

## HOUSING AND ITS AVAILABILITY AS AN IMPORTANT QUALITY INDICATOR OF LIFE

Jarmila Vidová<sup>1</sup>

---

### Abstract

Thus, the quality of life is the result of the interaction of social, health, economic and environmental conditions relating to human and social development. As housing is one of the assessed quality indicators, the aim of the paper is to analyse housing and its accessibility in the Slovak Republic by means of the housing cost burden of households. We have focused on the analysis of the burden on households by regions in the Slovak Republic. The analysis showed that the burden on households is higher than 30%, with the least vulnerable being the family, where two employed members are without children living in a one-room apartment. The lowest housing costs are for households with 1 working without children (23% - 29%). All other types of households and in all regions of Slovakia housing costs exceed 40%. The high financial burden has a significant impact on the quality of life of households.

### Keywords

Housing, Housing Availability, Rental Housing Quality of Life

---

### I. Introduction

The quality of life is the result of the interaction of social, health, economic and environmental conditions relating to human and social development. As it captures a wide variety of diverse living conditions, research into the quality of life may be focused on sub-areas of human life, but it may be explored in the sense of a holistic notion of all the conditions of life of an individual or society. Quality of life is influenced by the degree of economic development. The research takes into account many factors, the distribution of pensions, the amount of government debt and the population. Several authors are involved in the study of quality of life (Laluha, 2002, 2008, Holková, 2010, Antalová, 2018). Pigou (1929) was the first scientist to mention the term 'quality of life' in the context of economics and welfare discussions. Most of the early research on quality of life was conducted in the United States and focused on exploring satisfaction, happiness and well-being.

The theoretical model of quality of life as "good life" was created by Lawton, who defined it as a behavioral competence (Lawton, 1983). In the 1950s, Eisenhower set out to measure the quality of life, and the results revealed various environmental and social impacts (Oliver, Huxley, Bridges and Mohamad, 1996). The term 'quality of life' was used in a report from the European Commission published in the mid-1960s (Wood-Dauphine, 1999), which was the start of a review of social indicators in the US, which produced regular reports on social progress to assess social policy. .

The aim of the paper is to point out to the fact that in the Slovak Republic the quality of life is affected by the high financial burden associated with housing. This fact has a negative impact on people's standard of living, as housing expenditures and other payments related to housing account for a larger percentage of household income. Housing inaccessibility affects demographic development, as in Slovakia young people have difficulty securing their own housing and as a result, as many as 74% of young people under 34 live with their parents.

---

<sup>1</sup> Department of Economic Policy, Faculty of Economics, University of Economics in Bratislava. Dolnozemska cesta 1, 852 35 Bratislava. Slovak Republic. E-mail: vidova@euba.sk.

Housing unavailability also negatively affects demographic development, the sustainability of the pension system, the outflow of young people abroad or labor mobility.

## **II. Quality of life and its measurement**

Quality of life as a multidimensional concept according to Fahrenberg, Myrtle, Schumacher and Brähler, is satisfaction with life by individual assessment of past and present life conditions and life expectancy (Fahrenberg, Myrtek, Schumacher, Brähler 2000). Specifically, they examined 10 areas of life and individual satisfaction with them: health, work and occupation, financial situation, leisure, marriage and partnership, relationship with their children, happiness with themselves, sexuality, friends, acquaintances, relatives and housing. Their analysis is based on research into the whole complex of problems associated with the apartment, house and its surroundings. The degree of satisfaction of human life needs is determined by analyzing the equipment of the area with various service institutions and facilities. The conditions of rest are examined directly in the city and its surroundings, taking into account the localization, selective and realization prerequisites of rest and recreation. Environmental conditions can be examined through the analysis of environmental pollution (air quality, water quality, noise conditions, etc.) and environmental infrastructure (waste management). Social comfort is a measure of personal and public security.

An important international impetus for quality of life research was the extension of the WHO definition to include health, including physical, emotional and social well-being, which also contributed to the debate on extending the measurement of quality of life. In the early 1960s, Andrews and Whitley's research (Andrews, Whitley 1976) focused on welfare indicators, expressing, in terms of quality of life, the degree of impact of objective living conditions as well as subjective assessment of its level by large groups of people. Later, for research into Diener (Diener 1984, 2000), economic and social quality of life indicators (income and material security, political freedom and independence, social justice, legal certainty and health care) and subjective quality of life indicators (subjective well-being and satisfaction with life).

Satisfaction with life in a particular country, welfare, can be measured by several indicators, such as the index of quality of life of the population, the index of human development and many other indicators. The index of quality of life consists of nine indicators:

