



László Vértessy

Housing and rentals in Hungary with an international outlook - snapshot, policy, solutions



Gazdaságelemző Intézet
Institute of Economic Analysis
Budapest, 2021

László Vértesy

Housing and rentals in Hungary
with an international outlook
- snapshot, policy, solutions

© László Vértesy, 2021

DOI: 10.5281/zenodo.10417476

Minden jog fenntartva, beleértve a sokszorosítás, a nyilvános előadás, a rádió és televízióadás, valamint a fordítás jogát, az egyes fejezeteket illetően is.

All rights reserved, including reproduction, public performance, radio and television broadcasting, and translation rights, also for each chapter.



Gazdaságelemző Intézet
Institute of Economic Analysis

Printed in Hungary, Budapest

Table of contents

I. General foundation.....	8
1. Affected groups.....	9
1.1. Population - Demographics	9
1.2. The affected groups	13
1.3. Demand and housing affordability	17
2. Apartment rentals and sublets.....	22
2.1. Housing portfolio	22
2.2. Rentals, Sublets	24
2.3. Rental fees, prices	29
2.4. Effects	44
2.5. EU comparison	46
3. Alternative rentals - Airbnb, taxation.....	52
II. Construction and investment possibilities	61
4. Housing construction in general	63
5. Brownfield - rust zones	70
5.1. Foreign examples.....	74
5.2. Hungarian surveys.....	80
5.3. Budapest	83
III. Housing policy	87
6. Housing policy and options	88
7. State support for the rental system.....	96
7.1. Tax reform	97
7.2. Legal framework, legal services, supervision	98
7.3. Housing allowance.....	102
7.4. Rental apartment construction	104
7.5. Rent control, price ceiling, cap.....	106
IV. Summary	113
Appendix	115
List of sources	122

Housing and rentals in Hungary

with an international outlook

snapshot, policy, solutions

The housing issue has not been resolved in Hungary, although the situation is no better in the EU states of the region. It is a permanent social problem, and every party – government or opposition – must deal with it. It affects a wide range of people, many of them directly, so it is particularly important what the proposals are to improve the situation. Especially considering that most of those who do not own an apartment have a thin wallet (earnings, social situation, etc.), they need support – from the taxpayers.

The most obvious is to increase housing construction. Helping demand (not just for large families but for other groups, too), making the banking sector more flexible, improving the construction industry's capacity and breaking down unrealistic prices are just some of the things that need to be done. What they all have in common is that they all cost much money. Implementation? The most straightforward measure seems to be a partial change of profile in the construction industry. If this does not involve EU money, it is completely free to spend the planned amount.

The housing situation in Hungary is no worse than the regional average. However, the rental conditions are. In addition to presenting the situation, this study aims to provide suggestions for improving the current situation. In the beginning, after getting to know the topic, it became clear that state intervention is unavoidable and that only the market (invisible hand) is slow and ineffective. Furthermore, the question must be solved now, not in decades, since those who want to live do not want to do so in twenty or thirty years.

In accordance with Hungarian terminology, the text sometimes calls the system and refers to sublets, where the residents pay a wage for the use of the apartment. Classically, the sublet is rented from the primary tenant; that is what Kádár-era talked about. The rental agreement is concluded with the owner – the state's representative – and is paid regularly, usually monthly, by the resident or tenant. Joint tenancy typically occurs in multi-room apartments, where the responsibility is joint and several only for the standard rooms and individual for the rest. Today, it almost only exists as a sublet, but not under that name.

In order to give a comprehensive picture of the Hungarian housing market and rental situation, specific data would also be necessary. However, this is only partial and only approximate. Not only are the KSH's data inaccurate, but so are those of daily market observers, even housing prices. Especially when looking at rents, the differences are even greater. Through the land registry data of the capital and county government offices, housing prices can be tracked concerning sales, but the situation is significantly worse for rent since a significant part (according to estimates, about a third to a half) is not even officially registered and "goes into your pocket". Whitening is also a state task; some discounts automatically bring this, but in its current form, this is still insufficient. Sanctions and punishment are not effective measures either, as they only provide a solution in one case at a time, and they are only temporary and create hatred towards the authorities at most. The Hungarian tax code is far from the same as the Scandinavian one; it is true: the citizens do not get the same either. So, there is plenty to do.

Internet data are guide prices. Renting an apartment usually begins with a negotiation; this is common practice in Hungary, and many people take this into account from the start. There is no feedback on the net about the final price, but it is obviously no more than a direction. A reduction of 10-20% is typical, but it is also rumoured that in the case of a more current apartment, candidates outbid each other, but the latter is not typical. Many people do not even dare to indicate the actual fee on the anonymous questionnaire.

The discourse surrounding housing is multifaceted, intricately woven into the fabric of urban life, economic systems, and governmental policies. In this comprehensive exploration, we navigate through seven key chapters, each offering a unique perspective on the various dimensions and challenges within the housing sector.

Understanding the diverse groups affected by housing dynamics is fundamental to crafting inclusive policies. Chapter one delves into the nuanced experiences of individuals and communities impacted by shifts in housing, providing a foundational understanding of the broader landscape.

Chapter two immerses us in the dynamic world of apartment rentals and sublets. Exploring the evolving trends and challenges in contemporary living arrangements, this chapter examines the role of platforms like Airbnb and the tax implications associated with short-term rentals. Delving deeper into the intricacies of short-term rentals, Chapter three focuses on the specific

interplay between apartment rentals, platforms like Airbnb, and taxation policies. Unravelling the financial dimensions, this chapter sheds light on the regulatory landscape governing this burgeoning sector.

At the core of urban development lies the construction of housing. Chapter four surveys the broader landscape of housing construction and investigates trends, challenges, and innovations. This exploration provides insights into the foundational aspects of urban growth. Chapter five focuses on areas marked by industrial legacies and urban decay, commonly known as brownfield and rust zones. Analysing these regions' revitalization efforts, challenges, and policy interventions offers a unique perspective on urban regeneration.

Housing policies are pivotal in shaping the socio-economic dynamics of communities. Chapter six scrutinizes the various policy options adopted by governments, providing an in-depth analysis of their effectiveness, inclusivity, and adaptability in addressing diverse housing needs. The final chapter, Chapter seven, zooms in on the critical aspect of state support for the rental system. By examining how governments facilitate or regulate renting, this chapter unveils the delicate balance between fostering a dynamic housing market and protecting tenants' rights.

I. General foundation

The foundational elements of any comprehensive exploration into housing dynamics lie in understanding the diverse groups affected, the evolving landscape of apartment rentals and sublets, and the impact of alternative rental models, particularly within the framework of platforms like Airbnb and associated taxation policies. This initial segment, encapsulated under the umbrella of the general foundation, lays the groundwork for a nuanced examination of the multifaceted dimensions of contemporary housing. From the individuals and communities navigating housing challenges to the intricate interplay of short-term rentals and tax implications, this section sets the stage for a deeper dive into the complexities of our ever-evolving housing ecosystem.

The number of population and average age by sex

Year	Population			Average age		
	males	females	total	males	females	total
1900	3 418	3 436	6 854	26,9	26,9	26,9
1910	3 792	3 820	7 612	27,2	27,3	27,2
1920	3 874	4 113	7 987	28,5	28,9	28,7
1930	4 248	4 437	8 685	29,3	30,2	29,8
1940	4 561	4 755	9 316	31,0	32,1	31,6
1950	4 470	4 822	9 293	..	..	..
1960	4 804	5 157	9 961	32,5	34,8	33,6
1970	5 004	5 318	10 322	34,3	37,0	35,7
1980	5 189	5 521	10 709	34,6	37,7	36,2
1990	4 985	5 390	10 375	35,5	39,0	37,3
2000	4 865	5 356	10 222	36,6	40,6	38,7
2010	4 757	5 257	10 014	38,7	43,0	40,9
2020	4 681	5 089	9 770	40,6	44,8	42,8
2021	4 664	5 067	9 731	40,8	44,9	42,9

Source: KSH (2021): 22.1.1.2. A népesség száma és átlagos életkora nem szerint

1. Affected groups

Understanding the intricate web of affected groups is paramount within the realm of housing dynamics. This segment delves into the impact on various facets, beginning with exploring population demographics. This section offers a comprehensive overview by dissecting the characteristics of those affected, examining the broader spectrum of impacted groups, and assessing the interplay between demand and housing affordability. Through the lenses of demographics, group dynamics, and economic considerations, we navigate the multifaceted landscape that shapes the housing needs and challenges faced by diverse communities.

1.1. Population - Demographics

The issue of population and demography is the opening thought, as it generally refers to how many people the housing issue can be understood. Since the beginning of the 1980s, the population of Hungary has been decreasing. Between 1990 and 2011, the population decreased by 400,000 people, and between the 2011 census and 2014, another 100,000 people were lost. According to the population forecast for 2015, a further decrease in numbers and increasing ageing are expected.¹ Based on the forecast of the KSH Population Research Institute, the population will decrease by almost 2 million people by 2060; the proportion of people aged at least 65 will approach one-third, and their number will be two and a half times the number of people aged 0-14.

Future development of births, deaths and migrations are necessary: these form the system of initial hypotheses. Several hypothesis systems can be formed by combining hypotheses, but usually, three versions are calculated: the high, medium (or basic) and low versions. The new version of the calculation made in 2015 its hypothesis system is the following:

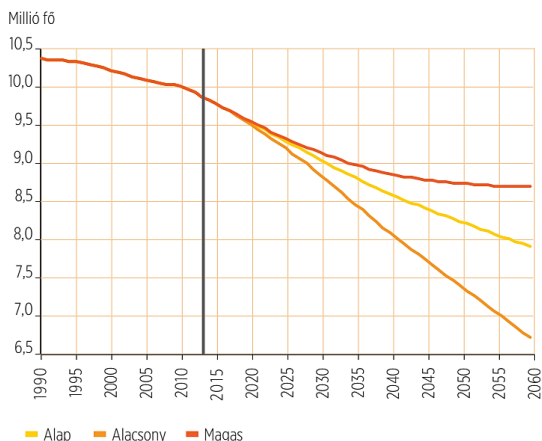
¹ Obádovics, Cs. (2018): The structure and future of Hungary's population. Demographic Portrait of Hungary, 273-296. and Tóth, C. G. (2021). Multi-population models to handle mortality crises in forecasting mortality: A case study from Hungary. Society and Economy, 43(2), 128-146.

National population projection hypotheses, 2015

	Basic hypothesis			Low hypothesis		High hypothesis	
	2013	2030	2060	2030	2060	2030	2060
Total fertility rate	1.34	1.6	1.6	1.45	1.45	1.74	1.75
Life expectancy at birth, males	72	76.7	84.8	75.6	82.5	77.5	87.1
Life expectancy at birth, women	78.7	82.4	88.7	81.1	85	83.7	92.4
Balance of international migrations	-7340	-5960	7500	-17500	-7500	-4360	17,500

Source: Földházi Erzsébet (2015): A népesség szerkezete és jövője. in Monostori Judit - Őri Péter - Spéder Zsolt (2015) (szerk.): Demográfiai portré 2015. KSH NKI, Budapest: 213–226.

According to the 2015 population forecast, the country's population is expected to be around 7,900,000 in 2060. The highest expected population is 8 million 690 thousand people, and the lowest is 6 million 700 thousand people: the difference between the two extreme versions is almost 2 million. The population decline continued until 2014, and according to all three versions of the forecast, it will continue in the future: even in the case of the high version, which assumes a significant increase in fertility and significant immigration, it will not reach 9 million people in 2060. According to the forecast, a decline of nearly 2 million people may occur even in the case of moderately improved fertility and mortality.



Of course, the number of the population alone is not enough, as the geographical distribution is also essential. The following list lists the settlements with the largest population in Hungary according to the 2018 KSH data.

Large cities

Settlement	Rank	Population (capita)	+/-	Area (km ²)
Budapest	capital	1,749,734	▼	525.09
Debrecen	county seat	202 214	▲	461.66
Szeged	county seat	161 122	▼	281.00
Miskolc	county seat	155,650	▼	236.66
Pécs	county seat	144 188	▼	162.77
Győr	county seat	130,094	▲	174.62
Nyíregyháza	county seat	117 121	▼	274.54
Kecskemét	county seat	110,638	▼	322.57
Székesfehérvár	county seat	97,382	▼	170.89
Szombathely	county seat	77,984	▼	97.50
Szolnok	county seat	71,521	▼	187.24
Érd	city with county rights	66,892	▲	60.54
Tatabánya	county seat	65,633	▼	91.42
Sopron	city with county rights	62,454	▲	169.01
Kaposvár	county seat	61,920	▼	113.59
Veszprém	county seat	59,754	▼	126.90
Békéscsaba	county seat	59,357	▼	193.93
Zalaegerszeg	county seat	57,780	▼	102.41
Eger	county seat	53 436	▼	92.21
Nagykanizsa	city with county rights	46,866	▼	148.40
Dunaújváros	city with county rights	44,358	▼	52.67
Hódmezővásárhely	city with county rights	43,700	▼	487.98

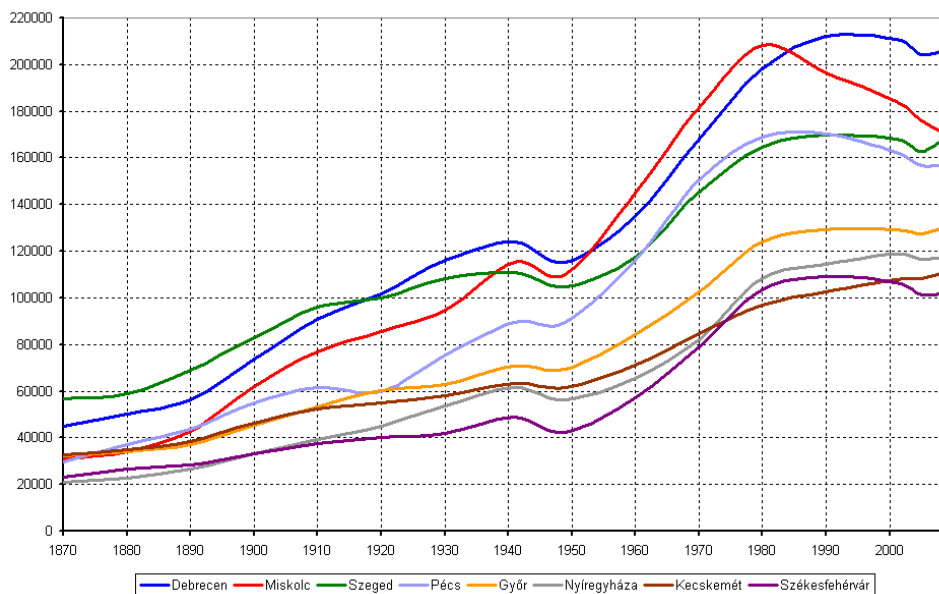
Source: KSH (2018): Magyarország közigazgatási helynévkönyve, 2018.

Despite the demographic changes and forecasts, it is worth noting that, despite the slight decrease, the population of the major cities is stagnating due to urbanisation;² the decrease is minimal. So, the countryside becomes depopulated, people move more and more to the waiting areas. As a result, the demand for housing will remain at the current level, and in the case of some economic centres, growth must be expected. In the case of some settlements, the increase is due to the sudden economic development, thus new

² The process of urbanisation is different from the process of urbanising. The urbanising process indicates the increase in the number of cities and their population. Urbanization means that the urban character of the settlements is strengthened, for example, the number of multi-storey buildings increases, the commercial supply, the number and quality of services, the condition of roads and infrastructures improve.

jobs. This is especially true in the case of Győr or Kecskemét, where the automobile industry positively affects these processes. At the same time, it should also be mentioned that this also means a kind of sectoral vulnerability since if these manufacturers and employers relocate to another town or country, it is difficult for the labour market to absorb workers with specialised skills.

Development of the population of large cities



Source: Rovács Barna (2009): A legnagyobb magyar városok népességnövekedése, Budapest nélkül, 1870-2009. Based on KSH data

The figure clearly illustrates that there has been a continuous increase in urbanisation in Hungary since the second half of the 19th century. The steepest fluctuations can be observed between the 1950s and 1980s when the population of several cities doubled. In Hungary, the process of urbanisation accelerated after the regime change, but this did not go hand in hand with the acceleration of urbanisation; that is, the quality of urbanisation did not necessarily follow the increase in the number and population of cities. Several settlements received city status after the turn of the millennium, so the number of cities in Hungary increased to 333 in 2011 and 346 in 2014.

1.2. The affected groups

The affected persons are mainly the young and the socially needy, the poor, and those with low incomes. At the same time, this is also a very significant ³voting base – well over a million, according to our estimate, and it is worth including at least some of its elements in the party programs.

Young people, especially **students**, are a temporary problem, not only because no one stays young forever but also because about half of the cohorts entering adulthood continue their education. With the targeted construction of dormitories, the problem can be solved relatively quickly, in an organised and especially long-lasting (!) manner. If the state does not want/cannot spend on this, give the market more opportunities: the existence of private colleges is not from the devil.⁴ Several are already operating in Budapest. Here, students who have been admitted to higher education institutions are provided with accommodation both in the inner-city districts of Budapest and in green areas with family houses further away from the city-centre, thus meeting different needs.⁵ We believe that the opportunity could get a considerable boost with some discounts.

Institutions, faculties, students (Nr.)

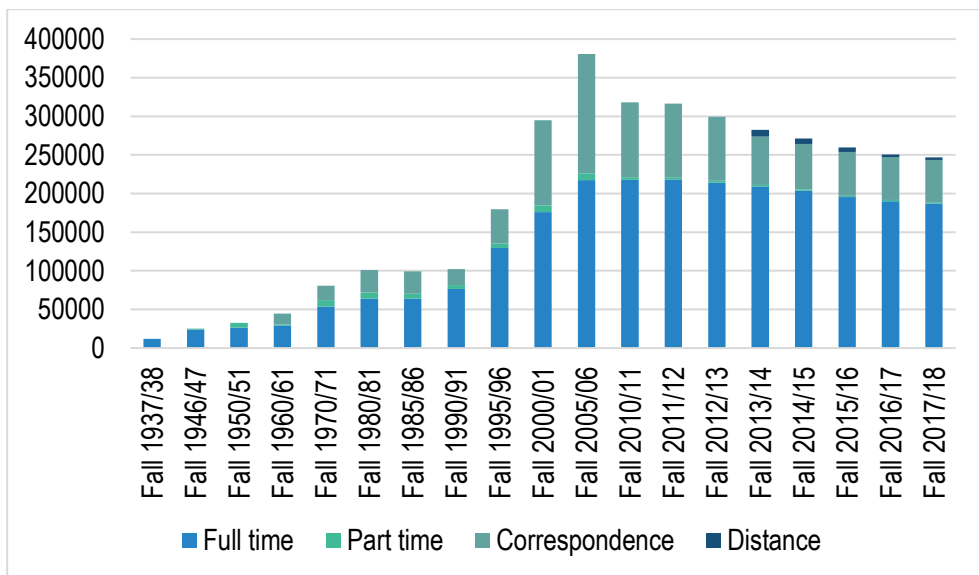
	Institu- tions	Full time	Part- time	Corre- spond- ence	Distance	All	Num- ber of prof.
1937/38	16	11,747	-	-		11,747	1 724
1946/47	18	24,036	1 216	-		25,252	..
1950/51	19	26,509	5,992	-		32,501	..
1960/61	43	29,344	1 314	13,900		44,558	5,635
1970/71	74	53,821	8 177	18,538		80,536	9,791
1980/81	57	64,057	8,035	29,074		101 166	13,890
1985/86	58	64 190	6 203	28,951		99,344	14,850
1990/91	77	76,601	4 737	21,049		102,387	17,302
1995/96	90	129,541	5,764	44,260		179,565	18,098
2000/01	62	176,046	8,625	110,369		295,040	22,873
2005/06	71	217,245	8,939	154,448		380,632	23 188
2010/11	69	218,057	3,100	96,862		318,019	21,495

³ One hundred thousand students graduate each year, together with other sources, roughly the same number apply for higher education, approx. half of them need housing, this includes approx. half a million young couples looking for an apartment, and the same number were actually in social need.

⁴ Such as Grassalkovich, Szív, Garay, Thököly

⁵ www.magankollegium.hu

2011/12	68	218,304	2 756	95,325		316,385	21 357
2012/13	66	214,320	2 329	82,987		299,636	20,555
2013/14	66	209 208	1 907	62,850	8 331	282 296	21 137
2014/15	67	203,576	1 725	59 136	7,043	271,480	21,080
2015/16	66	195,419	1 716	56,629	5,765	259,529	21,668
2016/17	65	190,098	1 688	55 196	3 725	250,707	22,436
2017/18	64	187,084	1 819	54,658	3 447	247 008	23 110



Source: Office of Education (2019): Higher education statistical data, downloadable reports
- Oktatási Hivatal (2019): Felsőoktatási statisztikai adatok, letölthető kimutatások

The same applies to the **nesting** program. With the added bonus that there are no semesters here, special attention must be paid to ensuring that the demographic processes develop favourably in the end. According to the National Housing and Construction Office (OLEH) calculation, home building is potentially available to 200-300 thousand people.⁶ In fact, the movement of this large crowd is not visible, but it is a separate study to examine this and propose changes professionally. The nesting programs are not meant for life; they come in handy initially and can be an excellent transition to creating a real family home. One of the criticisms of the current CSOK is that it is a kind of social support labelled with the call words "family" and "having children". The program does not solve or reduce social and social difficulties because

⁶<https://www.amiotthonunk.hu/epites-felujitas/epitesi-tanacsok/6078-feszekrako-program>

- the money also goes to existing children, which does not increase the number of births – Hungary's population continues to decrease;
- the rich also have money, and CSOK is especially interesting for them since they have the necessary self-power and financial security;
- it is not at all more accessible to get an apartment, as the market has switched to wild capitalist mode and has fully incorporated the amount of the CSOK subsidy into its prices.

The third affected group is the socially disadvantaged, **the poor, and those with low incomes**. It is not the economic interest that is dominant here, but the humanitarian one. The more a society can offer here, the more valuable it is morally.

Dimensions of poverty or social exclusion

Indicators	2005	2010	2015	2020	2021
By age group and sex					
Total	15,9	14,1	14,5	12,7	12,1
Male	16,3	14,5	14,4	12,3	11,6
Female	15,5	13,7	14,5	13,1	12,6
0–17	24,8	23,7	19,9	11,9	10,1
18–64	14,5	13,8	15,0	12,0	12,3
Male	14,8	13,7	14,7	12,1	12,1
Female	14,2	13,8	15,3	11,9	12,5
65+	9,4	4,9	6,8	15,6	13,4
Male	6,9	4,1	5,9	13	11,5
Female	10,8	5,4	7,3	17,3	14,6
By educational attainment					
Basic level at most	24,5	23,3	25,0	30,6	26,1
secondary level	11,0	10,0	11,4	10,8	11,1
higher level	3,0	2,9	6,0	2,9	4,6
By the most frequent activity and sex					
Employed	6,9	6,2	9,7	7,5	7,0
Male	8,1	6,9	9,5	..	6,9
Female	5,4	5,4	9,9	..	7,1
Unemployed	53,2	47,1	48,2	45,0	49,0
Male	55,0	49,4	49,6	..	51,8
Female	51,0	44,3	46,1	..	45,7
Pensioner	14,9	4,5	9,2	8,9	12,7
Male	17,2	4,4	7,0	..	11,5
Female	13,3	4,7	10,2	..	13,4
Other inactive	24,6	22,9	23,1	20,00	23,5

Male	22,5	21,4	23,2	..	26,0
Female	25,8	23,8	23,0	..	22,3
By household type					
Households without dependent children	10,0	8,9	11,3	14,1	14,8
Of which:					
single person	17,6	15,9	17,4	23,6	23,8
male	24,7	22,5	20,9	26,1	24,8
female	14,5	12,3	15,0	21,8	23,1
younger than 65	22,0	22,2	24,5	22,6	29,7
65 year old or older	13,5	8,6	9,0	24,6	17,4
two adults (<65) without dependent children	10,3	10,8	13,3	10,9	14,2
Households with dependent children	20,5	18,8	17,6	11,1	9,2
Of which:					
single person with dependent children	38,8	28,1	37,5	28,2	24,8
two adults with one dependent child	13,8	12,0	13,1	11,1	7,9
two adults with two dependent children	18,2	13,9	13,7	6,6	4,3
two adults with three or more dependent children	33,6	35,4	25,2	12,1	12,1
In Roma and non-Roma population					
Roma	..	..	54,7	36,4	33,2
Non-Roma	..	..	13,2	11,9	11,4
By tenure status					
Owner	15,2	13,4	13,8	11,9	11,9
Tenant	24,9	24,2	21,1	22,5	14,9
Without social benefits by sex and age group					
Total	29,6	29,0	25,8	20,6	19,1
Male	30,2	29,8	26,0	19,7	18,4
Female	29,0	28,3	25,6	21,5	19,7
0–17	44,0	48,7	43,6	11,9	22,3
18–64	28,5	28,7	25,4	30,1	19,4
Male	29,0	28,5	24,8	17,5	18,6
Female	28,1	28,8	26,0	19,6	20,1
65 year old or older	13,7	8,8	9,1	18,6	15,4
Male	9,7	6,7	7,2	15,4	13,9
Female	15,9	10,0	10,3	20,6	16,3

Source: KSH (2021): 5.1.1.4. Relatív jövedelmi szegénységi arány nem, korcsoport, iskolai végzettség, gazdasági aktivitás, háztartástípus és lakáshasználat jogcíme szerint [%]

1.3. Demand and housing affordability

In this connection, the limit values of the housing expenditure/income (L/J) ratio **following the rule of thumb are 35 and 40%, respectively.** Many housing maintenance programs use this simple indicator to determine eligibility for participation (supplemented with other elements). It is a theoretical question whether there is a natural ratio between housing costs (L) and incomes (J). In the rental housing sector, which developed during the rapid urbanisation, the normative rule was that the rent could not be more than one week's salary. Nevertheless, in banking practice, the 33% rule is also often used during credit evaluations (i.e., a maximum of one-third of the household's income can be used to repay the loan). The Act of 1993 on Social Security also set the acceptable limit of housing expenses at 35%. The United States' Section 8 housing assistance program supports families below 30% of the median income in that city region, and the goal is to keep their housing expenses below 30% of their income.⁷

According to KSH data, in April 2019, the gross average earnings of those employed full-time at the national economic level - at businesses employing at least five people, at budget institutions and non-profit organisations significant in terms of employment - was HUF 371,100, excluding public employees, HUF 381,700. The average net salary without discounts was HUF 246,800, and discounts were HUF 254,300. The gross and net average earnings calculated without discounts increased by 9.0%, and the net average earnings calculated with discounts increased by 9.1% compared to the same period of the previous year.

