained/index.php/Housing_statistics
- Hammar, M. (2013). A growing importance of rental housing. *Global Tenant*, 14. Retrieved from http://www.iut.nu/FindOutMore/Europe/Rental_housing_Finland_GT_Dec_2013.pdf
- Housing Europe. (2017). Why Housing Policy in Finland is a Success Story. Retrieved August 30, 2018, from <http://www.housingeurope.eu/resource-1024/why-housing-policy-in-finland-is-a-success-story>
- Kaleva, H. (2017). *The Finnish Property Market 2017*. Helsinki. Retrieved from <https://kti.fi/wp-content/uploads/page/The-Finnish-Property-Market-2017.pdf>
- Kauko, T. (2005). *Comparing spatial features of urban housing markets*. Delft: Delft University Press. Retrieved from <https://repository.tudelft.nl/islandora/object/uuid:2de54f2c-6363-4e45-a1b8-700bc79fe993/datastream/OBJ>
- Kettunen, H., & Ruonavaara, H. (2016). Discoursing deregulation: the case of the Finnish rental housing market. *International Journal of Housing Policy*, 15(2). Retrieved from <http://www.tandfonline.com/doi/abs/10.1080/14616718.2014.990774?journalCode=reuj20>
- Korhonen, E. (2004). Helsinki City tenants are satisfied with their housing but problems exist. Retrieved August 30, 2018, from https://www.hel.fi/hel2/tietokeskus/tiedotteet/04_05_31_summary_korhonen_satisfied_tenants.html
- Latio (2016). Housing Market Overview: Riga and regions. (Latio. (2016). *Mājokļu Tirgus Pārskats: Rīga un reģioni*.) Riga. Retrieved from <http://latio.lv/lv/pakalpojumi/tirgus-analize/majoklu-tirgus/145/latio-majoklu-tirgus-parskats-2016-q4.pdf>
- OECD. (2017). Prices and purchasing power parities (PPP). Retrieved September 7, 2018, from <http://www.oecd.org/std/prices-ppp/>
- Rent prices (2018). Ss.com. Retrieved August 30, 2018, from www.ss.com
- Riga City Council Property Department. (2017). Municipal real estate. (Rīgas domes Īpašuma departaments. (2017). *Pašvaldības nekustamais īpašums*.) Retrieved September 13, 2018, from http://rdid.lv/uploads/free/rdid_2017.pdf
- Riga City Council Housing and Environment Department. (2017.) How to get housing from a municipality? (Rīgas domes Mājokļu un vides departaments. (2017). *Kā saņemt mājokli no pašvaldības?*) Retrieved September 7, 2018, from <https://www.riga.lv/lv/news/ka-sanemt-majokli-no-pasvaldibas?9052>
- Riga City Council City Development Department. (2016). Thematic Plan of Housing Development. (Rīgas domes Pilsētas attīstības departaments. (2016). *Mājokļu Attīstības Tematiskais Plānojums*.) Riga. Retrieved from http://www.rdpad.lv/wp-content/uploads/2016/10/MAJOKLI_TmP_saturs_MAJ.pdf
- Statistics Finland. (2016). Housing in Finland. Retrieved August 30, 2018, from <http://suomifinland100.fi/housing-in-finland/?lang=en>
- Statistics Finland's PX-Web databases. (2015). Disposable Income. Retrieved September 1, 2018, from http://pxnet2.stat.fi/PXWeb/pxweb/en/StatFin/StatFin__tul__tjt/statfin_tjt_pxt_001.px/table/tableViewLayout1/?rxid=142e94b0-82b1-4a2b-b9d7-47a1ffa213bf
- Statistics Finland's PX-Web databases. (2017a). *Rents of Dwellings 2016*. Helsinki. Retrieved from http://www.stat.fi/til/asvu/2016/asvu_2016_2017-03-09_en.pdf
- Statistics Finland's PX-Web databases. (2017b). Statistics on quarterly rents since 2010. Retrieved September 1, 2018, from http://pxnet2.stat.fi/PXWeb/pxweb/en/StatFin/StatFin__asu__asvu/statfin_asvu_pxt_001.px/?rxid=66fda875-3ebb-457b-a2f5-49e916b3935d
- Strategy monitoring system. (2008). Assessment of services in the vicinity of Riga. (Stratēģijas uzraudzības sistēma. (2008). *Pakalpojumu izvērtējums Rīgas apkaimēs*.) Retrieved September 1, 2018, from <http://www.sus.lv/susd/sys/index.php?cat=3&sub=2&year=2008>
- Urpena E. (2017). EM offers a new legal framework for the development of the housing market and for the wider protection of tenants. (Urpena, E. (2017). *EM piedāvā jaunu tiesisko regulējumu dzīvojamu telpu īres tirgus attīstībai un īrnieku plašākai aizsardzībai*.) Retrieved September 1, 2018, from <https://em.gov.lv/lv/jaunumi/15371-em-piedava-jaunu-tiesisko-regulejumu-dzivojamo-telpu-ires-tirgus-attistibai-un-irnieku-plasakai-aizsardzibai>
- Varady, D. P., & Schulman, H. (2004). Developing Sustainable Public Housing: Learning from Helsinki. In *Sixth Symposium of the International Urban Planning and Environmental Association meeting* (p. 31). Louisville, KY. Retrieved from http://yks.tkk.fi/fi/opinnot/arkisto/36-2320/ysss_2007/materiaali/Varady_Paper_presented_IUPEA.doc

AUTHORS' SHORT BIOGRAPHIES

Sindija Balode is a second-year professional Master's degree student of urban and regional engineering economics at Riga Technical University. She holds a Bachelor's degree in International Economics from the University of Latvia obtained in 2015. She was an exchange student at the University of Groningen, the Netherlands in 2013 with the main study focus on business and international relations. In 2015, Sindija received a scholarship from Dr. Aina Galejs Foundation, and spent the following year studying at the University of Wisconsin-Eau Claire, U.S., where one her study focuses was urban economics.

E-mail: Sindija.Balode@gmail.com

Uldis Kamols is an Assistant Professor at the Faculty of Engineering Economics and Management of Riga Technical University. He is a PhD candidate. He received a Master's degree in Management and Entrepreneurship from Riga Technical University in 2007 and Master's degree in Economics from Riga Technical University in 2005. His research interests focus on city development, urbanization, city and national economics. He teaches undergraduate and postgraduate courses in microeconomics, economics, European Union co-financed project management, urban economics and social environment at the Faculty of Engineering Economics and Management at Riga Technical University. E-mail: Uldis.Kamols@rtu.lv