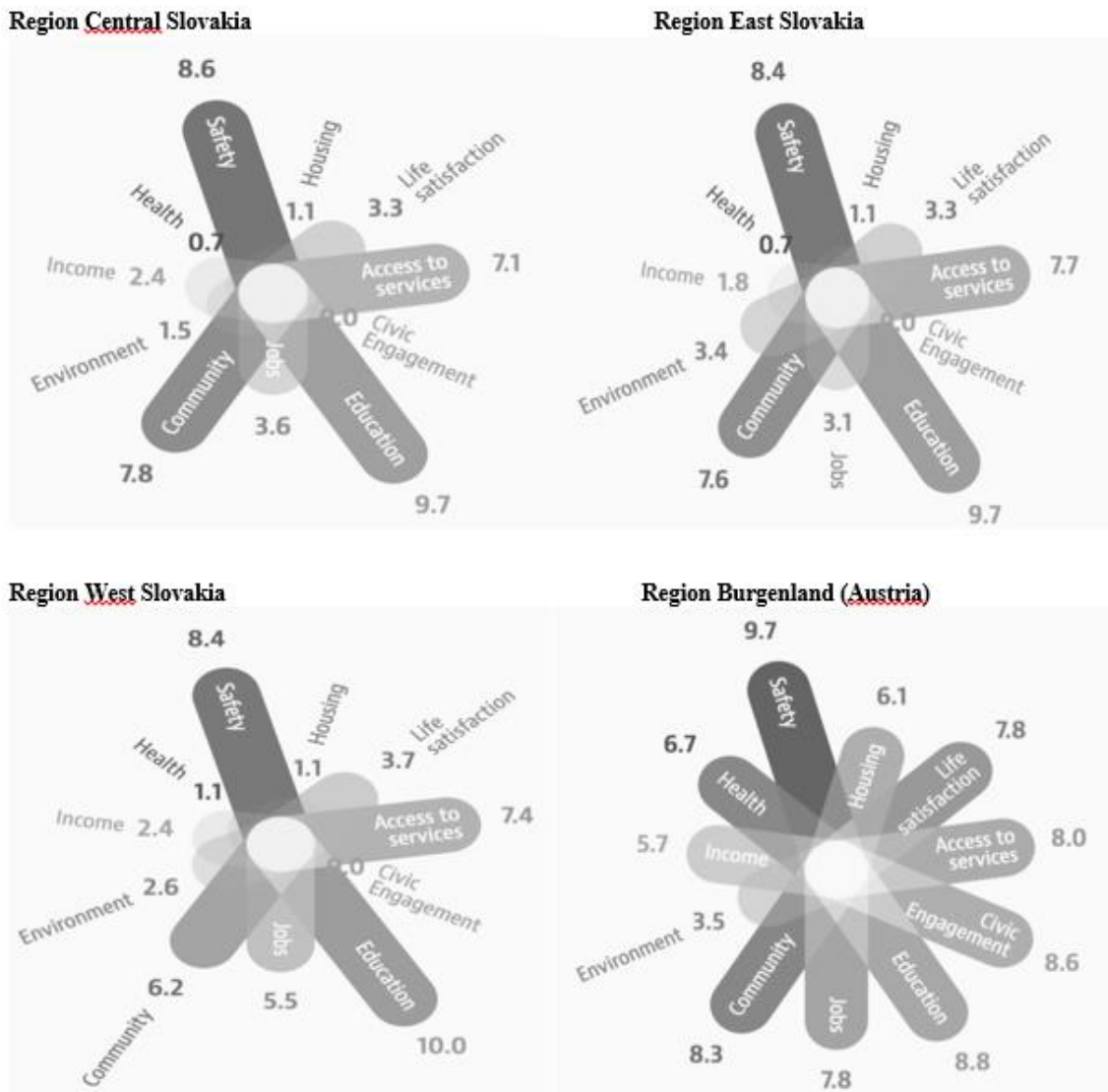
- material well-being expressed in GDP per capita weighted by purchasing power parity
- health (expressed in life expectancy at birth),
- political stability,
- family life (in terms of divorce rate),
- community life (measured by worship and trade union membership),
- climate and geographical location (expressed in longitude on which temperature depends),
- employment security (expressed in unemployment rate),
- political freedom (index of political and civil liberties),
- gender equality (difference in average earnings of men and women).

The use of this comprehensive indicator compared to a simple economic-monetary GDP indicator illustrates well the complexity of quality of life analysis. It makes contrasts visible, for example, some countries with relatively high levels of GDP are lagging a dozen cities in the “world ranking” in quality of life.

The Human Development Index is a composite indicator that measures the country's average performance in three basic dimensions of human development: long and healthy life as measured by life expectancy at birth; education as measured by the adult literacy index and the combined rate of gross attendance at primary, secondary and higher education; the standard of living expressed in GDP per capita, weighted purchasing power parity. The figures in Figure 1

show the differences in the indicators, which is an indicator of economic and regional policy and their direction. For comparison, we also give an evaluation in the region of Burgenland (Austria), which is a neighboring region.

Figure 1 Quality of life (selected regions NUTS III)



Source: processed according Economist (2018).

One of the indicators of quality of life assessed is housing as one of the basic human needs, it is a property with a specific feature, long-term life. It should be satisfied at a level commensurate with the overall social and economic development of society. There are considerable differences in the assessment of housing compared to individual regions of Slovakia and selected regions in Austria. In Slovakia in all regions the value of the housing indicator reaches a maximum of 1.1 points, but in Austria it is up to 6.1. Based on these values, the primary objective of state housing policy must be, above all, to increase the overall level of housing so that it is accessible and proportionate to the population, using specific tools to extend housing life, increase safety, usability and reduce energy consumption.

### **III. Housing and availability as an important part of sustainable quality of life**

Housing is one of the most important needs of the population and is one of the hallmarks of the lifestyle as well as its standard. Its importance affects the social development of people and thus significantly affects the quality of life. Housing is not understood as a claimable right of an individual against society, but as a right based on the joint responsibility of society towards the citizen. Its socio-economic importance lies in the creation of preconditions for the development of human potential, creative abilities and social activity of man. Undignified housing affects personality, traits, can lead to the break-up of personality, as well as negative social phenomena such as homelessness or crime, which threaten society as a whole. Adequate housing is essential for individual and community welfare. There are few trends more tragic than the growing housing problems many people face. An unacceptable number of people are homeless, and many lower-income households devote an excessive portion of their income to housing (Litman 2019).