Earnings trends, 2020 (HUF)

Sector	Altogether		Without public employees	
	average monthly earnings	change to the previous year, %	average monthly earnings	change to the previous year, %
Gross				
Undertakings	372,700	11.4	373,300	11.3
Government (Budget)	323,300	6.7	356,900	4.1
Nonprofit	309,300	11.3	328,000	7.6

⁷József Hegedüs - Eszter Somogyi (2015): Housing affordability and social inequalities - based on the 2015 KSH housing survey

Total national economy	356,900	10.4	367,400	9.4
Of this:				
public employees	82,000	-0.7	x	x
Net				
Undertaking	247,800	11.4	248,200	11.3
Budget	215,000	6.7	237,300	4.1
Nonprofit	205,700	11.3	218,100	7.6
Total national economy	237,300	10.4	244,300	9.4
Of this:				
public employees	54,500	-0.7	x	x

Source: KSH (2020): Gyorstájékoztató, Keresetek 2020 január-április

Average net earnings of full-time employees without discounts

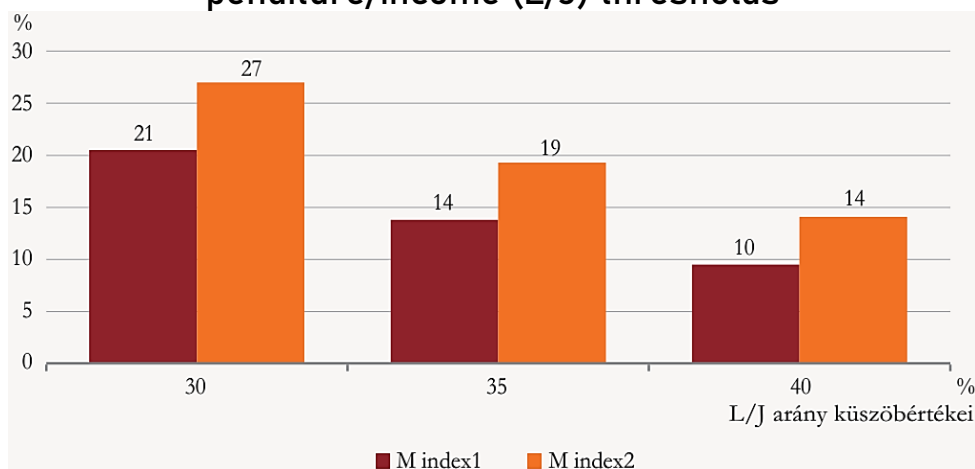
Territorial unit					
name	2015	2016	2017	2018	2019
Net average earnings, HUF					
Budapest	209,277	226,030	250,599	275 273	294,322
Pest	148,094	159,209	179,887	198,673	215,465
Central Hungary	195,966	211 294	234,805	257,878	276 117
Head	154,215	167,597	190,571	213,885	234 141
Komárom-Esztergom	159,540	172,901	194,228	215,336	233,542
Veszprém	141,658	154,062	175,333	197,894	213 331
Central Transdanubia	152,226	165,284	187,305	209,677	227,995
Győr-Moson-Sopron	169,803	182,561	204,712	226,805	241 115
Iron	147,695	160,506	182,776	201,526	211 659
Zala	127,085	137 164	156,527	172,648	184,083
Western Transdanubia	153,662	165,761	187,412	207,530	220 319
Baranya	130,649	139,202	160 149	179,951	190,226
Somogy	133,594	141,709	162,413	180,871	191,657
Tolna	148,357	159,972	183,445	202,453	206,875
South Transdanubia	135,865	144,898	166,311	185,547	194,647
Transdanubia	148,295	159,909	181,732	202,622	216,698
Borsod-Abaúj-Zemplén	124,930	133,906	153,858	173,244	181 447
Fierce	147,773	158,956	182,727	202,914	216 120
Nograd	119,610	131,505	151,889	168,904	177,866
Northern Hungary	130 001	139,990	161 103	180,618	190,286
Hajdu-Bihar	133,651	142,320	162,250	180,752	193,757
Jász-Nagykun-Szolnok	127,854	137,504	160,685	178,951	188,248

Szabolcs-Szatmár-Bereg	111,650	118,420	137,747	153,451	161,920
Northern Great Plain	124 148	132,255	152,946	170,513	180,988
Bács-Kiskun	134,751	146,091	167,486	186,666	199 158
peaceful	118,744	128,422	146,305	163 117	170,312
Csongrad	138,324	148,731	169,754	189,010	197 121
Southern Great Plains	131,554	142,255	162,770	181 451	191 177
Lowland and North	128,240	137,717	158,494	177,008	187,022
Country total	162,391	175,009	197,516	219,412	234 181

Source: KSH (2020): 6.2.1.14. A teljes munkaidőben alkalmazásban állók kedvezmények nélküli nettó átlagkeresete a munkáltató székhelyének elhelyezkedése szerint

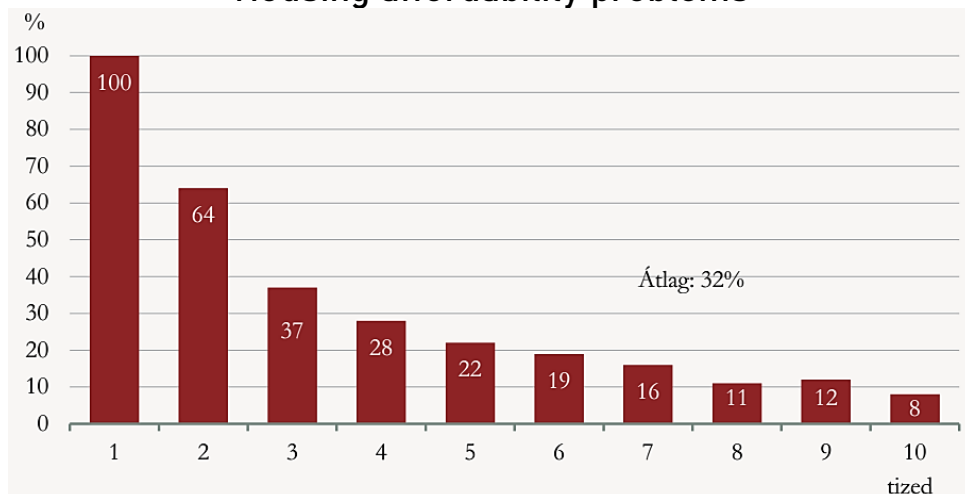
An important question is what we consider **housing costs**. Basically, two definitions can be distinguished: ongoing expenses related to the apartment (rent, utility costs¹), and expenses related to housing investment (purchase, construction, renovation). Housing expenses without mortgage repayments (M index1) are 22% of the family's income, and housing loan repayments (M index2) are 25%. If the affordability limit is set at 40 % of income, then 10 and 14% of families are among those who spend an excessively large part of their income on housing, but if the limit is 30%, then 19 and 27% of families - is involved in the problem.

Affordability of housing costs for different housing expenditure/income (L/J) thresholds



Source: Hegedüs József – Somogyi Eszter (2015): A lakások megfizethetősége és a társadalmi egyenlőtlenségek – a KSH 2015-ös lakásfelvétele alapján

Housing affordability problems



Source: KSH (2018): Miben élünk? A 2015. évi lakásfelmérés részletes eredményei

Analysing according to income deciles based on equivalent income, we see that more than two-thirds of the families belonging to the two lowest income deciles are affected by the affordability problem, 3-7. a quarter of families belonging to the lowest income decile are affected. In contrast, 10% of the three highest income groups are affected. As expected, the relationship between affordability and income is close but not linear. The affordability problem is a complex social phenomenon, but one of its most obvious consequences is the arrears in the payment of housing costs. 15% of the households had some kind of arrears (rent, loan, utilities or common charges), which is closely related to the income of the households and the affordability problem. 36% of families belonging to the two lowest income groups had arrears in the past year, but the proportion of arrears is high in grades 3–7. also, among income deciles (13% on average), while in the top three deciles, it is 4%. Interestingly, even in the highest income groups, there is a delay in the payment of housing-related costs.

In the last 12 months, 15% of households (575,000 households) were unable to pay rent, mortgage repayments, utility fees or common charges on time one or more times due to a lack of funds. During the past year, 522,000 households were in arrears of utility bills at least once, and 112,000 were in arrears of common charges. 77,000 households were unable to pay their rent on time, and 60,000 were late on their home loan instalments. Arrears were

more frequent in households with a low level of comfort, with several children and with a low income. 76 % of the arrears existed for no more than 3 months, and 24 % were debts beyond three months.

It is important to note that **housing estates do not have the biggest affordability problem**: in the case of single-family houses, the problem is 50% more likely to occur than in housing estates, and in the case of municipal rental apartments, where the rents are lower and where the social role of the state should be more prominent, the probability of the occurrence of housing problems is twice the average.

2. Apartment rentals and sublets

The inherited housing stock in Hungary reflects the conditions of the recent past. Apart from the bombing of a major city (e.g. the siege of Budapest) in World War II, there was no destruction of buildings (e.g. carpet bombing) on the scale of that in Austria, Czechoslovakia, Poland or even Germany. After the war, however, no development took place for a long time, and the existing apartments were being cut up (separations, joint rentals, sublets etc.). Due to the spectacularly deteriorating situation, large-scale housing construction started in the sixties; the panel era quickly resulted in a spectacular increase in quantity, particularly in large cities. Masses have access to housing with a relatively good level of comfort. In this way, large demands could be met relatively quickly – at least partially.

The concept of cheap rent disappeared with the system change. The previous "favourable" situation was created in such a way that the maintainer, then known as HKI (House-management Directorate), did not spend on the renovation. Even after privatisation, this became a problem, not a small one. Some of them have survived into the 21st century, for example, the outer Ferencváros or the Hős utca settlement in Budapest. There are still such indicators in the countryside, for example, the old barracks (Rozália street) in Sopron, where even the oldest people do not even remember the idea of preserving the state. People can still live in them today; of course, the price is appropriate. There are two obstacles to their demolition: the removal also costs money, and: where should those who have been there go to live?

2.1. Housing portfolio

What is the inherited situation? Today, there are 4.4 million dwellings in Hungary, of which 1 million are in buildings with more than 25 flats, and properties with four or more dwellings account for 39 % of the housing stock. 82 % of dwellings in Budapest are in buildings with more than three flats, and this rate is 64 % in county capitals.

The number of vacant apartments is increasing; in 2001, it was 9.2%, and in 2011 it was 10.9 %.⁸ The regional distribution shows a significant

⁸ KSH (2016): Miben élünk? A 2015. évi lakásfelmérés főbb eredményei és A magyar lakáshelyzet <https://kizamol.hu/a-magyar-lakashelyzet/>

deviation: 6 % in Budapest and 18 % in Northern Hungary. This telling number also shows that it is not possible to rent out the apartment everywhere; there is simply no demand for rentals or sublets. Most of the vacant apartments cannot even be sold at depressed prices, or let alone rental or sublet. There are good quality Kádár cube houses (i.e. built in the 70s, square, mostly with two or three rooms, around 90-100 m²) for a very modest amount, even though they cost the same to build as their counterparts in frequented locations.

Own property vs. Rentals

	Own Property	Rentals, sublets
Advantages	<ul style="list-style-type: none"> • Equity Building • Stability and Control • Investment Potential • Tax Benefits 	<ul style="list-style-type: none"> • Flexibility • Financial Predictability • Lower Upfront Costs • Landlord Responsibility
Disadvantages	<ul style="list-style-type: none"> • Financial Commitment • Maintenance Responsibility • Market Fluctuations 	<ul style="list-style-type: none"> • Lack of Equity • Limited Control • Rent Increases • Temporary Living Situation

Source: own compilation

One of the primary advantages of **owning property** is the opportunity to build equity over time. Mortgage payments contribute to ownership, allowing for potential financial gains in the long run. Property ownership provides stability and a sense of control over one's living space. Homeowners have the freedom to make structural changes, decorate as they wish, and establish a lasting residence. Real estate often appreciates in value over time, presenting an opportunity for homeowners to build wealth through property appreciation. Additionally, the property can serve as an investment with potential rental income. Homeownership may come with tax advantages, such as deductions for mortgage interest and property taxes, providing financial relief for homeowners.

On the other hand, owning property requires a significant financial commitment, including a down payment, mortgage payments, property taxes, and maintenance costs. This can be a barrier for some individuals. Homeowners are responsible for the upkeep of their property. Maintenance costs, repairs, and renovations can add up in terms of time and money. Real estate markets can be unpredictable, and property values may fluctuate due

to economic conditions. Economic downturns can impact the value of owned properties.

The rent provides flexibility for apartment rentals, allowing individuals to easily relocate for work or personal reasons without the commitment of selling a property. Tenants often have fixed monthly payments, providing financial predictability without the concerns of unexpected maintenance or repair costs. Renting typically involves lower upfront costs compared to purchasing a property. There is no need for a substantial down payment, making it more accessible for individuals with limited savings. Tenants are not responsible for major property maintenance or repair costs. Landlords bear these responsibilities, offering convenience to tenants.

Unlike property owners, tenants do not build equity. Monthly payments contribute solely to occupying the space without potential long-term financial gains. Tenants have only limited control over the property. They may be subject to rental restrictions and unable to make significant alterations or improvements without landlord approval. Rental costs are subject to periodic increases depending on the terms of the rental agreement. This lack of cost stability can be a disadvantage for long-term financial planning. Renting or subletting often implies a temporary living situation. This lack of permanence can be a drawback for individuals seeking a permanent home.

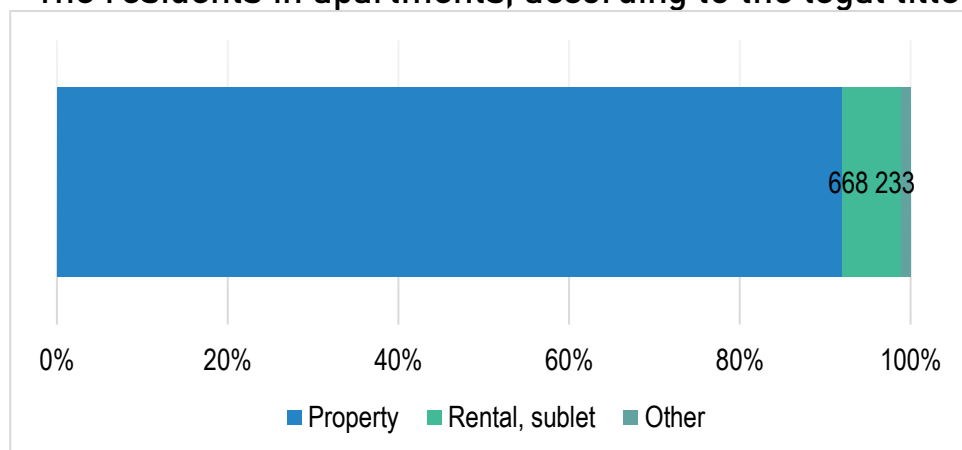
In weighing the advantages and disadvantages of owning property versus renting or subletting, individuals should consider their financial situation, lifestyle preferences, and long-term goals to make an informed decision aligned with their needs.

2.2. Rentals, Sublets

The **geographic distribution** of the rental and sublet market is very heterogeneous. It is almost only in large cities and the capital. After all, why would someone rent permanently in a small village in Nógrád or Szabolcs, where people can buy a complete house in good condition for 1-2 million, even in instalments? The leaders of the housing market are large cities, especially university cities and those where the demand for qualified labour in terms of quantity, but above all in quality, exceeds the local supply. This is the case everywhere in the world. The smaller the settlement, the smaller the demand.

The proportion of inhabited apartments is 87%, i.e. 13% of residential properties are unoccupied. In other words, there are 3 million 854 thousand inhabited apartments, and at least 8-9% of the residents live in a rental, i.e. there are **about 300,000 rentals in Hungary**, calculated with the average household size (2.36); this **means about 700,000 people**. (According to the 2011 census, 668,000 people rent and 108,000 people under other legal titles: usufructuary, preferential housing use, etc.) The accurate picture includes the fact that foreigners occupy 10 % of rental properties; in Budapest, this ratio is 20 %. Among the rental apartments, there are many panels, clearly dominant in county seats (59 %) but also significant in Budapest (20 %).

The residents in apartments, according to the legal title



Source: KSH (2012): 4.3 A lakások lakói a lakás használati jogcíme szerint

The **prices** also change accordingly. The bigger the city and the more university students it has, the more expensive the rental is. As a result, Budapest is the most expensive, and there are already Western European prices on the market, with the significant limitation that the wallets of apartment seekers are not Western European. In addition to what was already mentioned, this is also why state intervention is needed. In some cases, the gap between the wages of state-municipal housing and those on the market is large; it is fully justified to bring the two to the same level, or at least to approximate them, given that the support for those in need is obviously significantly greater than the former. The more such apartments are built from the former, the easier it is for the state to keep rent market prices under control. You just have to get this far.

What are the **characteristics** of the rental people are looking for? What are they looking for in general? In terms of time, they are usually one or two

years near contracts and universities; 9-10 months is typical for students. In the latter, there is more of a break for the summer, and the payment of two or three months' extra (unused) rent is significant. Multi-year agreements are rare; with these having a more significant discount, the price is fixed, i.e. the effect of inflation does not apply. Luxury apartments are a separate category; foreigners usually rent them, and the price is unique, but so is the standard. There are few of them; they do not even make up half a per cent of the rental market. With the openness of the foreign market, the demand for this is also increasing. The market does not value the unique features of the apartment for rent. For example, we mention a property for rent in Budapest, where the house's builder was a minister who fought for freedom in 1848/49, so it was initially built as a bishop's palace, with the corresponding level of sophistication. Its designer was one of the best architects of his time, the deputy of the greatest master of the Viennese Art Nouveau, Otto Wagner, the dreamer of Vigadó in Buda, etc. – the price has not become more, as they say: there is no need for this anymore.

The technical condition of rental apartments essentially reflects the entire housing stock. Regarding the latter, we know that more than a quarter of them (according to the profession, 25-30 %) need immediate renovation, the reason for the delay being "only" the issue of money. There would also be an opportunity for state intervention here: for example, those who take rentals at discounted rates would receive discounts. The cost of renovation and modernisation is significantly lower than that of a newly built apartment, not to mention the profit over time. Many apartments - the vast majority - are not in such bad condition that they should be demolished. Almost every apartment can be equipped with adequate heat protection (insulation), in some cases with favourable energy consumption (solar panels, windmills), and intelligent, smart solutions. In the West, this is now a widespread form of renovation, which could otherwise be one of the solutions for starting the nesting of young people. Another aspect of financing is that it pays for itself after a while by reducing overhead costs. The connection with the rental construction is almost simple.

Their comfort level is below average, which means that, for example, in rental apartments in the capital, only two-thirds of the city's housing stock is of overall comfort, while three-quarters of the total of the housing stock. In villages, one in five rental dwellings is semi-comfortable or uncomfortable. In the latter, 12 % of rental apartments do not even have a bathroom; therefore, the rental fee also corresponds to this. The question remains: is there anything lower?

According to the MNB survey,⁹ 84% of Hungarian households owned real estate in 2017, far more than the European average. Due to the historical background, such a high proportion of private property is typical of the former vassal territory everywhere. That is, in terms of number and quantity, there are quite a lot of apartments. If we take into account the expected demographic changes, an increasingly favourable housing picture is emerging, even if the current housing construction frenzy slows down. So, should it be built?

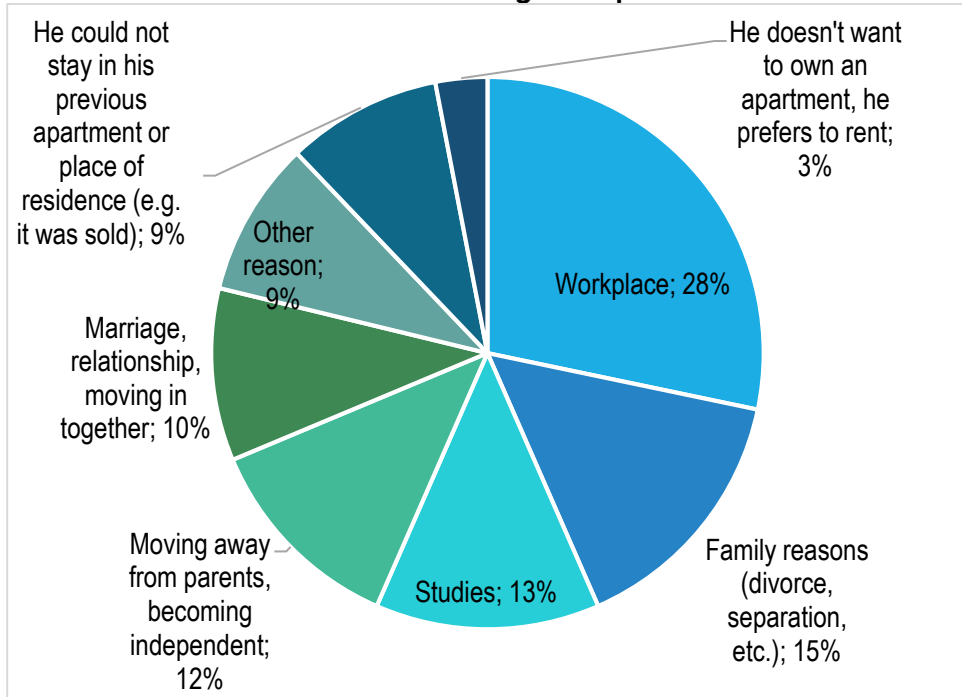
The fundamental reason for the current rental situation is not the lack of housing but the poverty of society. Plenty of apartments are on the market; for example, only www.startlak.hu presents 1,923 apartments for rent in Budapest. There would also be demand; there is a problem with solvency. The Hungarian rentals are expensive, primarily because they are not used by the top 10,000. It can be said without exaggeration that 99 % of the people living in the rental in Hungary chose this solution due to some kind of compulsion, i.e., all of them are in need. It should be treated that way.

More and more people are looking for and offering apartments online. The last 20 years have drastically reorganised the world of classified ads. Computer IT knowledge is mandatory for students, as all applications and knowledge readings are online. Many companies specialise in advertising, and of course, they ask for a price typically equivalent to the first month's rent. In return, however, the searcher must only look at an already selected selection. What is essential is that the modern solution did not make the rental market cheaper.

Most tenants (57 %) live in the apartment with their family or partner. In a third (32 %) of the rented apartments, the tenant lives alone; this proportion is higher in Budapest (37 %) and lower in smaller municipalities. In the capital and the county seat, it is more common for students and friends to rent an apartment together, while in smaller settlements, it is more common for colleagues to share an apartment.

⁹⁹<https://piacesprofit.hu/gazdasag/no-a-sakadek-a-lakastuidornosok-es-a-berlok-kozot/>

Reason for renting an apartment



Source: KSH (2018): Private apartment rental, rents - main results of the 2018 rent survey

The primary reason individuals choose to rent an apartment is related to their workplace, accounting for a substantial 28 % of cases. Family reasons, including situations like divorce or separation, contribute significantly to the decision to rent, representing 15 % of instances. Studies emerge as another key factor, with 13 % of individuals opting to rent an apartment for educational purposes.

Approximately 12 % of people choose to rent to move away from their parents and achieve independence. Marriage, relationships, or the decision to move in together account for 10 % of the cases where renting is the chosen housing arrangement. Meanwhile, 9 % of individuals find themselves in a position where they cannot continue to stay in their previous residence, perhaps due to it being sold or other unforeseen circumstances.

A comparable 9 % of renters stated that they prefer not to own an apartment, indicating a preference for the flexibility and convenience offered by renting. Finally, a smaller percentage, 3 %, expresses this choice as a deliberate preference for renting over ownership.