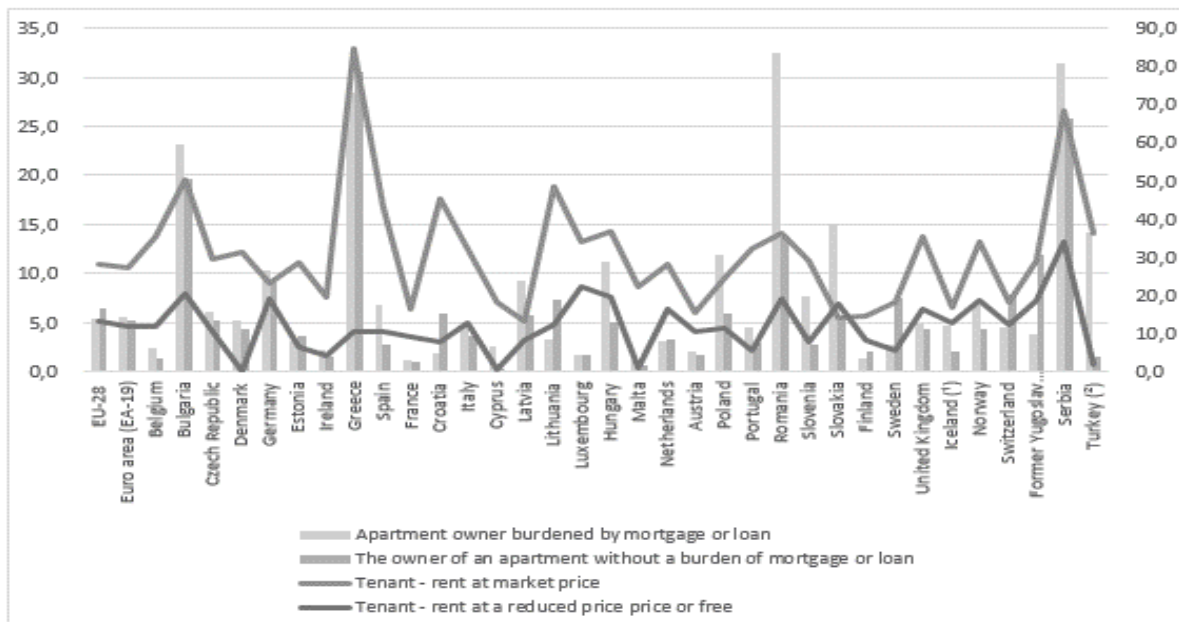
Housing availability is a multidimensional problem that is not new. One dimension of housing availability is affordability of housing, which includes the financial costs of housing as well as social welfare and sustainability issues. Many factors have to be taken into account when defining and assessing affordability, especially if housing is expected to produce more sustainable results. The factors that affect the availability of housing are income, housing costs and conditions for obtaining loans for housing provision. Pricing analyses typically take a proportionate approach by measuring the relationship between household incomes and housing costs. Proportional access typically uses reference or revenue and cost levels to assess the extent of variability between places or types of households and / or to assess changing circumstances over time (Hulchanski 1995, Paris 2007, Gabriel et.al 2005, Bouzarovski 2011)). Housing affordability can be understood as the cost of a mortgage or rent in relation to income. According to Milligan et al. (2007), affordable housing is also suitable for the needs of many low to medium income households and is affordable, so that households are able to meet their other basic living needs and pay related costs with low and medium income. There are many issues related to the use of rational access. The main problem with access to the ratio is that income and costs change significantly over the life cycle, with most of the income being spent on housing during the first years. During the period of rapid growth in prices and inflation, therefore, the very high costs associated with the first years of repayment of mortgages may be very costly, but this may soon be followed by much lower real costs and rapid capital growth (Paris 2007).

In the context of residential real estate investments, it is important to monitor the burden of housing costs (share of housing costs). In 2016, 11.1 % of the EU28's population lived in households that spent 40 % or more of their equivalent disposable income (Figure 2). The share of the population whose housing costs exceeded 40 % of their equivalent disposable income was highest among tenants with a rent at market price (28.0 %) and the lowest among those in owner-occupied housing without a loan or mortgage (5.4 %). EU28 average disproportionately varies between EU Member States: on the one hand, there were several countries in which a relatively small proportion of the population lived in households with housing costs above 40 % of their disposable income. These were Malta (1.4 %) and Cyprus (3.1 %). On the other hand, more than 40 % of their equivalent disposable income was spent on housing by just over two in five (40.5 %) in Greece and just over one in five (20.7 %) in Bulgaria. Similarly, one person from six in Germany (15.8 %) and Denmark (15.0 %). Affordable housing is a challenge for many households across the OECD, but low-income dwellers face a significant housing cost burden. In sixteen OECD countries, more than 40 % of low-income owners with a mortgage spent over 40 % of their disposable income on a mortgage in 2016. The same was true for low-income renters in private rentals in fourteen OECD countries. In Greece and the United States, low-income dwellers face a similar housing cost burden, regardless of tenure: in both

countries, more than half of the low-income population spent over 40 % of disposable income on rent or a mortgage in 2016. In as many as 10 EU Member States, more than one third of the population is at risk of poverty and lack income for housing. In particular, they live in flats with market rent and pay more than 40 % of their equivalent disposable income for housing. The highest share in 2016 was in Spain (43.0 %), Croatia (45.2 %), Lithuania (48.3 %), Bulgaria (50.4 %) and 84.6 % in Greece.

Its level in the Slovak Republic in 1999 was 5.8 %. It gradually increased and reached 30.1 % in 2005, 3.6 % in 2015. Regarding the cost of housing costs in the Slovak Republic by type of household, in 2007 the largest housing costs for households were in the rent for market rentals with a share of housing expenditures of 35.8 %. Loading rate in households without housing loans in 2016 with a share of 5.7 %.

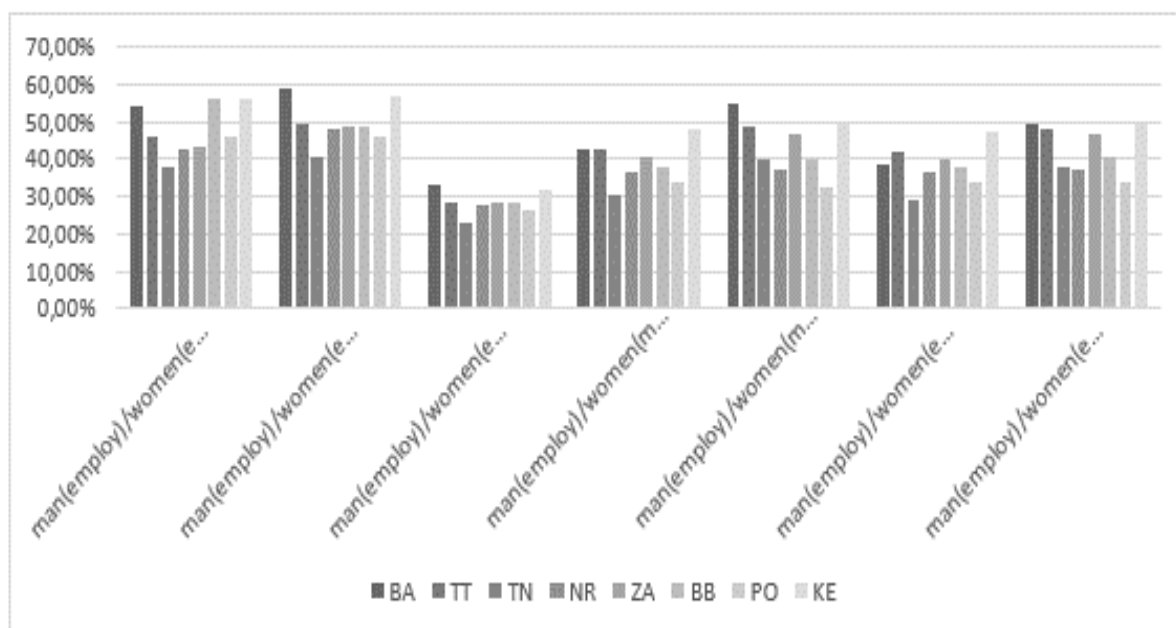
**Figure 2 Boundary of housing costs by ownership in the European Union (% of population, 2016)**



Source: own chart based on Eurostat data

Households in sublease at a reduced price or for free are more likely to face higher housing costs. In Austria, the share of housing expenditure is steadily at 25 % and the share of housing expenditure in Austria has increased by only 3 % between 1999 and 2015. The figure 3 shows the conversion of housing costs from income by type of household and the size of the apartment. According to the findings, almost all types of households have a load rate higher than 30 %. The least vulnerable is the family, where there are two employed members without children living in a one-room apartment. The lowest housing cost is for households with 1 worker without children (23 % - 29 %). All other types of households and in all regions of Slovakia the cost of housing exceeds 40 % (we work with average variables). The most inaccessible housing with regard to the price of real estate is in the Bratislava and Košice regions.