One-quarter of the respondents live in a rented apartment because of employment. Their proportion is higher in larger settlements, 37 % in Budapest.¹⁰ Currently, the price of a room for rent in Budapest starts at HUF 30,000, and for an apartment over HUF 100,000 in the city centre (typically the V. district, but this includes the inner part of Buda, the mountains, Újlipótváros, etc.) they start at HUF 200,000.¹¹ According to ingtalan.com, from January 2014 to March 2019, the average rent per square meter of apartments for rent increased by 54 % to HUF 3,200 in Budapest and by 48 % to HUF 1,833 in large rural cities.¹² The national average - in October 2018 – was HUF 80,000. This does not include apartment maintenance costs for most tenants (89 %).

2.3. Rental fees, prices

By the mid-2010s, not only housing prices but also rental prices skyrocketed, and it is expected that after the announcement of the point limits for the 2019/20 university academic year (July 25, 2019), there will be a further increase of 10-20 %, since about a third of the subtenants are university students who, due to the scarcity of family funds, have no other housing solution (their own apartment) due to lack of capital, there are few dormitories. In August, it will feel perfect. According to KSH data,¹³ last academic year, a total of 202,278 students took part in higher education during the day (this number includes all higher education from OKJ courses to doctoral schools), and of the 48,000 new entrants, 28,500 started their studies as first-year freshmen. Most of them need a roof over their heads because they are away from home, and they are the ones who throw the apartment market in a big wave every year. This is the case even if, due to the nature of the matter, the number of those who leave - they have a small gap - is approximately this much.

The study conducts a national review of rental fees and prices and then examines the values in some large cities. Smaller villages are left out of the analysis because what rent could be requested here, and from whom? Obviously, if the local infrastructure, job opportunities, etc., changed, the demand would also be different, but national solutions for this would take a long time

¹⁰ KSH (2018): Magánlakásbérlet, bérleti díjak – a 2018. évi lakbérfelmérés főbb eredményei

¹¹ www.nlc.hu/avan/20180807/alberlet-arak

¹² <https://piacesprofit.hu/gazdasag/no-a-sakadek-a-lakastuidornosok-es-a-berlok-kozot/>

¹³ <https://www.vg.hu/vallalatok/ingatlan/komoly-gondban-az-alberlet-kereso-egyetemistak-1008476/>

and a lot of money, and there is an uncertain future in the increasingly ageing villages. At the same time, it is a non-negligible tool for maintaining the countryside. Currently, with the exception of one or two tourist destinations, there is no demand for this type, and it is not expected that there will be in the near future. Thus, the capital and the large cities remain with small apartments.

According to experts, the rise in rent (87% in 5 years, i.e. between 2013-2018!) can hardly be stopped without state intervention. The current state housing policy only focuses on the acquisition of one's own property. 13-19% of households had utility debt outstanding for more than 60 days, partly because they had to choose between paying utilities or instalments. This includes not only Swiss franc borrowers but also the poor people (although the formers are already poor) who live in small villages without job opportunities or as public workers. Solution at this time – none.

In November 2018, the KSH conducted its rent survey in more than 500 local governments on a representative sample covering the entire country. When determining the average rental fees, they relied on the data of 79% of the respondents, for whom the fee did not include utilities.

Nationally

About 1 million people in Hungary's housing market struggle with rental prices.¹⁴ The largest group of tenants are those who live in a family or partnership relationship; according to the KSH survey, this is 57 % of tenants.¹⁵ It is also noteworthy that in one-third of rented apartments (32 %) the tenant lives alone. Two-thirds of the rental apartments are fully or partially furnished (64 %). The desired rental apartment has good transport links but is in a quiet location, and, of course, the price is favourable. These include, if not primarily, rental apartments in large cities close to universities. The level of furnishing is – surprisingly, but it seems – only a secondary issue.

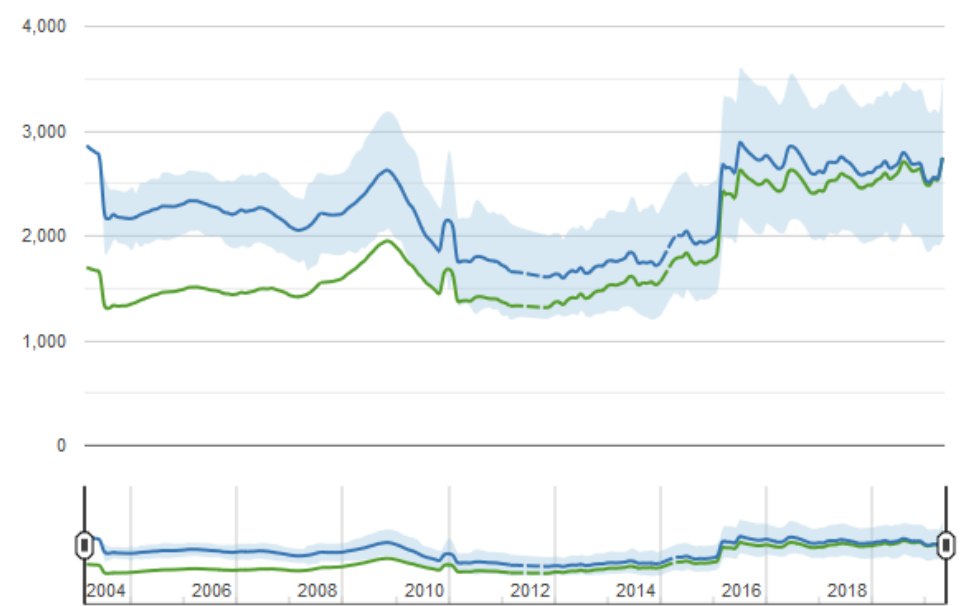
In some cases, housing was connected to the tenant's employment relationship, and it also happened that the employer entered into a long-term contract with the owner of the apartment where he housed his employees. For 89% of the respondents, the rent did not cover any apartment maintenance costs. If it did, it most often included the standard cost and the water

¹⁴ <https://24.hu/belfold/2019/01/25/alberlet-ures-onkormanyzati-lakas-budapest/> _

¹⁵ KSH Statistical Mirror June 25, 2019

and sewerage fee (6.7 % and 5.4 %, respectively). The cost of heating was included in the rent in 4 % of cases, and other items, such as the price of hot water, were even less often included in the rent. 79 % of all respondents paid purely market rent, which did not include utilities or discounts.

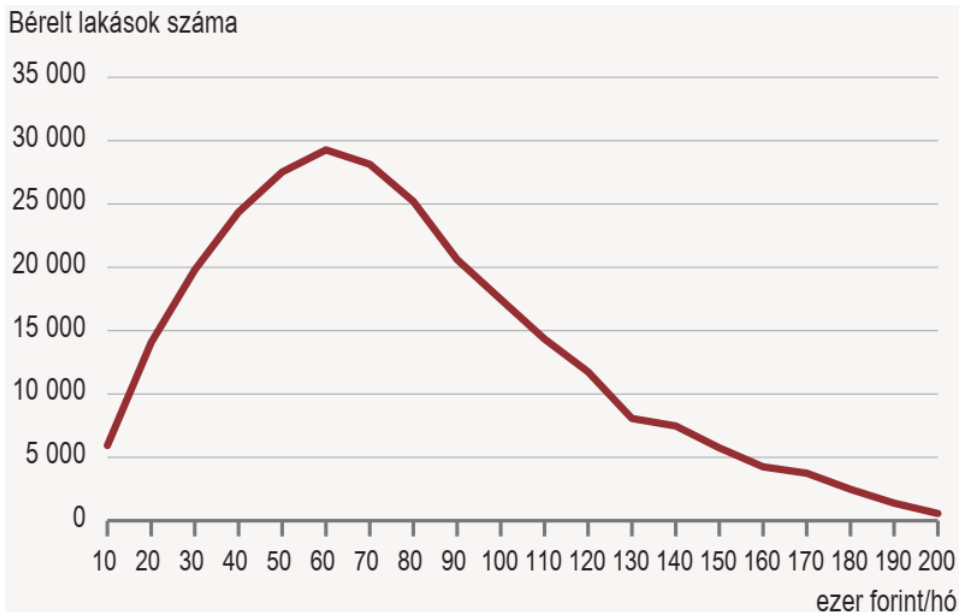
Evolution of the national average rental price (m², HUF)



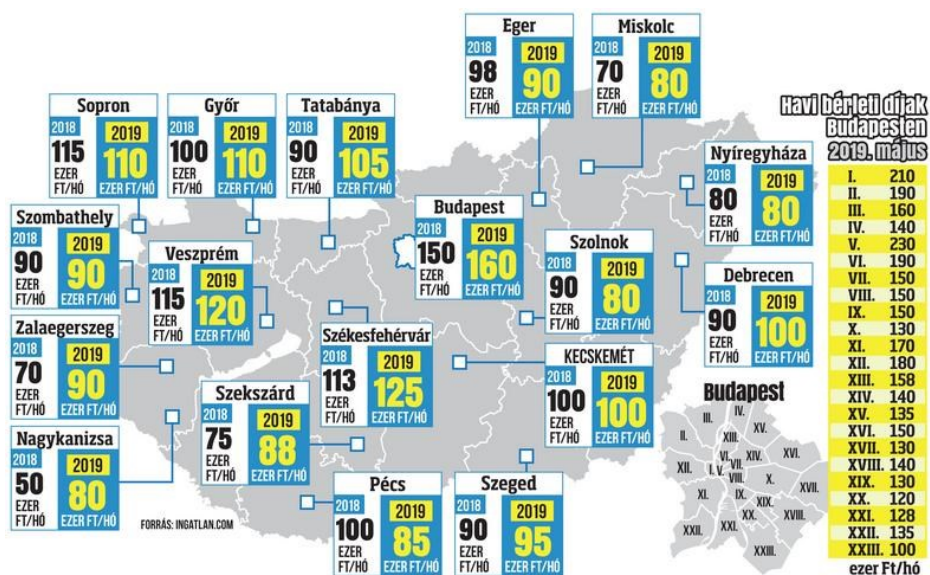
Statistics per square meter			
Average m²	Average m² price	Lowest m² price	Highest m² price
81	2 126	600	3 255
Real estate statistics			
Average price	Lowest price		Highest price
153,568	10,000		1,000,000

Source: Based on <https://www.ingatlanet.hu/statisztika/>; the nominal price (green) shows current prices in forints per square meter, while the real price (blue) is the inflation-adjusted value of the nominal price

Distribution of rents



KSH (2019): Magánlakásbérlet, bérleti díjak – a 2018. évi lakbérfelmérés főbb eredményei



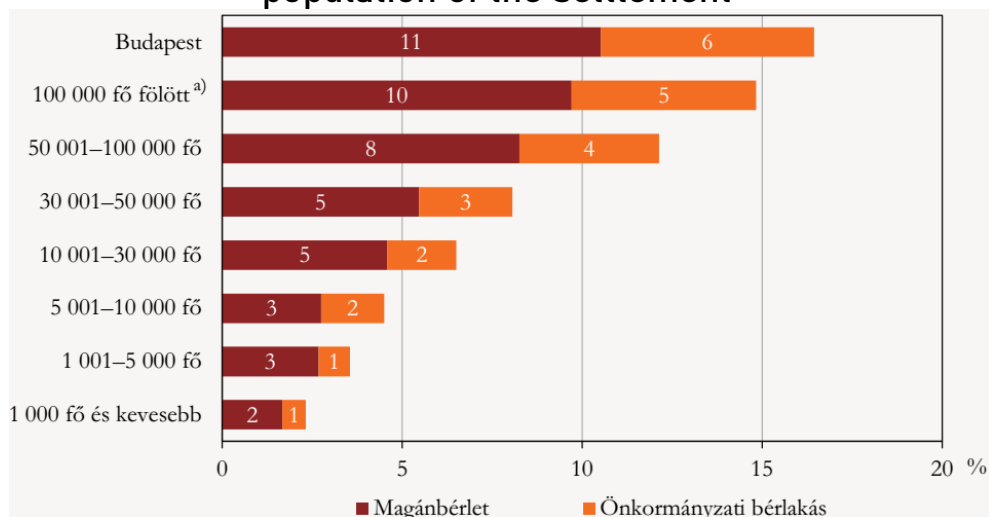
The average calculated on real estate portals is HUF 106,000, meaning there are bargains and discounts at the time of sale. Many factors matter here: trust, familiarity, length of rental period, etc. Almost half of the tenants got in touch with the apartment owner with the help of relatives and friends, and

31% of the tenants found an apartment on websites specialised in real estate advertising. Today, the Internet is the primary source of creating a rental relationship. There are more and more portals and companies specialising in the mediation of apartment rentals; there really is something to choose from. Another question is that this does not affect the prices. The national average rent was HUF 63,000 in the former and 106,000 in the latter. According to KSH's analysis, the most important factor in the difference between the two is probably trust because personal contact reduces the risk of renting out an apartment. According to ingatlan.com, nearly 16,000 properties are currently offered for sale.

Large cities

Market rental apartments are concentrated almost exclusively in large cities, and there are also in multi-apartment buildings. Mainly, smaller apartments are rented out; according to KSH, their average size is 56 m², and more than half of them have two rooms; in the case of large hotels, the average size is slightly larger at 81 m². According to the KSH survey, 39 % of all rented apartments were in Budapest, another 30 % were in county seats, and only less than a third were in other cities or villages. In Budapest, 41 % of rental apartments are located in city apartment buildings, 20 % in housing estates, and 35% in other, mainly non-green belt, multi-apartment buildings.

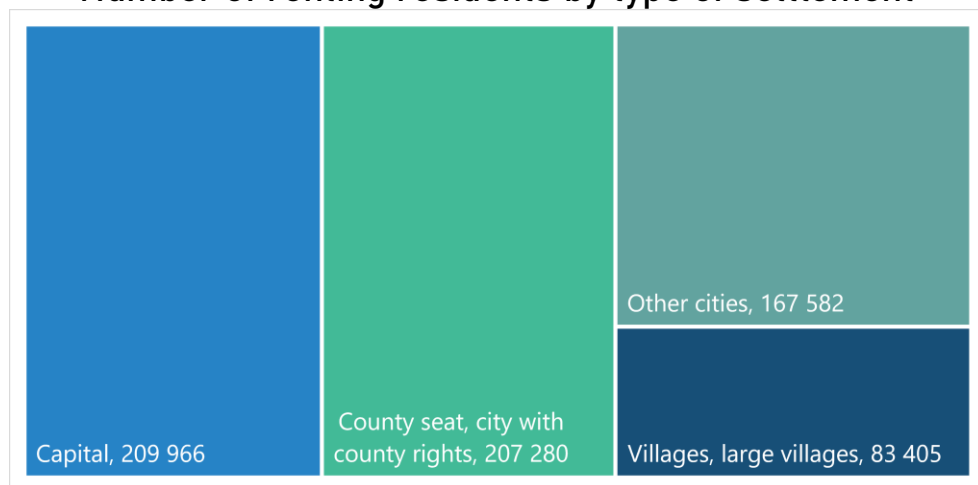
The proportion of rented apartments according to the population of the settlement



Source: KSH (2016): Miben élünk? A 2015. évi lakásfelmérés főbb eredményei

From the KSH graph above, it is clear that rental apartments now represent a noticeable proportion not only in the capital but also in larger county seats and cities with county rights. It is also close to 8-10 % for the latter. The following graph also confirms this correspondence.

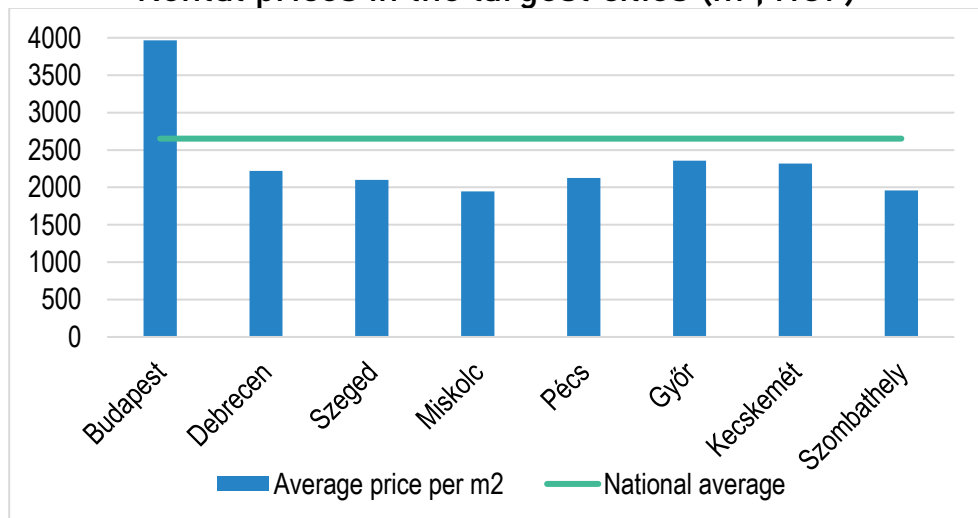
Number of renting residents by type of settlement



KSH (2020): 4.3 A lakások lakói a lakás használati jogcíme szerint

Almost two-thirds of tenants rent apartments in the capital (31 %) and the county seat, cities with county rights (31 %), 25% in other cities and only 12 % in villages.

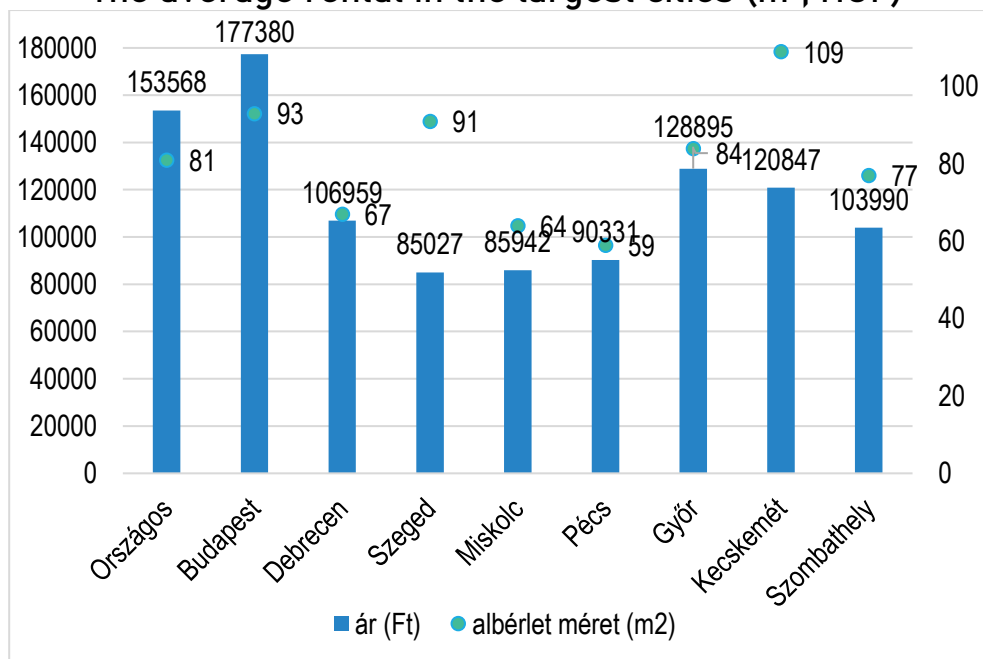
Rental prices in the largest cities (m², HUF)



Source: <https://www.ingatlanet.hu/statisztika/Budapest>

Compared to Budapest and the national average, prices are lower in large cities. The difference is almost twofold in favour of the capital for one square meter. Among the county seats and large cities, the price increase is more significant where there is either significant industrial production and/or a larger number of students. Both maintain or may even increase demand, which drives up prices. Hungarians and foreigners looking for jobs in Budapest and the large cities and living in other counties are increasing the number of tenants, which also counteracts the decrease in fees.

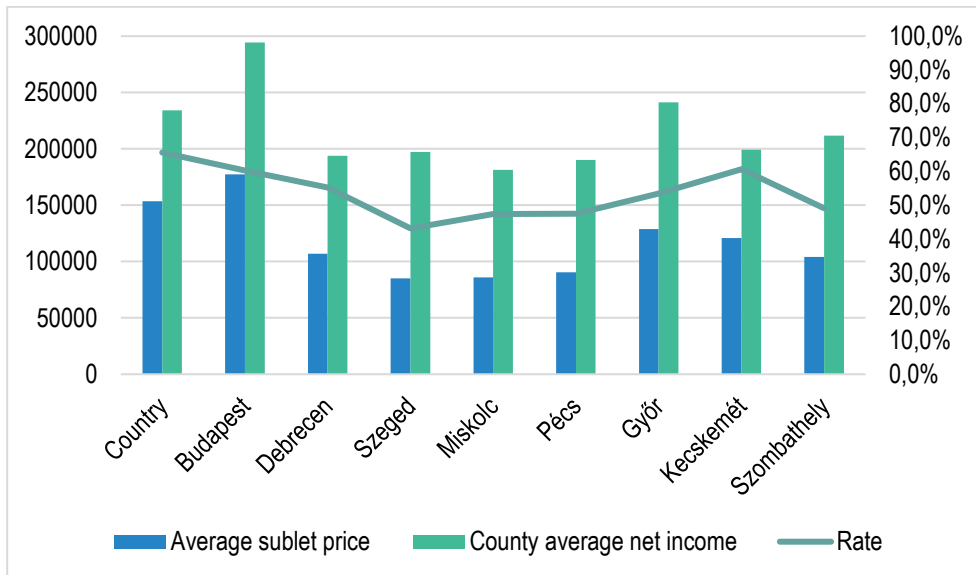
The average rental in the largest cities (m², HUF)



Source: based on <https://wwwingatlanet.hu/statisztika/>

In the countryside, the offer is slightly more favourable: in Debrecen, the market was at HUF 100,000, in Szeged at HUF 85,000, and in Pécs at HUF 90,000.

In the largest cities, the average rental price and average net income

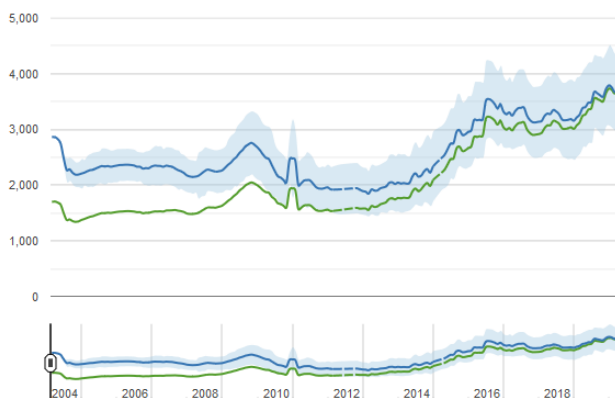


Source: Own compilation by KSH (2019): 6.2.1.14. A teljes munkaidőben alkalmazásban állók nettó átlagkeresete a munkáltató székhelyének elhelyezkedése szerint és az <https://www.ingatlanet.hu/statisztika/> alapján

It is worth comparing the average rental price with the regional (county) average income since, in most cases, households finance housing maintenance from local income. (The exception to this is young people who continue their studies with parental support in another settlement.) **In most cases, half - two-thirds of the average net income per person is the average rental price.** This far exceeds the limits following the rule of thumb accepted in statistics: 35 and 40 %, respectively. The fees, therefore, take more than half of the earnings: in large cities, the tenant have to pay HUF 130,000 for a rental on average, while the average net income is around HUF 200,000. The costs of apartment maintenance must also be added to this:

Rental prices in Budapest (m², HUF)

According to statistics in the capital, apartment rental prices decreased after the financial crisis, although they were still the highest nationally. From 2013, the rise became sharper; in 2015, it crossed the 3,000 mark, which continues to grow, approaching HUF 4,000.



Statistics per square meter			
Average m ²	Average m ² price	Lowest m ² price	Highest m ² price
93	3,838	1 290	4,505
Real estate statistics			
Average price	Lowest price		Highest price
177,380	10,000		1,000,000

Based on <https://www.ingatlanet.hu/statisztika/Budapest>; the nominal price (green) shows the current prices in forints per square meter, while the real price (blue) is the inflation-adjusted value of the nominal price.