**Figure 3 Housing costs (% of income) in Slovak republic – regions**

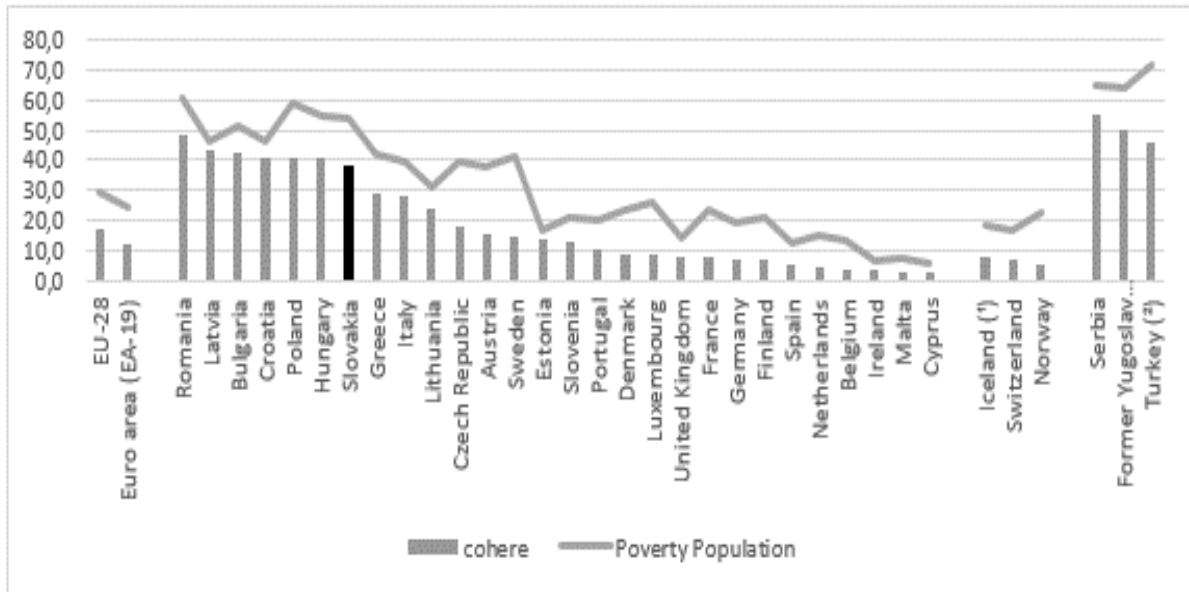


Source: own recalculations on the basis of demographic and social statistics SR

Another indicator of housing quality is the overcrowding rate of the dwelling. The overcrowding rate of the dwelling highlights the proportion of population living in dwellings. The rate of crowded dwellings reflects the proportion of people in populations living in scarce households according to some criteria. As many as 37.9 % of people in Slovakia lived in crowded flats and houses, which is well above the EU-28 average (16,6 %). Most often, households with three or more children (70.0 %) and individuals with at least one child (59.8%) are affected by this situation. The relatively high proportion of people living in overcrowded dwellings in Slovakia is caused, for example, by the unavailability of housing for young people and families, which in turn favour the choice of multi-generation households. While in the countries of Western Europe the share of the population living in overcrowded dwellings is lower, it is much higher in the former post-socialist countries. This is due to the specificity of the construction and direction of housing policy in the former socialist countries. The highest overcrowding rates among EU Member States were recorded in Romania (49.7%) and Poland (43.4 %), while rates above 50 % were recorded in Serbia (53.4%) and the former Yugoslav Republic of Macedonia ( 51.1 %), while Turkey also recorded a relatively high overcrowding rate (45.9 %, 2013 data). In contrast, the lowest overcrowding rates were recorded in Cyprus (1.4 %), Belgium (1.6 %), the Netherlands (3.3 %), Ireland (3.4 %) and Malta (3.5 %), while seven other EU Member States, as well as Norway, Switzerland (2014 data) and Iceland reported that less than 10.0 % of their population live in overcrowded dwellings. The share of EU-28 population living in overcrowded housing did not change in 2014-2015. The biggest increase among EU Member States was reported by Latvia, where it increased by 1.6 percentage points, while in Sweden, Greece and Italy the share increased by more than 0.5 percentage point. On the other hand, the rate of overcrowding has decreased in 17 EU Member States.

In the EU-28, in 2016, the overcrowding rate of population at risk of poverty (people living in households with a disposable income per capita below 60 % of national median) was 29,5%, which is approximately 12.8 percentage points higher than the entire population. Hungary (62 %), Romania (61.7 %), Poland (59.7 %) and Slovakia (57.6 %) registered the highest overcrowding rates among people at risk of poverty; Turkey (72.9 %, 2013), the former Yugoslav Republic of Macedonia (68.1 %) and Serbia (63.6 %) reported similarly high rates of overcrowding amongst the population at risk of poverty. (Figure

**Figure 4 EU overcrowding rates and population at risk of poverty (%)**

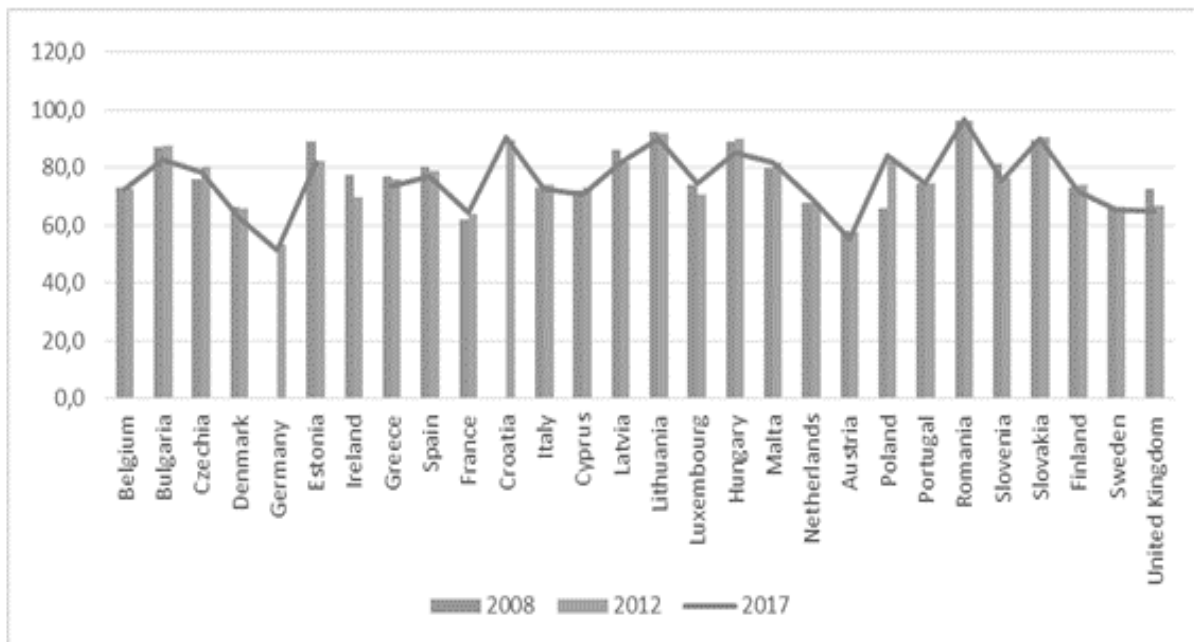


Note: Persons at risk of poverty - persons living in households where the equivalent disposable income per person is less than 60% of the national median

Source: own processing; based on Eurostat data

By contrast, Cyprus (3.5 %), Ireland (6.0 %), Belgium (6.5 %) and Malta (7.7 %) reported the lowest overcrowding rates for the population at risk of poverty. They were the only EU Member States that reported that less than one in ten people at risk of poverty lived under overcrowded conditions. The reason for the high overcrowding rate in Slovakia is a very small share of rental housing, which is approximately 1.33% of dwellings. In the European Union, the share of rental housing in the housing stock ranges from 19% to 62%. The share of rental apartments in Austria is up to 42%, in the Czech Republic it is 21%. (Figure 5)

**Figure 5 Proportion of Ownership of Housing in EU Countries (%)**

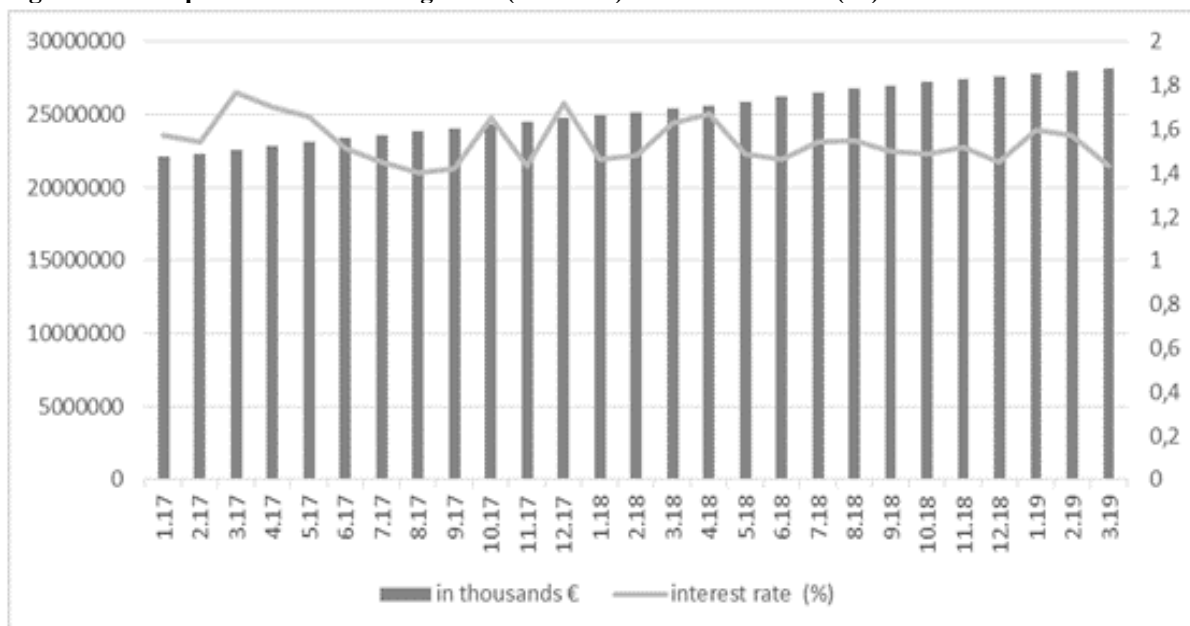


Source: own processing; based on Eurostat data

Low share of rental housing is a long-term unsustainable situation, which in the future will be reflected in further development, especially in regions with higher unemployment rates. With a low share of rental dwellings, the proportion of dwellings owned by households is increasing. Acquisition of apartments is mainly made from foreign sources, resulting in more than a quarter (26.6%) of EU-28 residents living in an owner-occupied dwelling that was burdened with a loan or mortgage. Overall, seven out of ten (69.2%) EU28 residents lived in owner-occupied dwellings, while 19.9% lived in rented dwellings and only 10.8% lived in dwellings with reduced rent or were accommodated free of charge.

In the Slovak Republic is increasing the indebtedness of households. About 50% of Slovak households are repaying some kind of loan. The reasons for borrowing are diverse, but a substantial part is comprised of loans for housing financing, which has an impact on the growth rate of household indebtedness, which is one of the highest in EU countries. This trend in the growth of the lending burden of Slovak households has been ongoing for almost a decade, with household income and debt ratio almost doubling over the mentioned period. This increases the risk of a credit trap in which Slovak households may fall in the event of loss of employment, long-term illness or an increase in interest rates on bank loans. The result of this process is the fact that Slovak households are more than indebted and financially healthy in the long term. This is evidenced by the fact that, for almost seven years in a row, mortgage lending in Slovakia has been the fastest among all EU countries. While in 2008 the share of Slovak households' debts in their income was around 35%, in 2018 this ratio was already around 70 %. In the past, conservative and cautious inhabitants of Slovakia became the most indebted inhabitants of the V4 countries. In February 2009, real estate loans accounted for just over \$ 8.4 bil. €, in February 2019, housing loans accounted for 27.959 bil €. This is a year-on-year increase of 11.1% compared to the year 2018.