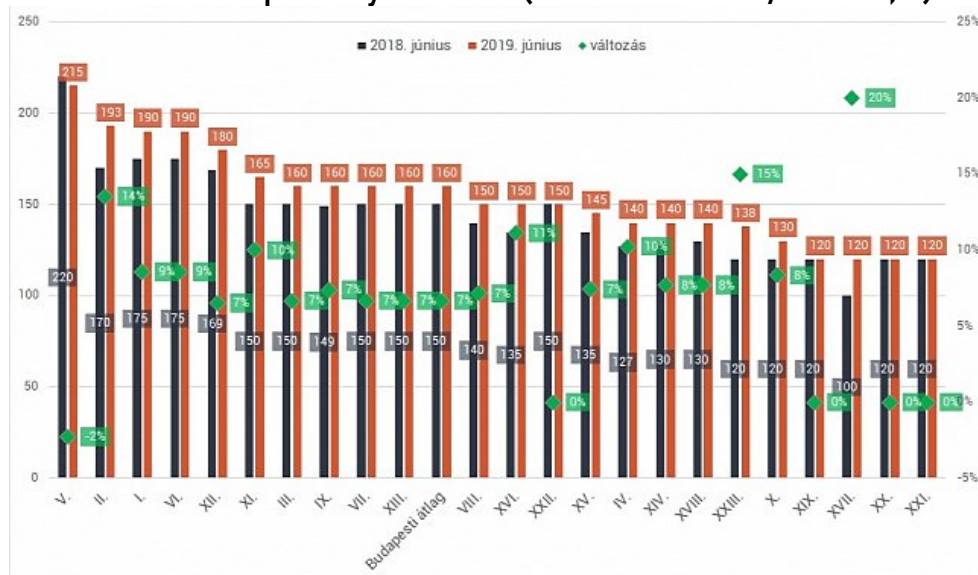
The average apartment rent in the capital was HUF 160,000 in mid-May, corresponding to a 7% increase in price per year. In July, it had already risen to HUF 177,000. The cheapest district in Budapest is XXIII, where the average rent is HUF 100,000. The average was HUF 120,000 and HUF 128,000 in the XX and XXI districts, respectively. The prices were the highest in the mountainous districts of Buda (146,000 forints on average), which can be partly explained by the high price of 2,397 forints per m², and partly by apartment sizes exceeding the national average (56 m²). In the inner districts of Pest, a rental costs an average of HUF 125,000, according to the KSH compilation. Rents in Budapest are close to one and a half times the national average.

In 2019, Budapest's average monthly apartment rent was HUF 160-165,000; in the city centre, HUF 200-240,000; and in the XIII district, HUF 158,000. According to ingtalan.com, the current average prices are 7-8%

higher than last summer. Typical prices exceed the average price by up to 20-40%, especially in the inner city. We add that, in addition, the apartment hunting season after university admissions begins in August each year when the landlords can expect a further increase in demand, which is not in the direction of a decrease.

It is mainly the market that can prevent further increases in apartment rents. According to several intermediaries, a slowdown in price increases can be observed in the inner city, where prices have already reached the ceiling. In some outer districts with less good transport connections and worse than average services, the price increase is below average, while in the sought-after VIII, IX, XI, and XIII districts, the price increase was 3-5 % compared to 2018. Nearly 12,000 new apartments will be built in these districts this year, of which approx. 35-40% may appear on the rental market, which may slow the rise; stagnation is also conceivable in the medium term. However, it will only decrease if the expansion of the supply continues at the current rate.¹⁶

Average monthly rent and change of 20-100 m² flats for rent in Budapest by district (thousand HUF/month;%)



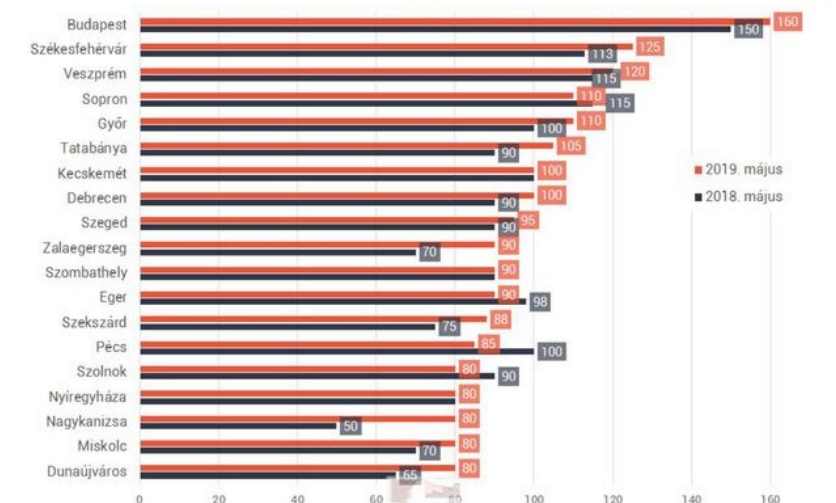
¹⁶Mester Nándor (2019): The entire Hungarian sublet market would collapse - Will rents be frozen here as well? in Portfolio, June 21, 2019

Average monthly rents and number of inquiries per 100 real estate ads in the capital



The demand is adjusted to the price level; the cheaper rentals (XXIII, XX, XXI, XVII districts) attract twice as many people as more expensive ones but three times as many. This is true even if the location is further away from the city centre, although many people are looking for housing close to the workplace and larger employers in the capital's outer district.

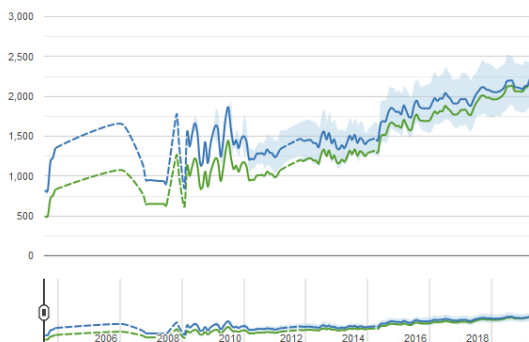
The average monthly rent of apartments for rent in large cities (thousand HUF/month)



In large cities, the situation is not the same as in Budapest; in Miskolc, for example, demand has increased by more than 60 %, supply has almost doubled, and rents have jumped by 14 % to HUF 85,000. "In Miskolc, supply was very tight a year earlier, so even though it expanded significantly, strong demand pushed up prices from a low starting point," the expert said. In Győr, there were 20 % fewer apartments to choose from this year, while demand has also increased by almost 70 %. As a result, average rents have risen by 10 % annually to 110,000 forints. In Debrecen, the average rent increased by 11 % to HUF 100,000; in Szeged, it increased by a more modest 6 % to HUF 95,000. Among the rural university cities, demand in Pécs increased by 17% and supply by 14%, while the average rent decreased by 15 % to HUF 90,000 compared to a year earlier. In the countryside, the highest rent levels were found in the West Transdanubian county towns, at HUF 81,000. In the rest of the country, especially in small settlements, rents were often below HUF 50,000 per month. Rents in the larger university cities were higher than in the region, with examples such as Debrecen (HUF 1,460), Győr (HUF 1,675), Miskolc (HUF 1,115), Pécs (HUF 1,665) and Szeged (HUF 1,376) in autumn 2018.

Rental prices in Debrecen (m², HUF)

Apartment prices in Debrecen have doubled over the past ten years, the price of HUF 1,000 m², but it is still close to HUF 2,000. Although the financial crisis between 2010 and 2015 measured growth.

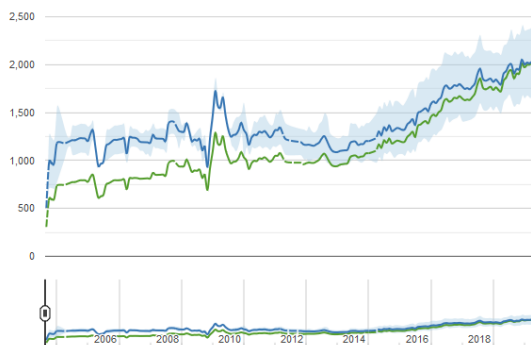


Statistics per square meter			
Average m ²	Average m ² price	Lowest m ² price	Highest m ² price
67	1 964	909	2 467
Real estate statistics			
Average price	Lowest price		Highest price
106,959	12,000		1,000,000

Based on <https://www.ingatlanet.hu/statisztika/Debrecen>; the nominal price (green) is the current price in forints per m², and the real price (blue) is the inflation-adjusted value.

Rental prices in Szeged (m², HUF)

A similar trend can be observed in Szeged: After the swing in 2010, prices did not settle until 2017. As a result of the process, by 2019, prices above HUF 2,000 per square meter should be expected.

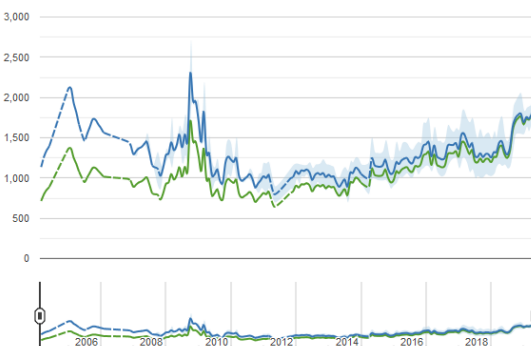


Statistics per square meter			
Average m ²	Average m ² price	Lowest m ² price	Highest m ² price
91	2 010	1 433	2 317
Real estate statistics			
Average price	Lowest price		Highest price
85,027	10,000		890,000

Based on <https://www.ingatlanet.hu/statisztika/Szeged>; the nominal price (green) is the current price in forints per m², and the real price (blue) is the inflation-adjusted value.

Rental prices in Miskolc (m², HUF)

Subletting in Miskolc shows a more moderate increase, which is why the prices still do not approach the exceptional peak of 2009 and 2010. In the last ten years, the rate of increase has been close to inflation.

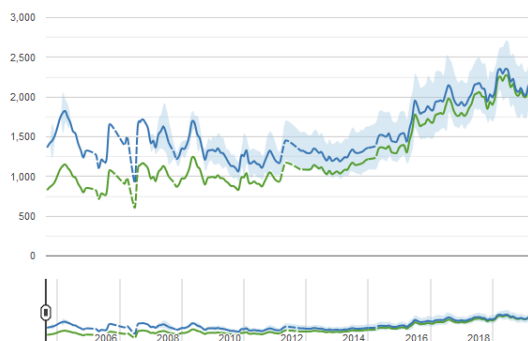


Statistics per square meter			
Average m ²	Average m ² price	Lowest m ² price	Highest m ² price
64	1 813	0	1 632
Real estate statistics			
Average price	Lowest price		Highest price
85,942	10,000		930,000

Based on <https://www.ingatlanet.hu/statisztika/Miskolc>; the nominal price (green) is the current price in forints per m², and the real price (blue) is the inflation-adjusted value.

Rental prices in Pécs (m², HUF)

In Pécs, the average rent exceeded HUF 2,000 in 2017. Compared to the crisis, a smaller degree of settlement can be observed. However, the strengthening seen at the beginning of 2019 was only temporary.

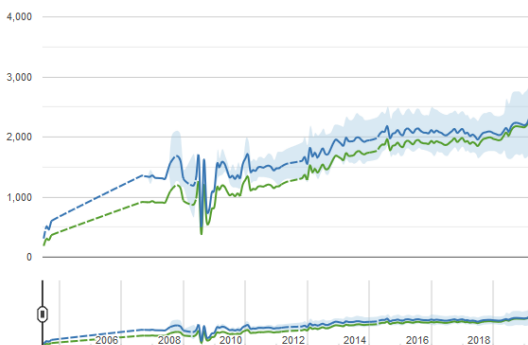


Statistics per square meter			
Average m ²	Average m ² price	Lowest m ² price	Highest m ² price
59	2 193	0	2 413
Real estate statistics			
Average price	Lowest price	Highest price	
90 331	10,000	1,000,000	

Based on <https://www.ingatlanet.hu/statisztika/Pécs>; the nominal price (green) is the current price in forints per m², and the real price (blue) is the inflation-adjusted value.

Rental prices in Győr (m², HUF)

Győr is a typical example of how the town's economic development in the automotive industry and the limited supply drove up rental prices. The extreme values show a three-fold increase.

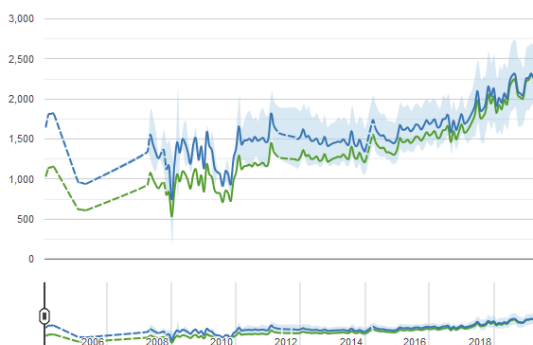


Statistics per square meter			
Average m ²	Average m ² price	Lowest m ² price	Highest m ² price
84	2 463	1 136	3,013
Real estate statistics			
Average price	Lowest price	Highest price	
128,895	10,000	888 888	

Based on <https://www.ingatlanet.hu/statisztika/Győr>; the nominal price (green) is the current price in forints per m², and the real price (blue) is the inflation-adjusted value.

Rental prices in Kecskemét (m², HUF)

The same can be observed in the case of Kecskemét. With the advent of the automotive industry, rents rose two and a half times, especially from 2017 onwards, a steeper increase.

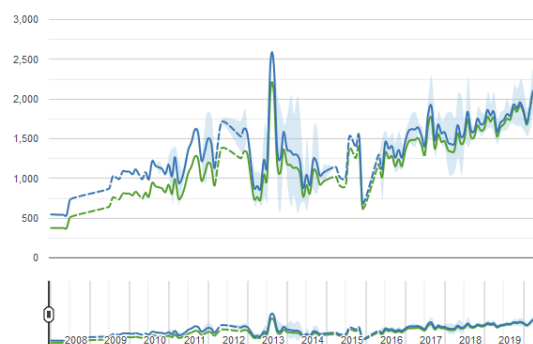


Statistics per square meter			
Average m²	Average m² price	Lowest m² price	Highest m² price
109	2 427	888	2 642
Real estate statistics			
Average price	Lowest price		Highest price
120,847	10,000		900,000

Based on <https://www.ingatlanet.hu/statisztika/Kecskemét>; the nominal price (green) is the current price in forints per m², and the real price (blue) is the inflation-adjusted value.

Rental prices in Szombathely (m², HUF)

In Szombathely, the increase is four times compared to the years 2008-2009. The fall of 2012 was considered an outstanding period, which suddenly returned to the real value, but since then it has continued to rise.



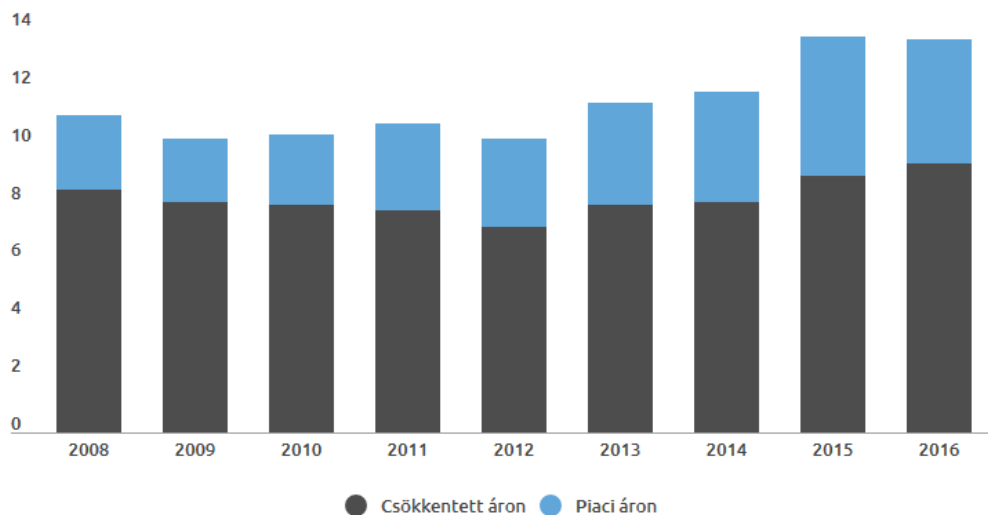
Statistics per square meter			
Average m²	Average m² price	Lowest m² price	Highest m² price
77	2,085	1 232	2,400
Real estate statistics			
Average price	Lowest price		Highest price
103,990	12,000		687,500

Based on <https://www.ingatlanet.hu/statisztika/Szombathely>; the nominal price (green) is the current price in forints per m², and the real price (blue) is the inflation-adjusted value.

2.4. Effects

High rental prices force the demand side to try to buy a temporary apartment. It is definitely worth it: the apartment price is expected to go up within a few years, and there is no rent, which are factors that make the apartment seeker think about buying an apartment even with a loan. The problem is with those whose wallets do not allow it. This is the majority.

The proportion of people living in rental in Hungary



*Black: reduced price, Blue: market price

Source: Eurostat (2018): Rentals

According to the KSH time series data, in 2017, 5.2 % of households rented the property they lived in at the market price, while in 2011, their share was only 3.6 %. At the same time, the proportion of non-market tenants - those living in social, municipal rental apartments - has practically not changed: it increased from 3.5 % to only 3.8 % in six years. At the same time, the proportion of households living in their own property decreased somewhat - from 87.6 % to 85.2 %.¹⁷

In addition to the rental fee, the **deposit is not to be neglected**. Typically, a 2-4 month pass fee is returned at the end but must be paid at the time of departure and used for the duration of the pass. In the West, this is significantly higher and clearly serves the purpose of ensuring that the apartment's

¹⁷ Egyre népszerűbb az albérlet

<https://www.vg.hu/vallalatok/egyre-nepszerubb-az-alberlet-738849/>

condition does not deteriorate, as the repair costs far exceed domestic costs due to the high hourly wages. This is also a severe aspect for Hungarian tenants since – as already mentioned – most of them come from the lower decade.

However, in most cases, the rental price does not include **utility costs**, etc. The affordability of housing maintenance expenses deteriorated from 2003 to 2010 and then improved by 2015, so that in 2015, households spent the same proportion of their income on housing maintenance as in 2003, an average of 22 %.

The price increase affects almost only those with little money, those who are forced to choose this form due to a lack of other solutions. It is luck in misfortune that, in the meantime, a whole industry has emerged on the supply side: due to the low bank interest rates, an increasing number of investors choose this form since the growth of their savings here is an order of magnitude more favourable than bank structures. According to the KSH ¹⁸, anyone who bought an investment apartment at the beginning of 2017 could realise a return of around 8 % in one year. After deducting the owner's costs (maintenance, vacancy, etc.), 5-7 % remained. This clearly exceeds the yield of the best government bond, and there is none better in its category on the market. The only problem is that only the top 100,000 have the opportunity to do so - only 1%.

In the rent vs. own home battle, renting is currently underperforming. With low base rates (currently 0.9 %) and poor banking conditions, people increasingly withdraw their savings from financial institutions and buy a home as an investment. Here is a statistic: in the prime areas of Budapest, on average, one in three apartments is already rented out.¹⁹ This market segment exists to such an extent that even foreigners have taken a bite. In other words, they buy run-down apartments cheaply, renovate them to a high standard, and rent them out. This form is becoming increasingly widespread, especially as this group of investors finds the other half of the market, the cash-rich tenants.

In addition to the current prices, if someone has the willpower, it is much more worthwhile to buy their own property because the repayments of

¹⁸ Rentals in Budapest are one and a half times more expensive than the national average. HVG June 25, 2019

<https://hvg.hu/gazdasg/20191625-Budapesten-masfelszer-dragabb-az-alberlet-az-orzagos-atlagnal>

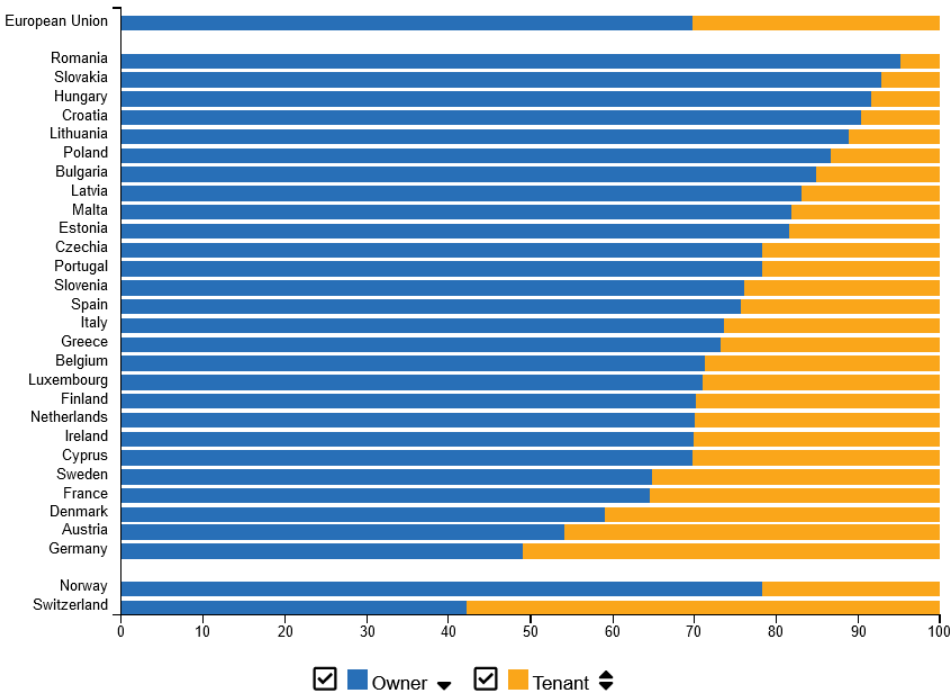
¹⁹ https://piacesprofit.hu/kkv_cegblog/kedvezobbek-lettek-a-lakaskiadas-adozasi-feltetelei/

bank loans are lower than the rental prices - many people, such as László Balogh, the leading economic expert of ingtalan.com, argue. We largely agree with this; the only problem is that such an opportunity is only given to the richest. For a loan of 15 million taken out for 20 years, the debtor would have to pay approximately HUF 80,000 in monthly instalments. Another increase is expected in a few weeks. Due to the arrival of new university students, the rental market in university towns is booming, where demand has already increased significantly. This year, 70 % more people are looking for an apartment in the capital, 60 % more in Miskolc, and 17 % more in Pécs.

2.5.EU comparison

The choice between owning or renting a house or flat varies significantly among the European Union (EU) Member States.

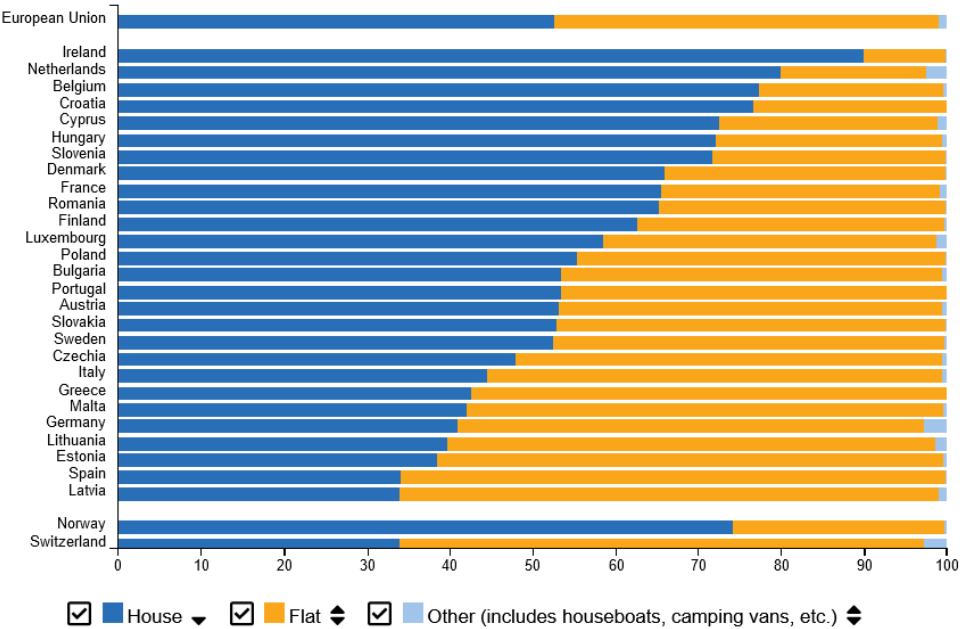
Share of people living in households owning or renting their home, 2021 (%)



Source: Eurostat (2021): House or flat – owning or renting (<https://ec.europa.eu/eurostat/cache/digpub/housing/bloc-1a.html>)

In 2021, a substantial majority, 70% of the EU population, resided in households where homeownership was prevalent, while the remaining 30% opted for rented housing. The highest rates of homeownership were notably observed in Romania (95 %), Slovakia (92 %), Hungary (92 %), and Croatia (91 %). In all Member States except Germany, homeownership was more prevalent. In Germany, slightly over 50 % of the population leaned towards renting. Austria (46 %) and Denmark (41 %) followed suit in favour of renting.