**Figure 6 Development of new housing loans (€ million) and interest rates (%)**



Source: own processing; based on NBS data

The growth rate of Slovak household debt can be considered problematic or liquidating. This trend has an impact on the sensitivity of indebted Slovak households to the negative development of the Slovak economy. The debt ratio of Slovak households and gross domestic product is around 40 %, with already 30 % indebtedness to GDP, the effects on economic growth are unfavorable and economic problems and instability are beginning to emerge. The 60 % of household debt to GDP ratio already indicates a relatively serious risk of an



economic crisis. Although Slovak households have stabilized the 2008 financial crisis relatively well, the potential new crisis could have much more devastating effects on the economy. Slovak households are indebted more than twice as much as before the 2008 crisis and their real incomes have increased only slightly and are not at all equal to debt growth. The main risks to households at risk are rising interest rates, which, with a large volume of high loans, will significantly increase household costs for monthly loan repayments. Another risk for indebted households is the deterioration of the labor market. Increase in the number of unemployed, respectively a decline in real wages can lead to inability to repay loans. A sharp drop in property prices can cause problems for households and later for the banking sector.

#### **IV. Conclusion**

The level of satisfaction of society reflects the level of satisfaction with the individual's own life. In relation to the quality of life, we focused on housing and its accessibility as part of social development, improving the quality of life of both individuals and society. Housing affects the quality of life of households in different ways, providing shelter, security, privacy and space for rest, education and life. It can also be seen in the context of the local environment, in terms of the smooth accessibility of childcare, educational facilities, employment, leisure opportunities, shops, public services and the like. Housing availability is a multidimensional problem with a long-term historical background. It is addressed in every country because its socio-economic importance lies in the fulfillment of its basic function by creating the preconditions for the development of human potential, creativity and social activity, which affects its quality of life.

The result of the current housing policy in the Slovak Republic is the fact that the financial burden on households associated with housing is increasing, thus reducing the volume of funds for other purposes. While in 1999 housing expenses were 12.4%, the EU average was 25.44%. In 2018 housing became the most expensive item in Slovak households. Within the consumer basket, spending on housing, water, electricity and gas accounts for almost 25%. Food and non-alcoholic beverages make up 18% of all monthly spending, recreation and culture 10% and only 2% for education.

Increasing the share of housing expenditures affects household indebtedness, although some perceive property ownership as positive. In addition, pension constraints create tensions between domestic resources and expenditure. As a result, some population groups have to reduce consumption spending much more than others, putting them in a state of social need and significantly deteriorating their quality of life.

A significant problem is also the fact that in the Slovak Republic the fourth highest proportion of privately owned population in the EU at the level of 90.5%, which significantly reduces labor mobility, has a negative impact on the labor market, and the large number of young people leaving Slovakia, also because of the conditions of family formation - that is, higher availability of housing, depletion of human potential and damage to the country in the coming years. This situation will continue to exist as it is assumed that interest rates on mortgage loans will not increase yet. Low interest rates and a broad supply of loans from banks, even under new conditions, will support the growth in lending and, at the same time, business efforts to implement more massive housing at higher prices, making housing unavailable. The lack of affordable housing significantly reduces birth rates, thus contributing to the demographic problem of Slovakia, as evidenced by the very fast pace of aging in the EU. Up to 74% of young people between 18 and 34 years of age live in Slovakia with their parents, the highest proportion in the European Union. According to a 2015 survey, the majority of young people (45.4%) are the most unacceptable housing as the main reason for postponing family formation. Lower birth rates naturally have a negative impact on the sustainability of the pension system.

The topic of housing has recently become very attractive. Since 1990, it has been devoted only to the political or professional public very sporadically. That is why we are dealing with a significant problem of household indebtedness today, a problem with a high level of residential housing, which prevents moving from areas where there are no job opportunities. Despite these problems, the development of the residential housing sector in Slovakia has a rising tendency, real estate prices are rising due to low interest rates. Although owner-occupied housing should be intended for the middle class, but when rental apartments are scarce, there is no other option than to buy housing. Households are offered loans for the acquisition of housing on favorable terms, which they are willing to borrow for a long period and already more than 90% of people own housing property, which has made us to the forefront of the European Union.

The concept of the State Housing Policy until 2020 emphasizes the need to increase rental housing in Slovakia, affordable apartments for young families, as well as the intensity and quality of housing construction and the renewal of the housing stock. As the concept implies, the role of the state in the development of rental housing should be to introduce effective instruments, preferably in the tax area, used in developed European countries. The effect of these measures would not only bring the effect of increased pressure to reduce apartment rental prices, but would also create a more attractive perception of rental housing compared to home ownership.

Slovakia's significant lag in the supply of affordable housing is a challenge for housing policy and to develop a market for subsidized rental housing, which would also help alleviate the potential imbalance caused by high household debt, which has a significant impact on the quality of life of the population.

### **Acknowledgements**

This paper resulted from a project VEGA No. 1/0251/19 Household investment in housing and their alternative use as additional income at the time of retirement benefit.

### **References**

- Andrews, F. M., Withey, S. B. (1976). *Social indicators of well-being: America's perception of life quality*. New York: Plenum.
- Antalová, M. (2018). Bývanie a sociálna kvalita. In: *Trh práce a sociálna ekonomika – špecifické otázky a problémy*. Bratislava: Vydavateľstvo Ekonóm.
- Bouzarovski, S. (2011). *Energy poverty in the EU: A review of the evidence*, presented at the European Commission Directorate General for Regional Policy workshop on 'Cohesion policy investing in energy efficiency in buildings', Brussels, 29 November 2011.
- Diener, E. (1984). Subjective well-being. *Psychological Bulletin*, 95(3), 542–575.
- Diener, E. (2000). Subjective well-being: the science of happiness, and a proposal for a national index. *American Psychologist*, 55(1), 34–43.
- Economist. (2018). *Quality of life*. Retrieved June 12, 2019, from [http://www.economist.com/media/pdf/QUALITY\\_OF\\_LIFE.pdf](http://www.economist.com/media/pdf/QUALITY_OF_LIFE.pdf).
- Eurostat. (2019). *Housing statistics*. Retrieved June 18, 2019. Retrieved June 12, 2019, from [https://ec.europa.eu/eurostat/statistics-explained/index.php/Housing\\_statistics](https://ec.europa.eu/eurostat/statistics-explained/index.php/Housing_statistics).
- Fahrenberg, J., Myrtek, M., Schumacher, J., Brähler, E. (2000). *Fragebogen zur Lebenszufriedenheit (FLZ)*. Handanweisung. Goettingen: Hogrefe.
- Gabriel, M., Jacobs, K., Arthurson, K., Burke, T., Yates, J. (2005). *Conceptualising and measuring the housing affordability problem*. National Research Venture 3: Housing

affordability for lower income Australians Research Paper No. 1, Australian Housing and Urban Research Institute.

Gabriel, S., Painter, G. (2018). Why affordability matters? *Regional Science and Urban Economics*. 71(6), Retrieved June 12, 2019, from <https://www.sciencedirect.com/science/article/pii/S0166046217303058?via%3Dihub>.

Holková, V. a kol. (2013). *Spotreba a kvality života domácností SR vo väzbe na ich spotrebiteľské rozhodovania v európskom kontexte*. Bratislava: Vydavateľstvo Ekonóm.

Holková, V., Lалуha, I. (2009). Nerovnosti kvality života domácností Slovenskej republiky z pohľadu ich spotreby. Bratislava, *Nová ekonomika*, 2(4), 89-102.

Hulchanski, J. D. (1995). The concept of Housing affordability: Six contemporary uses of the housing expenditure-to-income ratio. *Housing Studies* 10(4), 471-491.

Labaj, J. (1993). *Byty, bývanie a bytová politika v trhovom hospodárstve*. Bratislava: Elita.

Láluha, I. (2002). *Kvalita a dynamika sociálno-ekonomického pohybu*. In: Stanek, V. a kol. *Sociálna politika*. Bratislava: Vydavateľstvo Sprint.

Láluha, I. (2002). Kvalita života sociálny rozvoj. In: Stanek, V. a kol. *Sociálna politika*. Bratislava: Vydavateľstvo Sprint.

Láluha, I. (2008) Kvalita života. In: Stanek, V. a kol.: *Sociálna politika*. Bratislava: Sprint dva.

Lawton, M. P. (1983). *The dimensions of well-being*. *Experimental Aging Research*, 9(2), 65-72.

Litman, T. (2019). *Parking Requirement Impacts on Housing Affordability*. Victoria Transport Policy Institute. Retrieved July 12, 2019, from <https://vtpi.org/park-hou.pdf>.

Milligan, V. et.al. (2007). *Approaches to Evaluation of Affordable Housing Initiatives in Australia*. National Research Venture 3: Housing affordability for lower income Australians Research Paper No. 7, Australian Housing and Urban Research Institute.

National Bank of Slovakia. (2019). *Information on loans for house purchase*. Retrieved June 16, 2019, from <https://www.nbs.sk/sk/dohlad-nad-financnym-trhom-prakticke-informacie/publikacie-a-vybrane-udaje/vybrane-udaje/informacie-o-uveroch-na-byvanie>.

Nelson, E. (2003). The future of monetary aggregates in monetary policy analysis, *Journal of Monetary Economics*, 50(5), 1029-1099.

Oliver, J., Huxley, P., Bridges, K., Mohamad, H. (1996). *Quality of life and mental health services*. Florence, KY, US: Taylor & Frances/Routledge.

Paris, C. (2007). International perspectives on planning and affordable housing, *Housing Studies*, 22(1), 1-9.

Pigou, A. C. (1932). *The economics of welfare*. (4<sup>th</sup> ed.) London: Macmillan Retrieved July 12, 2010, from <http://oll.libertyfund.org/Home3/EBook.php?recordID=0316>

Slovak Statistical Office (2019). Demographic and social statistics SR. Income and consumption. Retrieved June 10, 2019, from <http://datacube.statistics.sk/#!/folder/sk/1000318>.

Wood-Dauphinee, S. (1999). Assessing quality of life in clinical research: from where have we come and where are we going? *Journal of Clinical Epidemiology*. 52(4), 355-363