Type of housing in cities or rural areas, 2021 (as % of the total population)

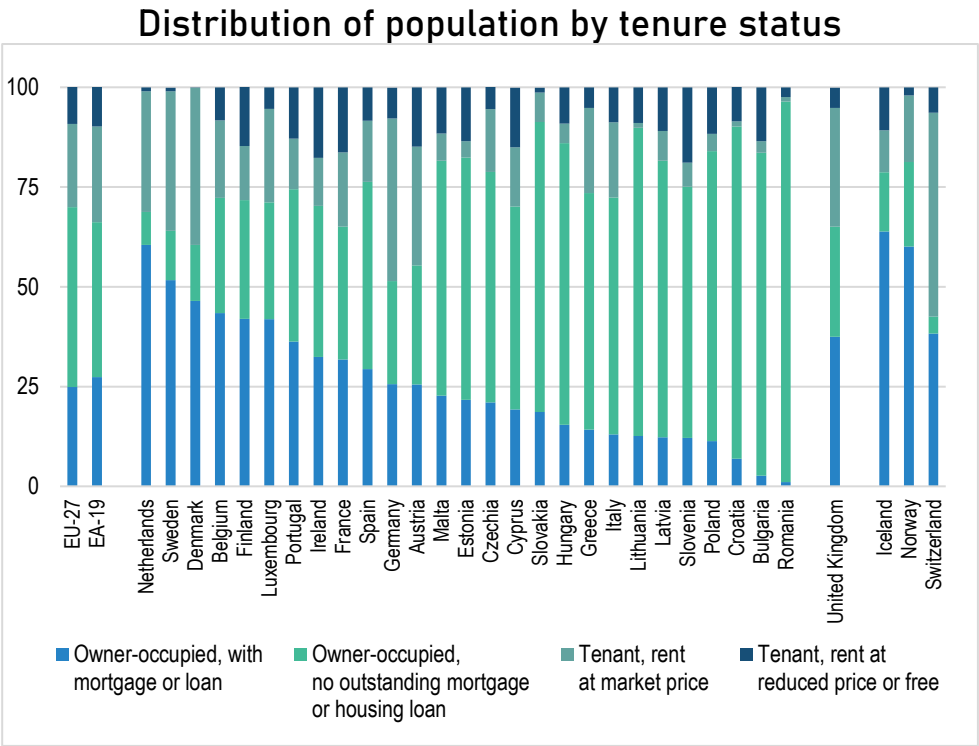


Source: Eurostat (2021): House or flat – owning or renting (<https://ec.europa.eu/eurostat/cache/digpub/housing/bloc-1a.html>)

The preference for living in a house or a flat also varies across Member States and is influenced by factors such as urban or rural residence. In the EU in 2021, 53 % of the population opted to live in a house, while 46 % chose to reside in a flat (with the remaining 1% residing in alternative accommodations like houseboats or vans). Ireland led with the highest share of the population preferring houses (90 %), followed by the Netherlands (80 %), Belgium, and Croatia (both 77 %), noting that terraced houses are included in this classification.

Houses remained the more prevalent choice in two-thirds of the Member States. Conversely, flats were most common in Spain (66 %), Latvia (65%), Estonia (61%), Lithuania (59 %), Greece, and Malta (both 57 %).

In urban settings, 71 % of the EU population favoured living in flats, while 28 % opted for houses. In towns and suburbs, the proportions shifted, with 58 % residing in houses and 41 % in flats. In rural areas, the majority (83 %) preferred houses, while only 15 % opted for flats. This nuanced analysis underscores the diverse housing preferences across different regions and provides insights into the dynamic choices made by individuals across the EU.



Eurostat (2020): Housing statistics. https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Archive:Housing_statistics

Nearly a quarter (24.9 %) of the EU-27 population resided in owner-occupied homes with a mortgage or loan, while over two-fifths (45.1 %) lived in owner-occupied homes without a loan or mortgage, as illustrated in Figure 2. Consequently, 70.0 % of individuals in the EU-27 lived in owner-occupied dwellings, while roughly one-fifth (20.8 %) were tenants paying market-price rent, and approximately one-tenth (9.3%) were tenants in reduced-rent

or free accommodation. Across all EU Member States in 2018, more than half of the population lived in owner-occupied dwellings, ranging from 51.4% in Germany to 96.4 % in Romania. In contrast, Switzerland stood out, where 57.5 % of the population were tenants, surpassing the number of people living in owner-occupied dwellings. In the Netherlands (60.5 %) and Sweden (51.7 %), over half of the population resided in owner-occupied dwellings with a mortgage or loan; a similar situation was observed in Iceland (63.9 %) and Norway (60.1 %).

The proportion of people living in rented dwellings with a market price in 2018 was less than 10.0 % in 11 EU Member States. Conversely, approximately two-fifths of the population in Germany (40.8 %) and Denmark (39.4 %) lived in rented dwellings with market price rent, along with over one-third in Sweden (35.0 %), nearly three-tenths in the Netherlands (30.2 %) and Austria (29.7%), and around one-fifth in Luxembourg (23.4 %), Greece (21.3 %), and Belgium (19.4 %). Switzerland had an even higher share, exceeding half (51.1 %). The share of the population residing in dwellings with a reduced price rent or occupying a dwelling free of charge was less than 20.0 % in all EU Member States and the eight non-member countries for which data are provided.

Housing cost overburden rate, analysed by tenure status

	Total population	Owner-occupied, with mortgage or loan	Owner-occupied, no outstanding mortgage or housing loan	Tenant, rent at market price	Tenant, rent at reduced price or free
EU-27	9,6	4	5,5	25,1	10,2
EA-19	9,8	4	4,5	24,9	10,1
Belgium	8,9	1,2	1,6	34,8	14,4
Bulgaria	17,9	6,3	16,7	50,1	20,3
Czechia	7,8	2,5	4,1	27,9	10,2
Denmark	14,7	5,2	7,1	28,9	:
Germany	14,2	8,6	8,6	20,9	16,1
Estonia	4	2	2,7	25,5	6,6
Ireland	3,4	1,2	1,2	14,3	5,2
Greece	39,5	29,2	29	83,1	8,6
Spain	8,9	3,5	2,6	38,1	10,1
France	4,7	0,7	0,6	14,9	8,9
Croatia	5,1	1,1	4,9	32,1	6,5
Italy	8,2	3,3	2,6	29,1	8,3

Cyprus	2	0,6	0,2	11,3	0,7
Latvia	6,7	9,6	5,8	11,5	6
Lithuania	5,6	2	4,9	30,9	13,6
Luxembourg	9,6	1,5	2,3	29,3	24,2
Hungary	9,6	8,3	5,9	46,9	19,9
Malta	1,7	2,1	0,3	12,1	1,7
Netherlands	9,4	2,2	4	25,6	7,8
Austria	6,8	2,6	2,4	14,5	7,8
Poland	6,2	6,2	5,1	26,4	6,6
Portugal	5,7	3	2	25,8	4,9
Romania	10,3	0,8	9,7	46,3	20,5
Slovenia	4,9	5,1	2,8	21,7	6,4
Slovakia	4,1	1,9	3,1	19,2	7,3
Finland	4,3	1,4	1,8	15,2	7,5
Sweden	8,3	1,7	6,4	18,8	0
United Kingdom	15,1	5,1	7	37,7	20,3
Iceland	6,3	4,6	2,1	16,9	12,8
Norway	10,7	6,5	3,6	35,4	6,5
Switzerland	12,8	4,7	6,6	19,4	14,7
Montenegro	15,1	31,2	12,1	52	18,3
North Macedonia	10,2	:	9,8	38,1	12,4
Serbia	31,3	34	28,9	71	38,1
Turkey	9,5	10,9	0,9	32,4	1,2

Source: Eurostat (2020): Housing statistics. https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Archive:Housing_statistics

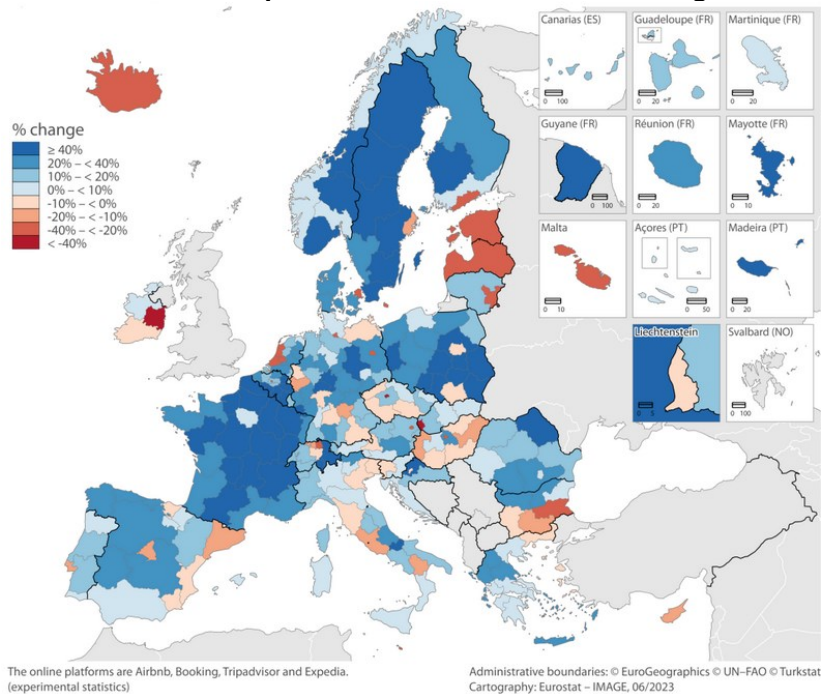
The 9.6 % of the EU-27 population resided in households where 40% or more of their equivalised disposable income was spent on housing. The proportion of individuals facing housing costs exceeding 40 % of their equivalised disposable income varied significantly based on tenure status, with tenants paying market price rents experiencing the highest rate (25.1 %) and those in owner-occupied dwellings with a loan or mortgage encountering the lowest rate (4.0 %). While the EU-27 average provides an overall perspective, substantial differences among EU Member States emerge. Notably, countries such as Malta (1.7 %) and Cyprus (2.0%) had a relatively small proportion of their population living in households with housing costs surpassing 40 % of disposable income in 2018. Conversely, Greece (39.5 %) and Bulgaria (17.9 %) stood out at the other end of the spectrum, with a significant portion of their populations facing housing cost burdens, as did Denmark (14.7 %) and Germany (14.2 %).

Focusing on the tenure status with the highest proportion facing housing costs exceeding 40% of their disposable income, namely tenants with market price rents, considerable disparities existed among the EU Member States in 2018. Six Member States had over one-third of their population in this category experiencing such burdens, exceeding two-fifths in Romania (46.3 %) and Hungary (46.9 %), reaching half in Bulgaria (50.1 %), and soaring to over four-fifths (83.1 %) in Greece. In contrast, Malta (12.1 %), Latvia (11.5 %), and Cyprus (11.3 %) reported the lowest rates of housing cost overburden for tenants with market price rents.

3. Alternative rentals – Airbnb, taxation

Over the past decade, the collaborative economy has substantially influenced the tourist accommodation sector. The advent of online platforms has simplified the process for service providers to showcase their rooms or apartments to potential guests, thereby enhancing market accessibility for property owners and guests. This heightened accessibility has garnered increased attention to this specific segment of the market. Notably, an agreement between the European Commission and major online collaborative economy platforms, including Airbnb, Booking, Expedia Group, and TripAdvisor, was inked in March 2020. This accord empowers Eurostat to analyse and compare guest nights spent in short-stay accommodations facilitated by these platforms starting in 2018. Throughout this article, the term "platform tourism" refers specifically to short-term rentals, such as apartments, booked exclusively through these four platforms, excluding other forms of lodging like hotels or campsites.

Guest nights spent at short-term accommodation booked via online platforms, NUTS2, % change



Source: Eurostat (2021): Short-stay accommodation offered via online collaborative economy platforms.

While the Covid-19 pandemic significantly impacted various tourism sectors in 2020, platform tourism has experienced a resurgence, surpassing pre-pandemic levels. The focal point of this article is to delve into national, regional, and city-level data on guest nights spent in 2021. However, a separate article delving into the pandemic's influence and a concise piece concentrating on regularly updated monthly data is also available.

In 2021, the aggregate guest nights spent in accommodations booked through these four platforms reached €364 million, marking a notable increase from 2020 (€272 million). This signifies that the recovery trajectory was initiated in 2021, and the forecasts say about 500 million for 2022, boasting a growth rate of approximately 50% compared to the preceding year. When juxtaposed with the pre-pandemic baseline of 2019, the growth still amounted to around 7%.

The table shows the cities with the highest ratio of tourists staying at short-stay accommodations offered via collaborative economy platforms compared with local population:

City	Total number of guest nights	Ratio guest nights/local population
Benidorm	1 562 072	6,1%
Zadar	1 333 011	4,9%
Benalmádena	1 115 883	4,4%
Pula/Pola	874 391	4,3%
Split	2 235 240	3,7%
Marbella	1 898 363	3,5%
Venezia	3 237 212	3,5%
Torremolinos	869 554	3,4%
Nice	5 409 914	3,2%
Torre Vieja	924 222	3,0%

Source: Eurostat (2021): Short-stay accommodation offered via online collaborative economy platforms. https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Short-stay_accommodation_offered_via_online_collaborative_economy_platforms&oldid=568080

When examining the demographic statistics of local populations, the European cities with the highest proportion of tourists staying in accommodations listed on platforms compared to local residents on an average night in 2021 were Benidorm and Benalmádena in Spain (6.1% and 4.4%, respectively), along with Zadar, Pula, and Split in Croatia (4.9%, 4.3%, and 3.7%, respectively). It is worth noting that, for the entire EU, this ratio is substantially lower at 0.33%.

There are also areas where results can be achieved with a small investment. An example of this is the use of **Airbnb**,²⁰ which operates legally in many countries with a suitable tax background.

Scholars examine the **determinants** of Airbnb prices in 10 major EU cities, focusing on the role of location:²¹ Amsterdam, Athens, Barcelona, Berlin, Budapest, Lisbon, London, Paris, Rome, and Vienna. These cities represent major destinations of urban tourism in various regions of Europe (Western Europe, Central Europe, and Southern Europe). The findings validate that factors associated with dimensions, quality, and proximity play crucial roles in determining Airbnb rates. Innovative indices utilising TripAdvisor data are employed to assess neighbourhood appeal, revealing a more substantial impact on pricing compared to conventional location variables based on selected points of interest.

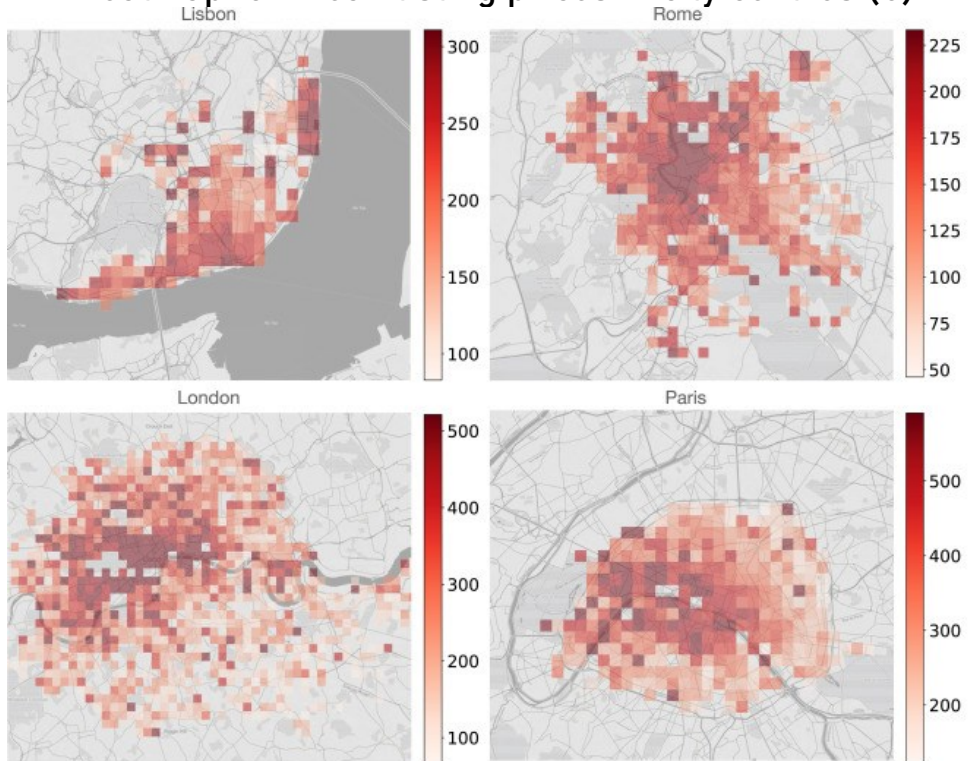
When investors and potential hosts explore apartments for short-term rentals, they should take into account several location-related factors. Rather than fixating solely on the proximity to the city centre, it is paramount to assess the general accessibility to popular attractions and dining establishments. The findings indicate that even minor distinctions in location can result in substantial price premiums. Consequently, ventures in neighbourhoods situated beyond the city centre yet relative to diverse tourist attractions can prove immensely lucrative over the long term.

The analysis affirms the spatial dependence of Airbnb prices, necessitating the application of spatial regression models. In line with recent research in spatial econometrics, we explore diverse spatial models, incorporating specifications with multiple forms of spatial interdependence. The results highlight notable disparities between coefficients estimated through Ordinary Least Squares (OLS) and various spatial models, particularly concerning location-specific variables. The maps show the concentration of attractions in the city centre: in general, the listings in central areas have a higher accessibility of attractions, while further from the centre, the index values decline.

²⁰Airbnb is an online marketplace through which accommodations can be rented out and booked over the Internet. Airbnb started operating in Hungary in the early 2010s. In the beginning, this form of renting out apartments grew slowly, but in 2015, the number of Airbnb rental apartments in Budapest almost exploded. In the middle of the decade, as a result, it was already possible to choose from more than 5,000 active ads

²¹ Gyódi, K., & Nawaro, Ł. (2021). Determinants of Airbnb prices in European cities: A spatial econometrics approach. *Tourism Management*, 86, 104319.

Heatmap for mean listing prices in city centres (€)



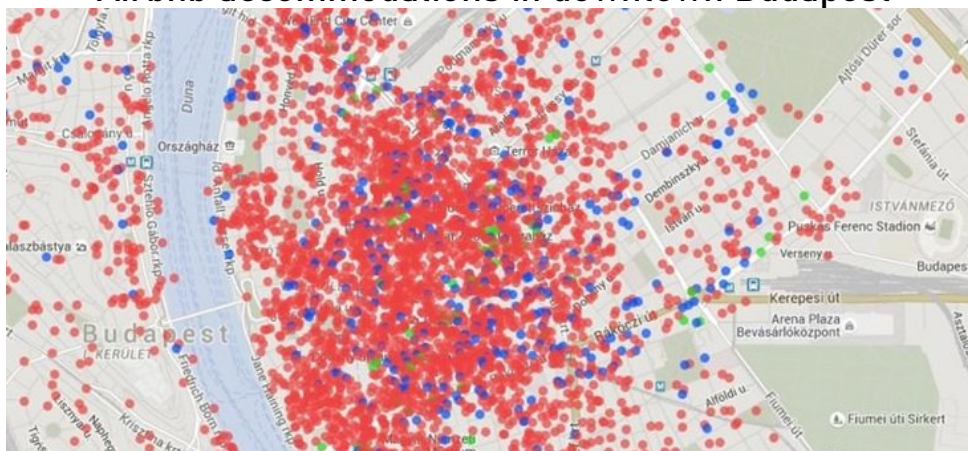
Source: Gyódi, K., & Nawaro, L. (2021). Determinants of Airbnb prices in European cities: A spatial econometrics approach. *Tourism Management*, 86, 104319.

Achieving superhost status is linked to a relatively substantial price premium. The prerequisites for obtaining superhost status encompass maintaining a high guest rating (above 4.8), a low cancellation rate, and a high response rate. In addition to attaining an elevated level of overall guest satisfaction, hosts should place emphasis on the cleanliness rating. While elevating these quality indicators may involve additional expenses, such as hiring a cleaning service, hosts can also refine their listing descriptions to showcase the location's characteristics better. For instance, providing a concise overview of nearby attractions, restaurants, and bars can enhance the listing's performance. Similarly, hosts should highlight convenient access to public transportation and short commute times to key points of interest.

Although it was not invented initially to improve the housing situation but to ease the problems of accommodation in tourism and make it cheaper, a half-yearly (read: 4-month) expenditure for students is not very different

from this. If the publishers tax etc., particular tenants receive a discount or support and/or this type of claimant receives some form of support, progress has already been made. There are currently over 8,000 Airbnb- type apartments in Budapest. These apartments are missing from the traditional rental market: what increases the offer at Airbnb is the item that reduces the supply, i.e. increases the price, in the classic rental market.

Airbnb accommodations in downtown Budapest



Although the government took a small step from 2018 to ease the situation of those making traditional expenses, this was far from sufficient to consolidate the housing market, increase supply and curb the price explosion. Airbnb.

The service of a commercial accommodation is considered a **taxable service** according to the Act on VAT, so registration is required. It is mandatory to obtain a tax number; without a tax number, this activity cannot be carried out, and the host is obliged to pay taxes declare and issue invoices for the services he provides. If they want to deal with short-term apartment rentals, they must make a report to the local town clerk, who will issue a certificate and register the activity. According to the 239/2009. (X. 20.) Government decree on continuing accommodation service activities: accommodation providers must register their hospitality activities through the National Tourism Data Center (NTAK) operated by the Hungarian Tourism Agency. From 2021, digital document readers are mandatory in accommodations.

From 2020, the Act on VAT classifies commercial accommodation services under a reduced **tax rate of 5 %**. The **tourist tax** is a local tax; therefore, its amount is regulated by the municipality where the property is

located. In Budapest, the tax typically amounts to 4 % of the accommodation fee, while in the countryside, we can find fixed amounts, which are collected by the accommodation tax and then paid by the 15th of the following month in a special declaration. As of January 1, 2020, anyone who provides commercial accommodation services **must also pay a tourism development contribution**, which applies if the taxable person enjoys a tax exemption pursuant to the VAT Act. Its rate is 4 %, and it is based on the value of the service without VAT. The deadline for payment is the VAT declaration period for the person liable for the payment. Due to the coronavirus emergency, the tourism development contribution does not need to be paid for the 2021 period either. A special tax in some districts, e.g. **construction tax**, must be paid to the municipality, which cannot be higher than HUF 1,846.6/m².

Basically, the **investor** who rents out residential real estate can choose between two types of **taxation**: i) real estate taxation according to the cost ratio or ii) real estate taxation according to itemised cost accounting. The essence of the property tax method, according to the **cost ratio**, is that 10% of the cost can be deducted from the income from renting the entire property. Furthermore, they must pay a 15 % tax on the remaining amount. (Let us assume that HUF 3 million in revenue came from renting out the property. Then the 10% cost will be HUF 300,000; i.e. we pay 15% tax on HUF 2.7 million, i.e. a total of HUF 405,000). The essence of **itemised cost accounting** is that a record of income and incurred costs is created, on the basis of which the income from renting out the property can be calculated. The advantages of the method are that even depreciation can be accounted for, and this can be a reporting item. The overhead received is considered income, but the cost paid to the utility provider can be deducted. The following expenses can be accounted for as costs:

- in order to continue the activity, recognised expenses incurred in the tax year and certified - in accordance with the provisions of Annex No. 3 of the Act on Personal Income Tax;
- in the case of income from real estate rental activities, according to Annex No. 11 of the Act on Commercial Property, the time-proportional depreciation write-off and renovation costs of tangible assets used exclusively for rental;
- if the apartment's lessor rents an apartment in another settlement (domestic or abroad), its rents.

A 15% tax must be paid on the income from renting the property. However, from January 1, 2019, when calculating the income from renting,

we do not have to take into account "services related to the use of the property, provided by another person, purchased from this person by the lessor to the lessee with the use proportionally transferred fee" (building tax and tourism tax are not included). That is, the amount that the tenant pays in order to use it to pay the fee for a service related to the use of the property by a third party, for example, the fee for utility services, that is, the utility bill – a non-negligible item in some instances, especially not on an annual basis. As of January 1, 2019, the value limit for the purchase of tangible assets increased from HUF 100,000 to HUF 200,000. For this reason, if the purchase price is below HUF 200,000, it can be accounted for as an expense immediately for furniture, furnishings, and household appliances. Considering that there is no express legal provision that prohibits the private individual from claiming the family discount regarding his income from real estate rental, the discount in question can be used in such cases as well.

If the government – in view of the housing problem due to the skyrocketing rents – does not want to wait for the market processes to bring about a long-term decrease in the profitability of Airbnb- type expenses and drive today's Airbnb owners back to the market of long-term, traditional expenses, then further they need to take action. In order to emphasise the social aspects, it is worth considering positive discrimination in favour of those who rent property to the young, nesters or the poor. With a more favourable tax half-plot, real estate rents can thus become cheaper since the tax does not burden the amount to be paid regularly. They do not have to pay EHO.

In Hungary, the size of the private rental housing sector currently exceeds that of the community rental housing sector (the former 4%, the latter 3%). The number of private apartments that are rented in an unannounced manner may be even higher, as well as the number of those who live as "sub-tenants" or "bed renters" in the apartments as a "courtesy" without any written contract. Considerations include:²²

- the **tax burden on income from** the traditional rental of residential real estate, **or even complete tax exemption if certain conditions are met** (the budgetary impact of this is not significant);
- central or municipal **rental register**, in which renters of their flats/houses must register (against a registration fee);
- creation of "**Rental Risk Associations**", **which would implement the reduction of fiduciary risks between tenants and landlords**

²² Büttl Ferenc (2018): Így viszi fel az Airbnb az albérletárakat! Mэрce 2018. mэрcius 14.

on an insurance basis (see "Secure Rental System").²³ The owner of a private apartment participating in the secure rental system is entitled to an exemption from real estate tax on the apartment and an exemption from personal income tax on income from renting, i.e. the difference between income and expenses;

- the **review of municipal rental housing management**, the assessment of the vacant, often deteriorated **rental housing stock**, the **development and implementation of its renovation and utilisation at the program level, with national scope, uniform distribution (utilisation) criteria**, and the provision of central state resources.
- of **vacant private residential properties** (collected as local tax) and, beyond a certain period of "non-use" (10 years), the possibility of compulsory municipal use;
- **increasing Airbnb's tax burden (flat tax rate)** and **imposing** national operating conditions (e.g. condominium contribution, ÁNTSZ inspection obligation, local government permit).

The system can be approached from two directions. In order to match supply and demand, it is reasonable to create an online system similar to Airbnb so that both parties know the conditions in advance. On the other hand, it is important to provide adequate proof of social status (higher education student or other legal relationship) and income (verifiable by public authorities, e.g. tax return). Since this method mostly affects taxation issues, it is recommended that the state develop it. With registration, the administrative burden of both parties can be reduced: it is automatically valid at the landlord's tax return, and the NAV (Tax Authority) verifies the condition of need.

²³ Darvas Ágnes – Farkas Zsombor – Győri Péter – Kósa Eszter – Mózer Péter – Zolnay János (2013): A szociálpolitika egyes területeire vonatkozó szakpolitikai javaslatok. in esély 2013/6

Owner and tenant in the Secure Rental System

Private home owner	Tenant
rents out the apartment continuously for at least 12 months. Special rules may apply to those who undertake 3-5 or more year rental;	rents the apartment continuously for at least 12 months
the rental, tenancy agreement is signed before a notary public	
registers for each rental, and a copy of the rental contract is registered in the ugyfelkapu.hu system	a copy of the rental agreement is kept in the ugyfelkapu.hu system
enters into a contract with one of the persons mediated by the intermediary organisation	enters into a contract with one of the home owners mediated by the intermediary organisation
applies the rental agreement in accordance with the relevant legislation, within which, among other things, it complies with the prescribed rules for rights and obligations, rent determination, rent and utility fee collection, notice of termination and the collection and declaration of residential address	
a mediator is used to settle disputes	

Source: own compilation based on Darvas Ágnes – Farkas Zsombor – Győri Péter – Kósa Eszter – Mózer Péter – Zolnay János (2013): A szociálpolitika egyes területeire vonatkozó szakpolitikai javaslatok. In: Esély 2013/6.

II. Construction and investment possibilities

In exploring housing dynamics, attention turns to the foundational elements of construction and investment possibilities. This segment, nestled within the broader context of housing, delves into the intricacies of housing construction in general. It further investigates the potential within brownfield and rust zones, unveiling opportunities for development and revitalization. By scrutinising these aspects, this section aims to illuminate the diverse dimensions of housing construction and investment, offering insights into the transformative possibilities within these spheres.

Total number of buildings in Hungary

Construc- tion period	Single family house		Multi family house			
	below 80 m2 (1-3 flats)	above 80 m2 (1-3 flats)	4-9 flats	10- flats tradi- tional	10- flats, indus- trialised technol- ogy- panel	10- flats, indus- trial- ised tech- nology - other
-1944	400 537	269 508	43 981	10 819		
1945-1960	449 213	672 128		16 825		
1961-1979					11 502	10 575
1980-1989	378 942				9 635	
1990-2001	198 938					
2001-2011	157 885		6 285	3 770		
Subtotal	2 527 151		50 266	31 414	21 137	10 575
Total	2 640 543					

Source: Csokányi Tamás et al. (2014): National typology of residential buildings in Hungary. Episcopo – Tabula.

Based on TABULA methodology, the typology of residential buildings, there are three main groups according to the size of the buildings and the number of flats: single family houses (SFH), multi-family houses with 4-9 flats (MFH) and apartment blocks containing ten or more flats (AB). More

subgroups were developed depending on the construction technology determined by the age of the building. Altogether, 15 different types were set up, from small traditional family houses to high-rise modern housing estates. Based on the data above, 95.71% of Hungarian buildings are a single family houses, and 27.9% of the remainder were constructed using industrialised technology.

4. Housing construction in general

Interest in apartments is high in the cities, especially in the county seats and university towns. Here, housing construction should be encouraged in both public (and municipal) and private forms. The problem of small settlements is different here. The support package must be established considering the countryside's retaining power and creating jobs. It should also be noted that in EU subsidies starting from 2021 (7-year financial cycle), both the agricultural sector and catch-up will receive less money, so the state must replace it but definitely take part. The government's housing policy should include rural service housing, especially in smaller settlements. In some places, the municipality has started building medical apartments, but these are few, as are other professions: teacher, social worker, etc. In many places, this is a true mission in the strict sense of the word: it is deserved for that reason alone.

With the right section and the proper form of support, it is possible to ensure that either public or subsidised private housing construction is not loss-making and will pay for itself over time. Thus, in fact, the expenditure for the state is only high in the initial years and decreases steadily. That is why promises can be made here, and not in a frivolous way.

With **state aid and subsidies**, housing can also be improved through renovations and repairs. The advantage of building is that it is cheaper and faster. The cost in the evening is a quarter of a third of that of new construction, and the timeframe from the start of construction is a few months rather than years. You can combine this with the thermal insulation of an old building (a requirement in the EU after 2020 anyway) and the use of renewable energy (e.g., solar panels on the roof), and you have another resource to do the job. Of course, this is not a one or two-year task, as there are many run-down, outdated homes (there were no such requirements before, and such techniques were not even available before the change of system), but it can be started once and completed in a decade or more. The owners' attitude can also be influenced: the carrot is accompanied by a stick, i.e. subsidies, and after a certain period of time, sanctions for non-participation. Do we need more to improve comfort, meet EU requirements, contribute to the environment, and save energy? It also promises to be economically beneficial: it pays for itself in terms of reduced energy use, selective waste and other associated benefits.

Technology can also help. On the other side of the ocean, **lightweight houses** are very fashionable, and we have seen them in Hungary,²⁴ but they are not yet widespread. To explain the technology a little, with some financial support, private and public investors could quickly build up whole neighbourhoods. Furthermore, the form of the "kaláka" used there even contributes significantly to reducing costs (labour costs). As a matter of fact, everything is given.

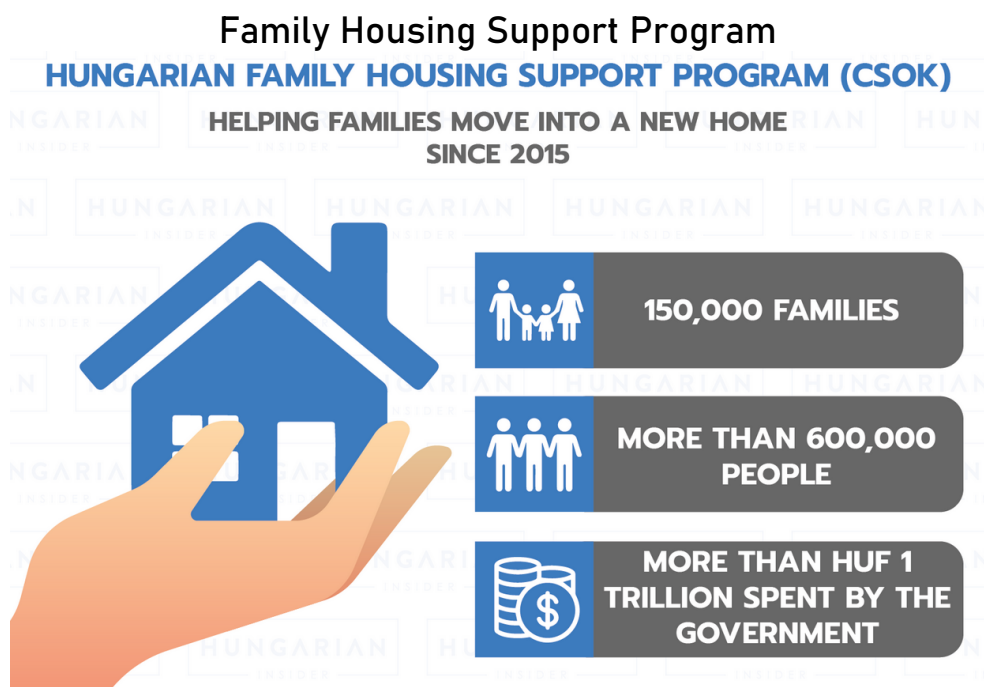
In more than twenty years of operation, Habitat for Humanity Hungary has built more than 150 houses, renovated 720 homes, provided technical advice to 700 families to improve their housing, and has helped 2,150 families in our home economics and training programmes with around 1,100 people participating in our programmes.²⁵ In addition to our field programmes, we have for many years been engaged in research, policy analysis, policy proposal writing and policy advocacy to develop policy responses that can comprehensively improve the situation of people experiencing housing poverty. The organisation is unique among Hungarian NGOs and housing organisations in that it combines field programmes with research and advocacy work to achieve its objectives, and the two programmes can only work effectively if they complement each other. Within the framework of its programs, it cooperates with Budapest district municipalities, which provide them with vacant rental apartments in poor condition. These apartments are renovated with the help of domestic and foreign volunteers and with the cooperation of future tenants. After that, depending on the program, homeless people living on public land or families who have lost their homes and are forced to live in a temporary family home are moved into the apartments. It could even be possible to support the organisation.

Also, technological help can be found for the **panel buildings**. In Hungary, there are nearly 788,000 apartments in them, which provided home to nearly 1.1 million people. In Budapest, the proportion of people living in the panel is 25 %, and for cities with county rights, the proportion is 24 %. The despised technology of the Soviet era is undoubtedly a thing of the past, and there are no longer any housing factories. A more modern version is not to be dismissed, but it has two advantages: cheaper and faster. In our labour-scarce world, this counts for a lot, although the cost is also essential since government intervention is precisely what the poor need. The new panels

²⁴ There was such a presentation, e.g. former US President Clinton at Veresegyháza, organised by Habitat Hungary.

²⁵ habitat.hu

already have a significant thermal barrier, nothing to compare with the old ones. Especially not with the fashionable glass palaces these days, where the facade is pure glass and therefore, the high-efficiency air conditioners, especially on the south-facing sides, have to run 24 hours a day.²⁶ We can illustrate with dozens of examples from Germany that old panels do not need to be demolished and can be upgraded relatively cheaply, e.g. their layout means that the complete replacement of the mechanical system costs about half the price of a conventional house. There is also a quick solution to improve comfort: by combining two apartments, the living space is not 40-50 m² but double that, and by insulating and completely renovating the house, very habitable apartments can be created for a fraction of the construction time and money. We believe that if the state were to set up a programme and give a little help, spectacular results could be achieved quickly – because these houses are ready.



Source: Hungarian Insider (2020): Family Housing Support Program

²⁶ The trend is starting to reverse: south-facing apartments used to have a lot of prestige, at the same time as the general warming, this is decreasing, of course this does not affect the special, panoramic apartments.

The Hungarian government's real estate building and development program focuses on integrating green technologies and energy-efficient housing. Families with, or planning to have, a minimum of three children can benefit from an allowance of 42 million HUF (approximately 117,657 EUR) and a soft loan of 73 million HUF (around 204,500 EUR) to purchase or construct eco-friendly homes. For families with two children, the sum reduces to 20+80 million HUF (280,000 EUR), while for those with one child, the support stands at 93 million HUF (260,000 EUR).

The Hungarian government's initiatives include the CSOK (Family Housing Support Program) scheme, comprising non-refundable and refundable components with a minimal % interest rate of 3 %. Families with at least three children can receive a maximum of 10 million HUF (28,000 EUR) for the former and 15 million HUF (42,000 EUR) for the latter. Additionally, subsidized "baby loans" target young married couples committing to expanding their families. Eligible couples can avail themselves of a maximum general-purpose loan of 10 million HUF, becoming interest-free after the first child, with subsequent reductions after the second and third child. Rural CSOK provides support for homes in villages with populations under 5,000 residents, offering 600,000 HUF (1,890 EUR) after one child, 2.6 million HUF (8,200 EUR) after two, and 10 million HUF (31,530 EUR) after three.

Introduced in October 2021, the **Green Home Program** incorporates green CSOK-loans, providing 10 million HUF (28,000 EUR) for families with two children and 15 million HUF (42,000 EUR) for families with three children, with a 0 % interest rate. Additionally, families can access an extra 55 million HUF (154,000 EUR) with a state-subsidized 2.5 % interest rate. For those bold enough to utilize all available loans and subsidies and commit to having three children with a green home, the potential state support amounts to an impressive 322,000 EUR, with 117,600 EUR being non-refundable. This comprehensive support package underscores the government's commitment to encouraging family growth and promoting environmentally conscious housing practices.²⁷

²⁷ Woods, John (2020): Hungarian government to give families even EUR 322,000 to build greener homes! Daily News Hungary, <https://dailynewshungary.com/hungarian-government-to-give-even-322-thousand-eur-for-families-to-build-greener-homes/>

Hungary already has a tradition of apartment lottery clubs, the so-called **housing lottery**.²⁸ This is also a form of getting home; its "only" flaw is that it is a quick solution for few people beyond the amount deposited. State aid could be used here to speed up the time. Act XV of 2016 on National Home Building Communities (**NOK**) aims to expand home-building opportunities, promote the growth of the housing stock, encourage the purchase of new residential properties, encourage community savings that help the population achieve their housing goals on their own, and access to housing in a closed and separate system, with state support and supervision creating the conditions for its implementation and indirectly promoting the strengthening of the construction industry.²⁹ The community is a legal entity with specific functioning and membership, which can start its activities with a minimum number of members determined by the organiser – at least 120 people. Members who join NOK undertake to pay a certain amount at a predetermined regularity, and NOK gives them the opportunity to buy a newly built apartment before the end of the term with an interest-free community advance and state support, depending on the amount deposited by the saver. When each member receives, the total amount is decided at the quarterly selection event. NOK advances the missing member payment interest-free to members selected by lottery.³⁰ Part of the housing policy is to increase housing mobility. In Hungary - like other countries of the Central and Eastern European Community - there is no tradition of frequent apartment exchanges, unlike e.g. in the Netherlands. We believe state regulation – not necessarily monetary support – could increase the turnover rate. An apartment closer to the workplace can also bring many additional advantages: time savings, fuel savings, environmentally friendly transport, etc.

National homemaking communities

Use of the paid amount	Only new residential property can be purchased within the framework of the NOK.
	Membership means a long-term commitment of 10-15 years .
	The value of the new residential property specified in the membership contract can be between HUF 10 and 40 million . This can be supplemented with state support, the amount of which is 30% of the payments, but no more than HUF 25,000 per month.

²⁸ The name is a bit misleading, as the regularly deposited amount significantly exceeds the cost of the average lottery.

²⁹ 115/2016. (VI. 6.) Government decree on the rules for the implementation of the law on national home-making communities

³⁰ <https://www.vg.hu/vallalatok/eloszor-sorsoltak-a-hazai-lakaslotton-838325/>

	<p>If the participant wants to buy a property that is more expensive than the value of the contract, he must provide the difference in one sum from another source when purchasing the property.</p> <p>The old apartment can be taken into account according to an individual agreement with the organiser.</p>
The amount of payments and state support	<p>In addition to the regular savings amount, there is a registration fee and regular organisational fees a fee must be paid.</p> <p>The monthly payment obligation depends on the term (10-15 years) and the contracted amount (10-40 million forints). For example, if you enter into a contract for the purchase of a new property worth HUF 10 million for 15 years, you will have to pay nearly HUF 56 thousand + an organisation fee plus VAT every month for 15 years. In the case of a 10-year, HUF 10 million real estate contract, the amount to be paid per month is nearly HUF 85,000 + organisation fee. Before the participant gets to the apartment, based on the decision of the organiser, he may be required to pay for life insurance coverage.</p> <p>State support can be provided if the organiser is considered a reliable organiser. The level of support is 30% of the payments, but it can be no more than HUF 25,000 per month. In order to make maximum use of the support, the participant must make a savings deposit of HUF 1 million per year, for which he must pay nearly HUF 85,000 per month + an organisation fee increased by general sales tax.</p> <p>The state aids in a lump sum - within 45 days after the conclusion of the sales contract - for the benefit of the community.</p> <p>The amount paid does not earn interest, but the community does not charge interest or costs for the amount advanced.</p> <p>Protection does not apply to the amount paid. Accordingly, neither the OBA nor any other guarantee fund has an obligation to make repairs.</p>
Time of access to the property	<p>To a large extent, it depends on chance (lottery) and the amount of extraordinary payments made as part of the bid, which member gets a new residential property sooner. Participation in the selection is conditional on the member paying at least 20% of the savings deposit. Important: the sooner the participant</p>

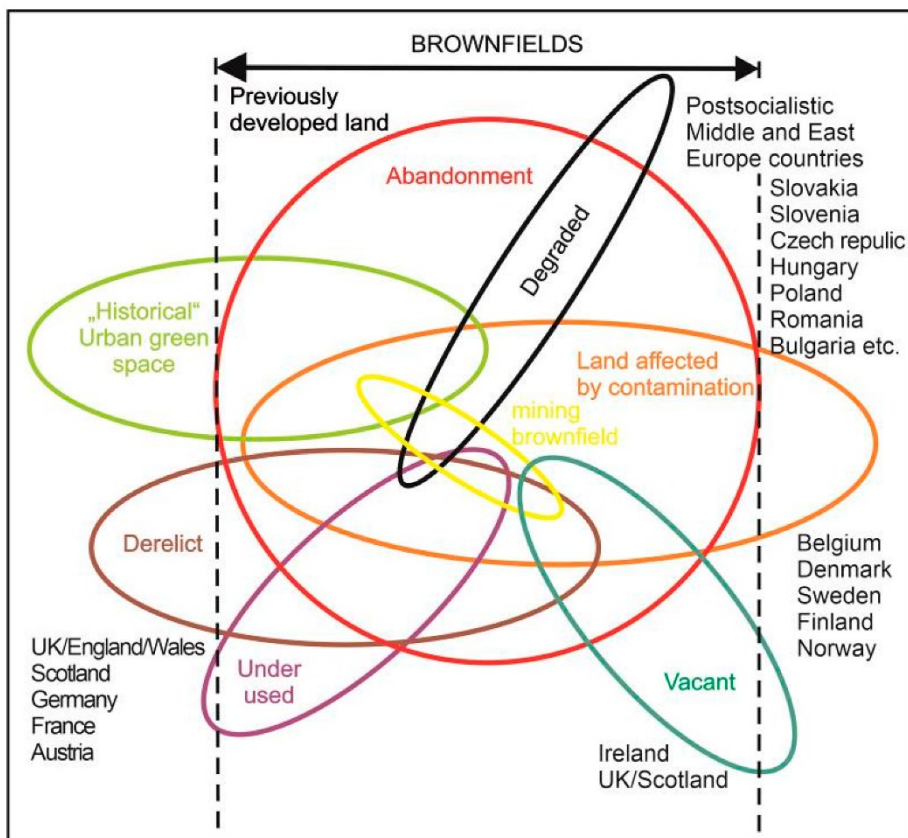
	<p>pays 20% of the contracted amount, the sooner he will be eligible for selection.</p> <p>The lucky one will be entitled to claim the amount missing from the purchase price – according to the membership contract – and, subject to the appropriate conditions, to the related state support. The seller of the new residential property will receive the money.</p> <p>In addition to a registered mortgage on the property, the organiser may also require other collateral (guarantor, other property as security).</p>
Non-payment rules	<p>If the living situation changes and the participant has not yet acquired a new residential property, he can request a reduction in the payment obligation, but there are conditions for this.</p> <p>If the participant is late or has not paid for 3 consecutive months and has not yet obtained a new home, the organiser may reduce his payment and the contract value. However, the contract value cannot be reduced below the minimum of HUF 10 million, so a reduction is only possible if he has contracted for a higher amount.</p> <p>With the permission of the organiser, the participant's membership can be transferred, but if he leaves the community or does not pay the monthly instalments, and there is no private person to take over his membership, he will be excluded from the community, and he can only get his previous payments back after the community is terminated. The amount paid does not earn interest.</p> <p>If the participant has already bought the residential property and does not pay the monthly amounts according to the contract, he cannot request a reduction of the monthly payment obligation. The eviction moratorium does not protect him, and he cannot participate in the private bankruptcy procedure.</p>
Inheritance of membership	<p>In the event of the death of the member, it is possible to designate a beneficiary.</p> <p>If the deceased member did not designate a beneficiary, the balance of his individual account is part of the estate, but a settlement with the heir becomes due only after the termination of the community.</p>

Source: MNB: Nemzeti Otthonteremtési Közösségek 2018

5. Brownfield - rust zones

Brownfield investment is a separate chapter in housing construction. Here, too, government support is necessary, as the market only moves to those with favourable locations. More precisely, it has moved, since in the last 30 years, we have managed to pick out the good and the best. Due to its high cost, this will be left to the state since it should carry out this significant cost-increasing work. Moreover, what should be in its place if it is already in full swing? Even housing, since most of these investments were not in wastelands or forests. In the absence of another actor, there is no choice here; it has to be done once, even if it is expensive.

Relationships between inconsistent definitions of brownfields in selected countries



Source: Gregorová B, Hronček P, Tometzová D, Molokáč M, Čech V. Transforming Brownfields as Tourism Destinations and Their Sustainability on the Example of Slovakia. Sustainability. 2020; 12(24):10569. <https://doi.org/10.3390/su122410569>

The concept of brownfields, developed in the 1970s, which for a long time was meant to describe a severe problem of the urban fabric, is nowadays a central element of sustainable settlement development. The meaning of "brownfield", originally used only for former industrial areas, has changed considerably.³¹ Based on original function and professional recognition, three basic categories should be established these days: traditional brownfields, transitional areas characterised by grey fields, and the most controversial potential brownfields, rust belts, or rust zones.³² The definition of the unified European brownfield concept is CABERNET (Concerted Action on Brownfield and Economic Regeneration Network) organisation, according to which we consider areas that can be said to be brownfields to be:³³

- they are strongly – mostly negatively – affected by their own and their immediate environment's previous utilisation,
- abandoned or underutilised,
- are burdened with perceived or real environmental pollution,
- are partially or fully located in a developed urban area,
- putting them back into use requires intervention.

The transition to a market economy generated drastic changes in traditional industrial areas; more and more plant areas changed functions or remained stagnant. Most of the affected areas are characterised by outdated infrastructure and a deteriorated state, meaning a severe burden and pollution on the environment. During the regime change, the former state assets were completely fragmented by privatisation, so the still unsettled ownership system is often an obstacle to utilisation. Deindustrialisation (at the same time as rehabilitation) continues today in the capital, especially in areas close to the city centre. In 2006, only roughly 3-4% of the city's area comprised industrial areas.

The **transitional area** is located between the city centre and the garden city, which includes the brownfield and the large agricultural areas connected to it, green areas, and transportation areas. The **brownfield area**, the brown zone, is the traditional (former) industrial area, with traffic and housing estate

³¹ Morar, C., Berman, L., Unkart, S., & Erdal, S. (2021). Sustainable brownfields redevelopment in the European Union: An overview of policy and funding frameworks. *Journal of environmental health*, 84(4), 24.

³² Orosz Éva (2012): A barnamező fogalmának változó értelmezése. in *Tér és Társadalom* 26. évf., 2. szám, 2012

³³ Ferber, U., Grimski, D., Miller, K., Nathanail, P. (2006): Sustainable Brownfield Regeneration: CABERNET Network Report. University of Nottingham

inclusions. Some of them have already been renovated or are in the process of being renovated. The **rust zone or rust belt** is the area of the brownfield that has not yet been renewed, the previously intensively utilised areas (industrial, transport, storage areas, barracks, possibly residential areas), but their utilisation was abandoned. The rehabilitation of the brown zone is a complex issue with economic, environmental and social aspects, where the different situation of the areas requires a different type of intervention:³⁴

- there are areas where the change of function should be promoted based on the current urban fabric context;
- there are areas where environmental remediation is the primary task;
- in other situations, the designated goal is to create new jobs and develop the working environment.

In all three cases, another important goal is to create attractive market conditions. Brownfields can be anywhere but are most often found in urban areas. Compared to rural areas, brownfield recycling in cities has typical advantages and disadvantages (risks):

Advantages and disadvantages of urban brownfield investments compared to similar rural investments

Typical advantages	Typical disadvantages and risks
Site with more advantageous features (central location, urban environment, closer to business partners)	Higher rehabilitation costs
Stable or increasing real estate value	Risks, e.g. extensive soil contamination and its treatment
Thanks to the broad spectrum of usability, the property is less likely to become vacant	Rising costs due to regulation, e.g. heritage protection of existing buildings

Source: own compilation

For the urban brownfield investments compared to similar rural investments, three main issues can be brought:

- Urban Brownfield Investments: Balancing Opportunities and Challenges
- Rural Investments: Embracing Open Spaces and Agricultural Potential

³⁴ Barnamező-kataszter, ingatlanfejlesztési lehetőségek adatbázisa. Budapest Főváros Önkormányzata, 2014

- Navigating the Diverse Landscape of Investment: Considerations for Success

Urban Brownfield Investments: Balancing Opportunities and Challenges. Investing in urban brownfields, or previously developed but underutilised sites, offers unique advantages and disadvantages compared to similar investments in rural areas. One notable advantage lies in the potential to revitalise neglected urban spaces, contribute to sustainable development, and mitigate urban sprawl. Brownfield investments in urban areas often benefit from existing infrastructure, such as transportation networks and utilities, reducing the need for significant upfront development costs. Additionally, urban brownfield investments can leverage the proximity to established communities, providing access to a skilled workforce and a diverse consumer base, which may enhance the project's economic viability.

However, the advantages of urban brownfield investments come with their share of challenges. Redeveloping these sites may involve navigating complex regulatory processes, addressing environmental concerns, and managing potential community resistance. The limited availability of space in urban environments may also restrict the scale of development, impacting the overall return on investment. Striking a balance between environmental sustainability, community engagement, and economic feasibility becomes crucial in maximising the potential benefits of urban brownfield investments.

Rural Investments: Embracing Open Spaces and Agricultural Potential. In contrast, rural investments present a different set of advantages and disadvantages. Investing in rural areas allows for larger-scale developments due to the availability of open spaces. This can be particularly advantageous for industries requiring expansive facilities, such as agriculture or renewable energy projects. Rural investments often encounter fewer regulatory hurdles, leading to a potentially smoother development process. Moreover, the potential for lower land acquisition costs in rural settings can be attractive for investors seeking cost-effective opportunities.

However, rural investments also come with their own set of challenges. Infrastructure development in rural areas may require significant upfront investments, impacting the overall project cost. Additionally, the distance from established urban centres may pose logistical challenges, affecting transportation costs and access to a skilled workforce. Furthermore, balancing economic development and preserving the rural landscape becomes crucial to avoid potential environmental and community concerns.

Navigating the Diverse Landscape of Investment: Considerations for Success. Whether investing in urban brownfields or rural areas, carefully considering the advantages and disadvantages is paramount. A successful investment strategy must account for factors such as regulatory frameworks, community engagement, environmental sustainability, and economic feasibility. While urban brownfield investments tap into the potential of existing infrastructure and urban connectivity, rural investments capitalise on open spaces and agricultural potential. Ultimately, a comprehensive understanding of the unique dynamics of each setting is essential for investors to navigate the diverse landscape and make informed decisions that align with their goals and values.

5.1. Foreign examples

Among the leading countries in brownfield research, we can mention three in particular: the United States of America (USA), Great Britain and Germany.³⁵ In addition to these, the topic is obviously the centre of attention in those states that are particularly affected by their historical and economic past (e.g., Belgium, France, and the Netherlands).

Several laws and regulations in the USA form the legal framework for brownfield developments. In addition to the measures implemented by the federal government, most states and even some municipalities have their own brownfield development programs (e.g. Kentucky Brownfield Program, Indianapolis Brownfield Redevelopment Program).³⁶ In 1980, the so-called Comprehensive Environmental Restoration, Compensation and Liability Act (CERCLA) or – after its amendment in 1986 – under its summary name – the "Superfund Act".³⁷ The created trust fund (Superfund) with a budget of 1.6 billion dollars was primarily financed by the amount received as a newly

³⁵ Siegle, C. (2005): *Revitalisierung und Entwicklung von Brachflächen*. Diplomamunka, Nürtingen University, Geislingen, p. and WEITKAMP, A. (2009): *Brachflächenrevitalisierung im Rahmen der Flächenkreislaufwirtschaft*. Doktoris disszertáció, Bayerische Akademie der Wissenschaften, Deutsche Geodätische Kommission (DGK), München, 289.

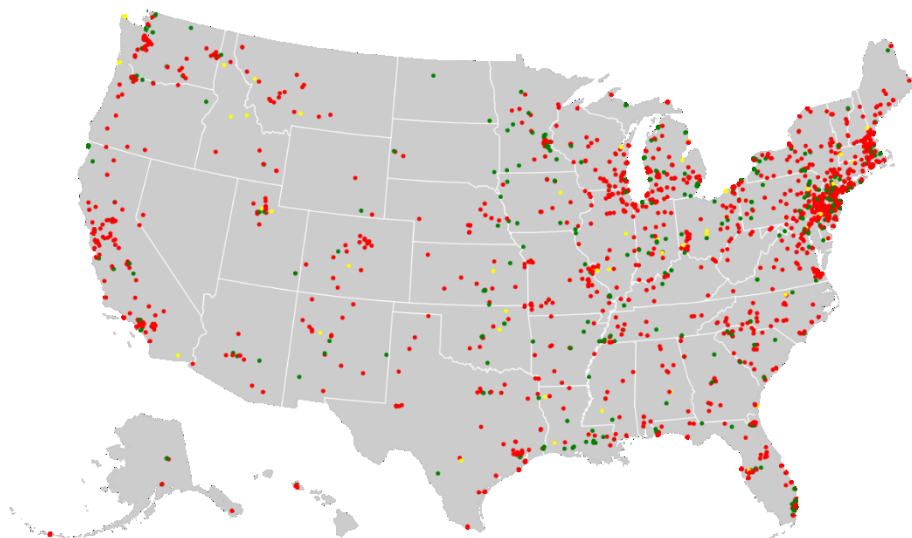
³⁶ Meenar, M., Howell, J. P., & Hachadorian, J. (2019). Economic, ecological, and equity dimensions of brownfield redevelopment plans for environmental justice communities in the USA. *Local Environment*, 24(9), 901-915. and Tachovsky, M. (2021). Environmental Dead Zones: The Evaluation of Contaminated Properties. *Appraisal Journal*, 89(2).

³⁷ Grad, F. P. (1982): A legislative history of the comprehensive environmental response, compensation and liability (Superfund) Act of 1980. *Colum. J. Envtl. L.*, 8, 1. and Kiaghadi, A., Rifai, H. S., & Dawson, C. N. (2021). The presence of Superfund sites as a determinant of life expectancy in the United States. *Nature communications*, 12(1), 1947.

introduced tax burdening the major chemical and oil industry emitters. After 1995, with the abolition of the tax, the program weakened.

Therefore, further changes were necessary, which were implemented by the brownfield's rehabilitation initiative for economic development, BEDI (Brownfields Economic Development Initiative), in which the federal government and the interested parties summarised the goals and proposals for change. BEDI takes a much more comprehensive view of brownfield land development than Superfund, in which, in addition to damage settlement and its financing, the future use of the land plays an important role; the intention is for the brownfield to become an active part of the natural land use cycle again. To this end, it aims to make the affected areas "autonomous" as soon as possible with active initial intervention; that is, market and economic forces will carry it forward. Experiences show that the lack of funds hinders revitalisation in the first project phase, which leads to the fact that most of the projects are not even thought about, or rather, there is no possibility."³⁸

USA - national map of Superfund sites



Red indicates currently on final National Priority List, yellow is proposed, green is deleted (usually meaning having been cleaned up).

Source: Environmental Protection Agency CERCLIS database. A live map of Superfund sites is available at <https://www.epa.gov/superfund/search-superfund-sites-where-you-live#map>

³⁸ Steffens, K. - F Ranzius, V. (2002): Das new Brownfields-Gesetz der USA. Altlasten Spektrum, Heft 4, pp. 175-180.

In 2002, the new brownfields law came into force (Small Business Liability Relief and Brownfields Revitalisation Act), commonly known as "The Brownfields Law" [US Public Law 107-118 (HR 2869)], which includes two pieces of legislation: Small Business Liability Protection Act (H.R. 1831), Brownfields Revitalisation and Environmental Restoration Act (S. 350). On the one hand, the new brownfields law can be seen as a continuation of BEDI, since its purpose is still primarily to encourage the parties concerned and to revitalise (economically, socially and sustainably in the long term) mainly (inner) city areas. In addition, it is also a supplement to Superfund, which aims to develop brownfield areas that are only slightly affected by perceived or natural pollution. There are 40,000 federal Superfund sites across the country, and approximately 1,300 of those sites have been listed on the National Priorities List (NPL)

The **European Union** also focuses on the issue of brownfields. Compared to American practice, the most striking differences are manifested on the one hand in different regional policies. While the liberal USA primarily regulates spatial processes with market economy tools in order to increase economic efficiency and, as a result, community welfare, in conservative Europe, the state plays a central role and, for example, implements "behaviour regulating" legal tools for the same purpose.³⁹ While in the USA, we mainly talk about (environmental) damage prevention and economic development (more precisely, the creation of spatially bound conditions for local economic development), the positive side effects of which are sustainable, space-saving regional development and social rehabilitation, while in Europe the latter aspirations are much more tangible and more often to the fore.

Leipzig Charter (as well as its founding documents) was created in 2007. The Charter emphasises the importance of efficient and sustainable resource utilisation based on a compact settlement structure. This can be achieved through urban planning, which prevents excessive expansion of the city by strictly controlling land use and speculative development.⁴⁰ The 2010

³⁹ Fürst, D. (2006): Der Beitrag der Regionalplanung zur nachhaltigen Entwicklung. Eien steuerungstheoretische Perspektive. In: Walkenhaus, R. - Machura, S. - Nahamonitz, P. - Treutner, E. (Hrsg.): Staat im Wandel. Festschrift für Rüdiger Voigt zum 65. Geburtstag, Franz Steiner Verlag, Stuttgart, pp. 177-196

Imre M. (2011): A szabályozó és felügyelő állam (az Európai Unió perspektívájában). Állam- és Közgazdaságtudományi Szemle, Pro Publico Bono Online, Támop Speciál, 2011/1

⁴⁰ Rink, D., & Schmidt, C. (2021). Afforestation of urban brownfields as a nature-based solution. Experiences from a project in Leipzig (Germany). Land, 10(9), 893.

Toledo Declaration, which mainly emphasises the integration of disadvantaged neighbourhoods, also states that "it is advisable to curb the unrestricted growth of cities and the spread of the city", where it also draws attention to another essential element in the change of attitude - in connection with which it also mentions the example of brownfields - that "disadvantaged urban areas should not be considered a problem". The **Budapest Declaration on the Demographic and Climate Change Challenges of European Cities**, adopted in 2011, emphasises the importance of the role of cities in terms of achieving environmental and social sustainability, including sustainable, integrated urban development, the creation of a compact urban structure, the slowing down of urban sprawl, and the protection of green areas.

Three Directorates-General of the European Commission primarily deal with brownfields: Environmental Protection (DG ENV), Research and Technological Development (DG RTD), and the Directorate-General for Regional Policy (DG REGIO). Among the European Structural Funds coordinated by the Directorate-General for Regional Policy, brownfield developments receive support thanks to the European Regional Development Fund (ERDF), established in 1975, mainly within the framework of community initiatives such as URBAN, JESSICA or INTERREG. In the framework of the INTERREG initiative, several smaller and larger support programs were created, such as the following:

- **BERI** (Brownfield European Regeneration Initiative): the project financed between 2004 and 2007 within the INTERREG III C "West" framework aimed to stimulate the exchange of experience and cooperation related to brownfield developments for sustainable European urban development. About 65% of BERI's total budget of 1.4 million euros was provided by the ERDF.
- **COBRAMAN** (Manager Coordinating Brownfield Redevelopment Activities):⁴¹ the goal of the project of the INTERREG IV B Central Europe program between 2008-2012 was to develop an area revitalisation management concept (Brownfield Manager) that can be applied to all work areas dealing with the topic throughout Europe. In the framework of the project, nine partners in five countries (Czech Republic, Poland, Germany, Italy, and Slovenia) collected proven practical experiences. The total budget of COBRAMAN was 3.6 million euros, 82% of which was provided by the ERDF (website CENTRAL).

⁴¹ <http://cobraman.uirs.si/>

- **HOMBRE** (Holistic Management of Brownfield Regeneration) is a 4-year European project financed under the 7th European Union Framework Programme. Starting in December 2010, its activities have been carried out by a consortium of 14 European partners coordinated by Deltares (NL). The total allocated budget for project activities amounted to 3.48 million Euros.⁴²
- **LEPOB** (Lifelong Educational Project on Brownfields): the program, based on the results of the CABERNET, RESCUE and WEL-COME projects, starts from the fact that Central and Eastern Europe is struggling with serious brownfield problems, which largely stem from ignorance and lack of experience. The project's aim between 2004 and 2006 was to promote the exchange of experience - with Western European countries that are at least 10-15 years ahead - and continuous professional training (multidisciplinary courses, educational packages) (website LEPOB).⁴³
- **NETSFIELD** (Networking and Training for Sustainable Brownfield Redevelopment): the aim of the INTERREG III C "Weimar triangle" sub-project with the cooperation of three former industrial regions³⁹ is to build an expert network, encourage the exchange of experience, and create training programs on the topic of sustainable brownfield rehabilitation (website NETSFIELD).⁴⁴

Thus, the union's member states took care of territorial cohesion within their own competences until 2009, and after 2009, they were shared with the EU. It follows that making a valid generalisation about European brownfield development practice is impossible. Based on this, **three groups of states** were distinguished:

- Scandinavia and Ireland: high competitiveness and low population density. Green fields are abundantly available, and abandoned urban areas easily find private investors, so the treatment of polluted areas becomes the focus.
- Western Europe: high competitiveness and population density. Due to the low number of available greenfield areas, the focus is on revitalising the brownfield as an area previously used is placed.

⁴² <https://cordis.europa.eu/project/id/265097/reporting/de>

⁴³ <https://www.eugris.info/displayProject.asp?ProjectID=4520&Aw=LEPOB&Cat=Project>

⁴⁴ <https://www.eugris.info/DisplayProject.asp?P=4451&t=Networking%20and%20Training%20in%20Sustainable%20Brownfield%20Redevelopment>

- Eastern, Central and Southern Europe: relatively low competitiveness and medium population density. These countries are located between the densely populated west and the dynamically developing north, which is by no means short on land, depending on their concept of brownfields. The system of polluted areas can be considered dominant. However, they have significant potential in revitalising brownfields (previously used areas), which can increase their competitiveness.

In **Great Britain**, two branches of brownfield development can be distinguished: the environmental remediation and change of function of polluted areas and the management of non-necessarily polluted areas. Wales considered a prosperous British region following the American model, is the first to be highlighted. Since 1976, the Wales Development Agency (WDA) has been dealing with land rehabilitation for the purposes of environmental protection and economic development. Like the American EPA, the WDA maintains a brownfield database and priority list and provides financial support for rehabilitation developments.⁴⁵ About 66,000 hectares of brownfield suitable for development (previously developed land, PDL) are located in England. The Office of the Deputy Prime Minister (Office of the Deputy Prime Minister, or ODPM) – and the National Assembly of Scotland and Wales – is responsible for brownfield revitalisation.⁴⁶ Brownfield land development, which in urban areas – with the exception of heavily polluted areas – is largely carried out by private capital, is still mainly driven by the needs of the housing market (housing, related developments, infrastructure).

In **Germany**, since the 1980s, remediation, soil protection, and the reuse of abandoned areas have played a significant role in environmental and structural policy. The central element of the sustainable land use policy is economic land use, for which the Federal Government published the National Sustainability Strategy in 2002, in which the following two goals to be achieved by 2020 were formulated:

⁴⁵ Horváth G. - Szabó I. - Szacsuri G. (2002): A barnamezők kérdéskörének, jogi gazdasági és környezetvédelmi vizsgálata, különös tekintettel a Borsod megyei régióra. EMLA Alapítvány a Környezetvédelmi Oktatás Támogatására, Budapest, 131.

⁴⁶ Hellowell, E. E., & Hughes, S. J. (2021). Asbestos contamination on brownfield development sites in the UK. *Environmental Research*, 198, 110480. and Li, X., Bardos, P., Cundy, A. B., Harder, M. K., Doick, K. J., Norrman, J., ... & Chen, W. (2019). Using a conceptual site model for assessing the sustainability of brownfield regeneration for a soft reuse: A case study of Port Sunlight River Park (UK). *Science of the Total Environment*, 652, 810-821.

- "30-hectare target allocation": by 2020, investments to expand (green fields), settlements and transport will be reduced from 105 hectares to 30 hectares per day;
- the development priority of inner areas of settlements compared to outer areas, at a ratio of 3:1.

In addition, the long-term goal is to reduce the 30 hectares to zero by 2050, and only the previously used areas would change functions within the framework of the land use cycle.⁴⁷

5.2. Hungarian surveys

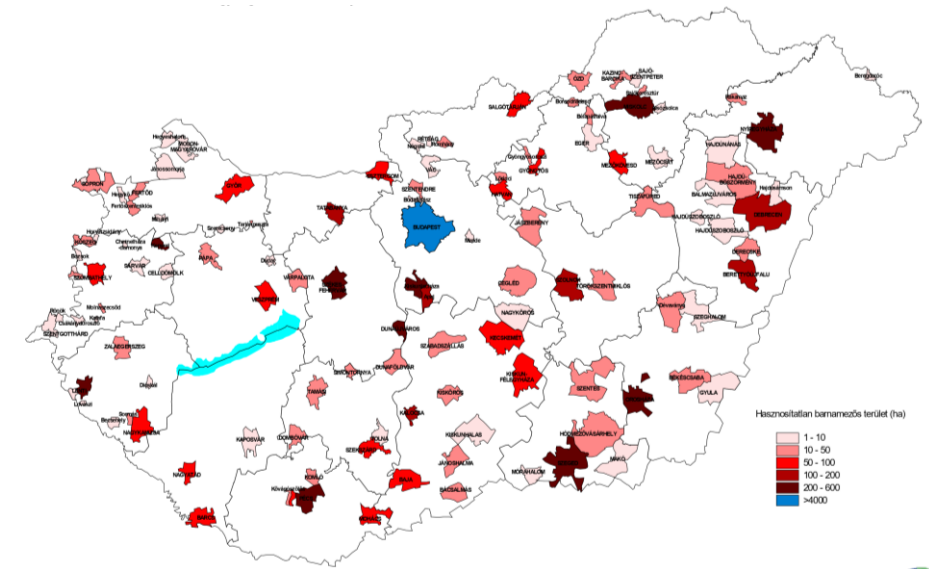
More data collection took place in the framework of the project, although none of them can be said to be comprehensive. We can consider the VÁTI survey as the cornerstone of the available data on brownfields in Hungary, which was followed by smaller and larger projects. Among these, perhaps one of the very first databanks was created within the framework of the Brownfields project launched by the Environmental Foundation in 2004 (website KTK). However, this investigation only covered municipal governments with urban status, as did a volume of studies investigating greenfield and brownfield investments in domestic and regional centres.⁴⁸ The so-called "Northern Hungary Register"⁴⁹ or the survey of the Kapos Innovation Transfer Center Ltd. was carried out in 2006, which processed the brownfield areas of the South Transdanubia Region and examined all three types of brownfields.

⁴⁷ Holsterkamp, L. - Degenhart, H. (2011): Fonds zur Revitalisierung von Brachflächen. Überblick und Analyse von Ansätzen öffentlich-privater Kooperation. Institut für Wirtschaftsrecht der Leuphana Univ. Lüneburg, Arbeitspapierreihe Wirtschaft & Recht, Nr. 9

⁴⁸ Györi R. (2006) Zöldmezős és barnamezős beruházások a magyar nagyvárosokban. Kézirat. MTA RKK, Pécs.

⁴⁹ Papp Gy. - Körösi V. - Gyöngyössy Sz. - Búzásné Józsa V. - Dernei B. (2006): Barnamezős területek az Észak-magyarországi régióban. Regiszter. Észak-magyarországi tényképek, 1 (2), pp. 5-175.

Brownfields in Hungary - The total size of barracks and industrial areas with brownfields in the affected settlements



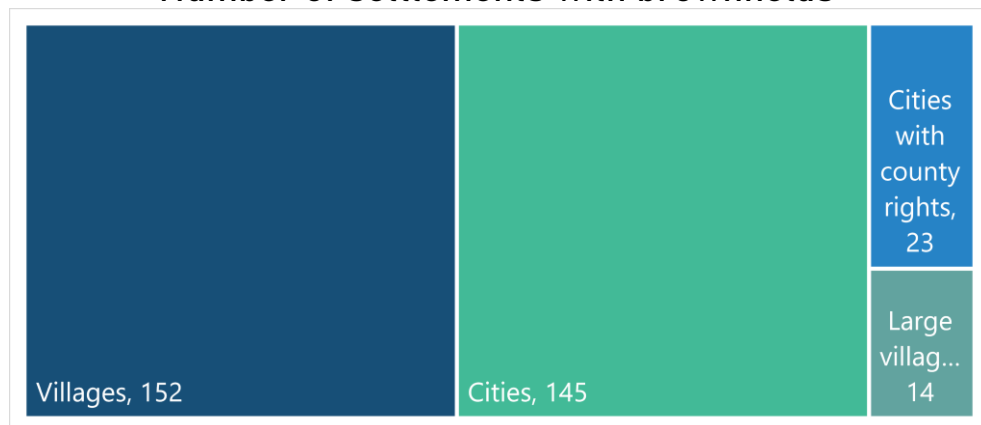
It is clear from the results of the regional studies that, although other types of brownfields occur significantly in terms of their territorial extent, they are pushed into the background within the region.

The Centre for Environmental Science Foundation's Brownfields project, launched in 2004, aimed to survey brownfield sites in Hungarian cities, collect good and bad practices related to brownfields and facilitate the exchange of experiences among stakeholders. The database contains detailed data on 183 brownfield properties in 66 cities (http://www.ktk-ces.hu/barnamezo_adatbazis.html).

Examining the legal status of settlements, we find that towns and villages share roughly half of the brownfields, and even within this, the share of villages with less than 5,000 inhabitants is exceptionally high (45.5%). According to them, brownfields in Hungary are at least as much a small-town phenomenon as an urban phenomenon.⁵⁰

⁵⁰ Dannert Éva (2016): Terra incognita - Barnamezők és kezelésük Európában, valamint Magyarországon. Pécsi Tudományegyetem

Number of settlements with brownfields



Between 2007 and 2013, through the New Hungary Development Plan (ÚMFT 2007), the EU supported eradicating brown zone problems in Hungary. Belong here:

- the remediation of the soils of industrial cities and the preservation and renovation of historical monuments are given priority in this period, as is sustainability;
- in cities, brownfield developments should be preferred over green-field developments;
- industrial infrastructure developments must also be implemented primarily in brownfields;
- revitalisation of brownfield areas also appears among the environmental tasks;
- the chapter on sustainable urban development also identifies promoting the change of function of brownfields as an important task.

Each regional operational program includes a brownfield or urban rehabilitation development concept. From 2011, the ÚMFT was replaced by the New Széchenyi Plan (ÚSZT). For now, there is no available information on EU brownfield development subsidies for the 2014-2021 budget period. What is certain is that the newly joined countries, including our country, no longer receive priority support from the EU, so it is feared that the support framework for regional development, including the territorial development framework, will be significantly reduced. One of the results of the decreasing application opportunities may be that those constructions that, based on the

cooperation of local governments and private capital, can bring progress in utilising brownfields will enjoy greater support.⁵¹

One of the three Capital Thematic Development Programs (TFP) targets brownfield developments. The document is based on the Budapest 2030 strategy. In the rest of the country – with the exception of Pest County⁶³ – it is possible to support regional development (regional economic development) investments within the framework of the Széchenyi 2020 Territorial and Settlement Development Operative Program (Településfejlesztési Operatív Program, TOP), which brings a significant change in domestic, regional development policy. TOP enables decentralised development in accordance with regional characteristics and needs, which is based on internal resources. In order to do this, the role of tenders will be significantly reduced, and more integrated, nominated programs will be financed. As a result of the territorial reforms in 2014, counties became the middle level of territorial development instead of regions. Specific support for brownfield developments is available under the "Rehabilitation of brownfield sites (TOP-2.1.1-15)" call, with a budget of HUF 21 billion. Unfortunately, this call is not based on the extended brownfield concept of the TFP.

5.3. Budapest

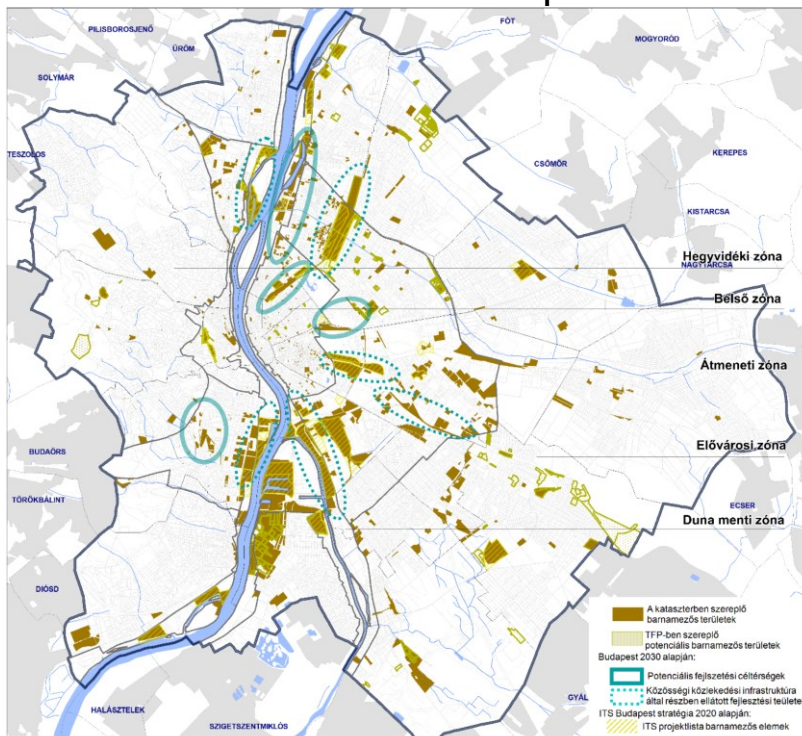
Budapest's sustainable spatial system, the core of the urban development target areas that ensure the city's compactness, is the development of internal reserve areas and brownfield areas, through which the missing functions can be integrated into the urban fabric using the existing infrastructure. From a territorial point of view, the most detailed analysis is available for the capital city, which is understandable since, according to VÁTI data, a third (35%) of the domestic brownfields - in terms of extent - are located in the capital city. In 2014, with the coordination of the Metropolitan Municipality and the cooperation of the district municipalities, a new urban development document, the Thematic Development Program for the Coordinated Development of Brownfields, was prepared. Its purpose is to eliminate functional deficiencies by preferring mixed land use to support sustainable growth and temporary utilisation that helps develop the land. Based on this, it became necessary to get to know and present the brownfield areas for the entire area of the capital.

⁵¹ Kádár Kriszta (2011): Barnamezők Magyarországon. in Deturope - The Central European Journal of Regional Development and Tourism, Vol.3 Issue 2 2011 ISSN 1821-2506

The content of the cadastre basically covers the areas, the position of the urban structure, the presence of built and natural values, the infrastructural supply, the function of the surrounding areas, the environmental impact and the utilisation opportunities resulting from the planned environment are highlighted. **The cadastre contains 417 brownfield demarcations, the area of which is approximately 2,800 hectares. The number of plots affected is 3,863.** The Budapest rust belt can be divided into **three large sectors**:

- northern sector: areas of the III, IV, XIII, XV, XVI districts;
- the cores of the eastern sector were formed along the main railway lines connecting Kőbánya, forming two large, contiguous industrial sectors, including the brown zones of the X, XVI and XVIII districts);
- the southern sector is the IX, XVIII, XX, XXI, and on the Buda side the XI and XXII include the district's industrial and transport zones.

Brownfields in Budapest

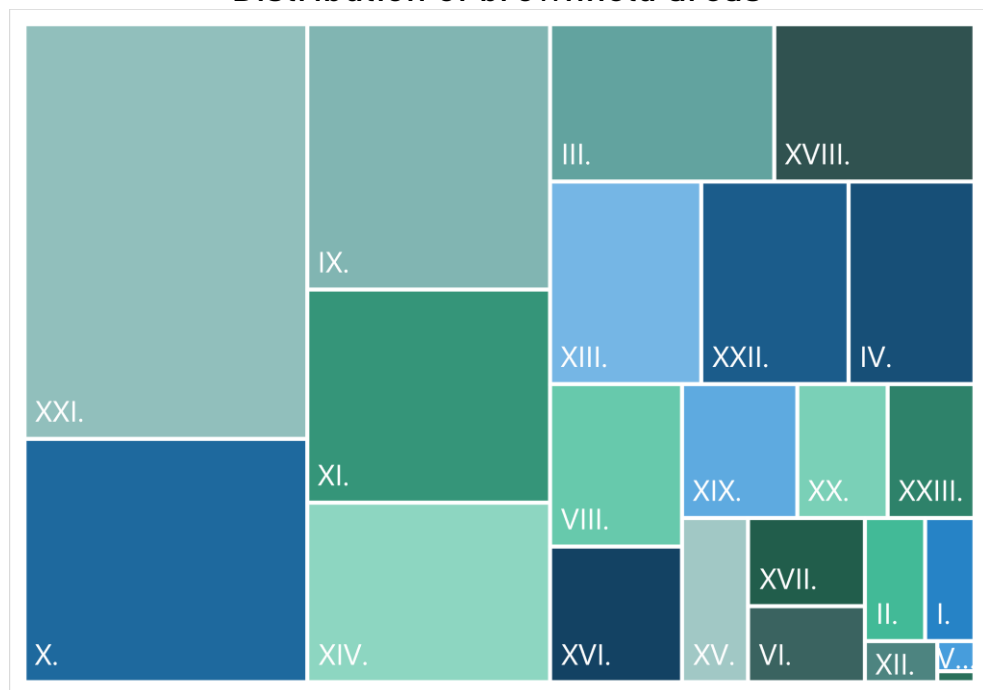


Cadastre of brownfield areas - construction and monitoring of a brownfield database, assessment of the possibilities of economic exploitation. Budapest Capital Urban Planning Ltd. 2015.

Based on the "Adaptive City" publication prepared by Budapest Metropolitan Municipality and the Center for Contemporary Architecture, the tool of the utilisation model is

- **offering real estate:** the targeted, discounted rental of municipal-owned real estate is a value-enhancing investment that increases the attractiveness, familiarity and economic potential of the given city district;
- **creating transparency:** flexible and transparent real estate management must be ensured as part of adapting to local needs and opportunities.
- **refinement of legislation:** the municipality can support the use of privately owned real estate by creating the appropriate legal and regulatory environment through various incentives (for example, tax incentives);
- **providing assistance:** simplified management of procedures related to everyday operations.

Distribution of brownfield areas



Source: own compilation based on Barnamezős területek katasztere - barnamezős adatbázis építése, nyomon követése, a gazdasági kihasználás lehetőségeinek felmérése. Budapest Főváros Városépítési Tervező Kft. 2015.

Brownfield areas by district

District	Brownfield areas (ha)	affected plots (pcs)	included in the cadastre (pcs)
I.	27.1478	49	11
II.	33.3773	6	4
III.	158.4450	243	29
IV.	114.3770	147	17
V.	1.7938	8	6
VI.	39.6498	64	19
VII.	4.9753	37	29
VIII.	96.2843	191	52
IX.	289.1453	143	18
X.	308.4698	199	43
XI.	231.9605	323	27
XII.	13.2967	11	9
XIII.	137.8059	460	50
XIV.	195.2877	157	17
XV.	48.5693	244	7
XVI.	80, 1988	42	8
XVII.	46.2210	80	9
XVIII	141.2306	17	13
XIX	69.3328	179	9
XX.	54.1353	81	11
XXI.	526.6676	995	15
XXII.	134.0578	132	8
XXIII	52.1758	97	6
SUM:	2804.6052	3863	417

Cadastre of brownfield areas - construction and monitoring of a brownfield database, assessment of the possibilities of economic exploitation. Budapest Capital Urban Planning Ltd. 2015.

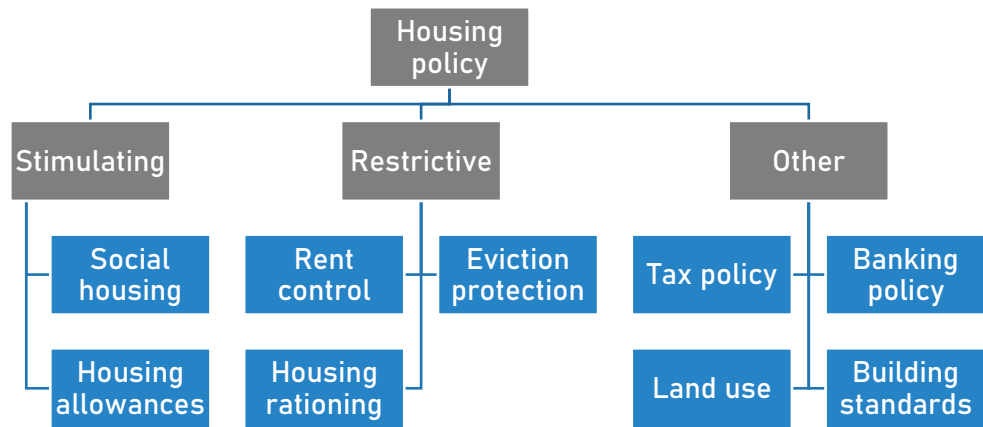
III. Housing policy

Within the realm of housing policy, a critical examination unfolds, exploring both the available options and the role of state support in shaping the rental system. This section, embedded in the broader discourse on housing policy, endeavours to dissect the various strategies and approaches employed to address housing challenges. From policy alternatives to the pivotal role of state-backed initiatives in facilitating the rental landscape, this segment offers a comprehensive perspective on the mechanisms influencing housing policies. By navigating these aspects, the goal is to shed light on the multifaceted nature of housing policy, underscoring its impact on fostering sustainable and inclusive living environments.

6. Housing policy and options

A housing policy is a set of guidelines, principles, and strategies formulated by governments or other relevant authorities to address issues related to housing.⁵² The primary goal of housing policies is to ensure that individuals and families have access to adequate, safe, and affordable housing.⁵³ These policies can cover a wide range of areas, including housing affordability, quality standards, tenure security, homelessness prevention, and urban development.⁵⁴

Housing policy tools: wide and narrow sense



Source: Kholodilin, Konstantin A. (2020): Lectures on housing economics: A European text.

The main purpose of **stimulating housing policy tools** is to **expand the supply of housing, particularly** cheap homes. In order to address housing shortages and promote sustainable urban development, governments often employ tools to stimulate residential construction. The policy of stimulating residential construction includes the following instruments: provision of state aid in the form of construction subsidies and low or zero-interest loans; provision of state credit guarantees; reduction of the taxes and fees (particularly, land stamp duty); and provision of building land at lower prices or in the form of long-term leasing. These can refer to incentives for devel-

⁵² Balchin, P., & Rhoden, M. (2019). Housing policy: an introduction. Routledge. and Balchin, P. (Ed.). (2013). Housing policy in Europe. Routledge.

⁵³ Schwartz, A. F. (2021). Housing policy in the United States. Routledge.

⁵⁴ Holmans, A. E. (2021). Housing policy in Britain: a history. Routledge.

opers, streamlined permitting processes, and financial support for construction projects. Housing allowances are a financial tool aimed at making housing more affordable for individuals and families. It involves providing direct financial assistance, often in the form of subsidies or grants, to help offset the cost of housing. Social housing is a critical component of a comprehensive housing policy to address the housing needs of low-income individuals and families. Its preliminaries date back to the Middle Ages, Augsburg (Germany) by the Fugger family.⁵⁵ In essence, social housing refers to housing units that are owned, managed, or subsidized by government or non-profit organizations with the primary objective of providing affordable and secure accommodation for those in need. Unlike market-driven housing, social housing programs prioritize social welfare over profit, ensuring that vulnerable populations have access to safe and decent living spaces. These initiatives often involve income-based eligibility criteria, long-term rentals, and rental subsidies to make housing affordable for those facing financial challenges in the private housing market. Social housing serves as a practical solution to housing inequality and fosters inclusive communities, promoting social cohesion and stability. By addressing the fundamental right to adequate housing, social housing contributes to building more robust, more equitable societies.

Among the **restrictive housing policy tools**, we can find the simple rent control tool that limits how much landlords can increase rent. This is implemented to ensure housing affordability for tenants and prevent sharp spikes in rental prices. To safeguard tenants' rights and prevent homelessness, housing policies may include tools that protect tenants from unjust eviction. These measures often involve legal regulations and tenant rights advocacy. Housing rationing tools may be employed when housing demand exceeds supply. These mechanisms allocate housing resources based on specific criteria, such as need or priority.

Within the **other** category, tax policies can influence homeownership by providing incentives such as deductions on mortgage interest or property taxes. These tools aim to stimulate homeownership and support housing stability. Regulations in the banking sector can impact the availability of mortgage financing and influence housing markets. Policies may include

⁵⁵ Hammel, T. W., & Aleksejewa, M. L. (2017). Fuggerei von jakob fugger als die älteste sozialsiedlung der welt. In Актуальные проблемы профессиональной сферы в современном мире (pp. 70-72).

measures to ensure responsible lending practices and financial stability. Governments implement land use regulations to control and guide the development of land. These regulations can influence the type of housing that is built, zoning requirements, and overall urban planning. Housing policies may integrate environmental considerations to promote sustainable development.⁵⁶ It can involve regulations and incentives for energy-efficient construction, green building standards, and environmentally friendly urban planning.

Key components and considerations within housing policy may include affordability, social housing, rent regulation, homeownership support, homelessness prevention, urban development, green building standards, inclusionary zoning, tenant rights, and community development. The following table provides a general overview:

Elements of Housing policy

Housing Policy Type	Description	Key Features	Examples
Public Housing	Government-owned and managed housing for low-income residents	- Subsidized rents - Eligibility criteria - Long-term rentals	Singapore's HDB, US Public Housing
Rent Control	Regulations on rental prices to protect tenants	- Caps on rent increases - Tenant rights and protections	New York City, San Francisco
Affordable Housing	Housing initiatives to make homes more affordable	- Subsidies for developers - Income-based eligibility criteria - Affordable housing quotas in developments	Low-Income Housing Tax Credit (US), UK
Social Housing	Non-profit or government-owned housing for various income levels	- Mixed-income communities - Tenant participation in management	Vienna, Austria, Netherlands
Rent Subsidies	Financial assistance for eligible tenants to afford rent	- Direct payments to landlords or tenants - Income-based eligibility criteria	Housing Benefit (US, UK)
Homeownership Support	Programs to help individuals purchase homes	- Down payment assistance - Low-interest loans - Mortgage guarantee programs	FHA loans (US), Help to Buy (UK)
Housing Vouchers	Portable subsidies that tenants can use in the private rental market	- Tenant choice in housing - Government-funded rental assistance	Housing Choice Voucher Program (US)

⁵⁶ Hegedüs, J. (2020). Understanding housing development in new European member states-a housing regime approach. Critical Housing Analysis, 7(1), 49-62.

Inclusion-ary Zoning	Mandates for developers to include affordable units in new developments	- Percentage of affordable units required - Zoning incentives for developers	Various cities in the US and Europe
Homelessness Prevention	Policies to address and prevent homelessness	- Emergency shelters - Supportive housing programs - Outreach and counseling services	Housing First (Canada, US), Finland
Green Building Standards	Regulations promoting energy-efficient and sustainable housing	- Environmental standards for construction - Incentives for green building practices	LEED certification, BREEAM
Gentrification Mitigation	Measures to counteract negative effects of urban gentrification	- Affordable housing set-asides - Community benefits agreements - Anti-displacement policies	Community Land Trusts, Inclusionary Zoning

Source: own compilation

Without claiming to be complete, we finally mention the pitfalls of the state housing policy here. The same rules apply to breaking corruption as in other areas, and rules must be made and observed. The sale of service apartments or liquidating state/municipal properties in small settlements can lead you in a crooked direction. Building a new apartment is much more expensive than privatising the existing one and eradicating the associated culture. Its particular flaw is that only one person involved is doing well here. In the same way, he should not interfere in those areas where the market works well. The state is usually more expensive and less effective in such areas.⁵⁷ It is also a mistake if the various subsidies get mixed up, so the primary goal is no longer building a quality apartment but getting the most subsidies. In our opinion, the complete freedom given to the executors - except for the exemption of the winter period - in the field of real estate auctions is not very fortunate; why is the state?

In developed democracies, if a party promises something and comes to power, it should be fulfilled, at least for the most part. Therefore, it is not easy to implement even if housing support for pensioners would be fortunate and socially just. However, there are 3 million voters, a homogenous ethnic group, for whom this type of support would really matter a lot. Everyone's income is significantly smaller than those living on wages and salaries, especially the nearly 1 million potential voters whose monthly allowance is around HUF 100,000 or less. With such support, there would obviously not

⁵⁷ Bohle, D., & Seabrooke, L. (2021). From asset to patrimony: The re-emergence of the housing question. In *Bricks in the Wall* (pp. 138-160). Routledge.

be more apartments, but there would be renovations, renovations, and an increase in the level of comfort.

Every government has a duty to take care of its citizens. In the housing issue, those who don't have one yet or don't have one anymore but want to start over. Only one person can provide the necessary financial background: the state. In those areas where the market cannot solve this – in some cases, it is not even its task – the government must step in with appropriate measures.

However, it is important to note that more than 80 % of the population in Hungary own their own apartment, which is exceptionally high compared to Western European rates. A smaller part of the remaining ten or so per cent is on the move and therefore does not want an apartment because of the informality; and the rest – due to their income conditions – will never have enough money. Brownfields can be costly for the state in many cases, and are mostly only worth it when the favourable geographical location (frequented inland area, dynamically developing agglomeration, economic and job-creating centre) offsets the additional cost. Over time, however, their number also decreases, and in some cases, brownfield rehabilitation is unprofitable and/or unreasonable. The financing thus falls on the state and possibly EU resources. The problem of the bottom decile is fundamentally social, so the largest part of it remains for the public finances.

The main government options for improving the housing situation in Hungary

Form	Advantage	Disadvantage	Support/flat	Estimated over-heads/month	Form of support	Comment
Own property	finalises	expensive	variable	20-50	tax, levy	upon selection
Big family	populist	relatively few	1-20 million	30-70	cash, interest sub-sidy	demographics are not growing
Disabled	fair	minimal political gain	1-10 million	15-40	once and/or monthly	relatively few people
Other social	partly catching up	non-voting base	1-10 million	10-30	casual	mixed demand
Freshman	new voters	-	1-20 million	20-80	cash, interest	repayable
State / municipal apartment	ready to move in	few	mixed	10-500	only social	market vs. soc
Renovated	quick solution	very few	unique	30-500	only social	market vs. social
To be renovated	cheaper	whose cost?	condition dependent	50-500	only social	only soc.
Seller	-	one time solution	casual	-	market vs. social	temporary solution
College	permanent solution	few	10-20 million /room	10-50	construction	one time solution
Service flat	labour force	few	mixed	mixed	state	must, must!
Convenience	protocol	expensive	HUF 50-500 million	100-990	unique	just justified
Professional	loyalty	fluctuation	variable	desire to be placed	uniform	not for sale!
Renovation	cheap to buy	expensive, many	regional	-	cash, interest	
Empty apartment mobility	general situation is improving	wrong placement	regional	-	tax, levy	
Rental, sublet support	more movement	difficult to define it	regional		tax	for business too
Student	general improvement	few			cash, tax, scholarship	partially reimbursed
Airbnb	several apartments	not specifically for that	-	-	tax	for a short time
Distance home	labour is moving	selection problem	regional	-	tax, other supports	for business too
Donation	unique	expensive	unique	-	unique	just extraordinary
Other	variable	tangled	different	-	extensive	let it be few!

Source: own compilation

A few notable reflections and notes about the table: while the proposed solutions may not yield immediate results, their impact becomes increasingly evident in the medium term, emphasising the importance of a sustained, long-term approach to address housing challenges effectively. Recognising the time horizon for these solutions is crucial for managing expectations and understanding the evolution of their effects over time.

Notably absent from the discussion in the table are secondary government benefits that may arise from the proposed solutions, such as the potential for increased traffic and heightened budget revenues. A comprehensive analysis should explore these indirect advantages to provide a more holistic understanding of the overall impact on both the housing sector and the broader economy.

The value of homeownership, a crucial aspect of the housing landscape, is intricately linked to settlement size. This consideration gains significance when contemplating the introduction of a possible property tax. Additionally, the emergence of uninhabited flats as a developing category underscores the need for nuanced strategies that account for diverse housing scenarios.

The oversight in renovating former public apartments by the Housing Management Directorate (HKI) due to financial constraints remains a persistent issue. Privatization did not offer a remedy for owners with limited resources, perpetuating a situation that requires renewed attention and sustainable solutions to ensure the well-being of homeowners and the overall housing market.

Despite recent stabilization in rent growth, particularly in cities like Sopron and Székesfehérvár, a strategic focus on large-scale public rental housing construction is poised to restore the market rapidly. This initiative has the potential to significantly alleviate housing shortages and foster a more balanced and accessible housing environment.

Access to world-class higher education institutions often hinges on the availability of dormitories. Addressing this element requires a long-term perspective, and the construction of state dormitories emerges as a viable solution. The cyclical nature of student turnover ensures a continuous influx of residents, alleviating the strain on student housing and contributing to a more sustainable housing ecosystem.

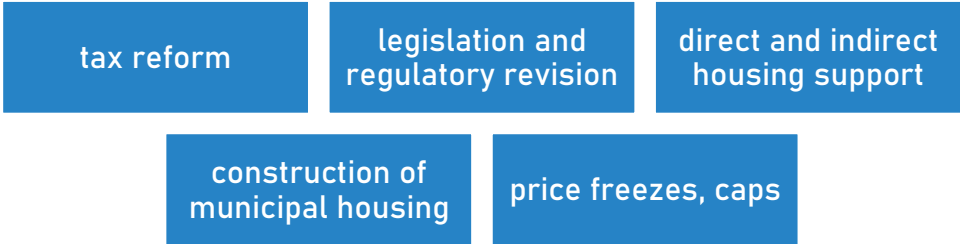
Specialised workers' accommodations, notably in industries such as construction and nursing, are excluded from the study as they are considered temporary solutions. While these arrangements may provide a practical solution in specific contexts, they raise concerns about humane living conditions, primarily when individuals are situated far from home and family, often without adequate compensation. Moreover, individuals starting with limited assets face formidable challenges in transitioning to independent apartments.

The research refrains from delving into the application of a general housing tax and similar measures. In a country where not everyone enjoys multimillionaire status as property owners and where daily income remains a concern for many, introducing such fiscal policies becomes a complex task. Public acceptance is crucial, and aligning these policies with the diverse economic landscape requires careful deliberation to ensure feasibility and popularity. Addressing these complex issues necessitates a nuanced and inclusive approach to foster positive changes in the housing sector.

7. State support for the rental system

Since the supply and demand conditions will not change much on their own in the near future, i.e. on a market basis, or if they do, only very slowly, the intervention of the state to alleviate the rent situation would be necessary as soon as possible. So, let us briefly start with the means of this, to the extent of one paragraph each. We already point out here that this is a neglected area: the state typically only thinks about building apartments, and we do not know much about rental subsidy policy - with one or two exceptions. However, social housing would be the most acceptable and liveable solution for hundreds of thousands of people. If not the only one.

There are many options for intervention: tax reform, regulatory revision, direct and indirect housing support, municipal housing construction, and price freezes.



The necessary money can be raised for all the mentioned areas, for example, by creating a multi-level income tax system, wealth tax, redeployment, etc., which is also socially just.

Just for a short, supplemented and comprehensive list, we can add that within the educational programs, the central and the local (!) governments can organize educational programs, workshops, or online resources to inform landlords and tenants about the legal aspects, benefits, and potential challenges of rentals. This can promote responsible rental practices. In the era of the Internet of Everything, Technology Integration, Artificial Intelligence, Big Data etc.; the state can support or create online platforms that facilitate secure and transparent rental transactions. These platforms can provide standardized agreements, verification processes, and communication channels for tenants and landlords. Furthermore, market monitoring is essential for data collection and research, which can collect data on the housing market to understand trends, challenges, and opportunities. This information can in-

form future policies and interventions. State support for the rental rental system often requires a balanced approach, considering the needs of both landlords and tenants while fostering a fair and transparent housing market.

7.1. Tax reform

Most of the possibilities lie in changing the **taxation system**. Fast, efficient, cheap. Governments may provide financial incentives, such as subsidies or tax breaks, to encourage landlords or tenants to participate in rental. This can be particularly beneficial for affordable housing initiatives. The disadvantage is that it is not always sympathetic to those involved.⁵⁸

It may seem like a solution that part of the rent can be deducted from personal income tax.⁵⁹ This would benefit those still employed, although its fairness is questionable, for example, in the case of a pensioner who needs a rental. The opposite is also true: what does someone who has saved for a spare (rental) apartment all his life say to introduce a new tax and use the rent to supplement his small pension? As far as we know, such a universal solution does not exist; it can benefit everyone. In addition, the rental market is not completely white either; there are many grey zones: verbal rental contracts between acquaintances and preferential use of apartments.

The movement of the Hungarian rental market can also be stimulated (for example, with a particular property tax, housing tax, house tax, etc.) so that the many vacant apartments are rented out.

Companies can also be encouraged to provide rental support. Depending on the distance to the employee's permanent home, selectively. Such opportunities are fast and act quickly. There are many forms.

The conditions for taxation of apartment rentals changed in 2019 and became more favourable. After more than half a year of experience, it can be said that, contrary to the government's expectations, an increase in the number of housing sales or a decrease in rent did not materialise, even though according to the new rules, part of the justified costs (water, gas, electricity,

⁵⁸ Alpanda, S., & Zubairy, S. (2016). Housing and tax policy. *Journal of Money, Credit and Banking*, 48(2-3), 485-512. and Barrios Cobos, S., Denis, C., Ivaškaitė-Tamošiūnė, V., Reut, A., & Torres, E. V. (2019). Housing taxation: a new database for Europe (No. 08/2019). JRC Working Papers on Taxation and Structural Reforms.

⁵⁹ Chambers, M., Garriga, C., & Schlagenhauf, D. E. (2009). Housing policy and the progressivity of income taxation. *Journal of Monetary economics*, 56(8), 1116-1134.

district heating, hot water, internet) can be accounted for. However, the relief does not apply to other items (e.g., everyday costs, cleaning, common representative fees, insurance, renovation funds). Let us not even look for the logic of this because there is none. It would be investigated in the country's second-largest building (Hárshegy), but it is not functioning at the moment. Typically, this decision was made in the most prominent and largest building.

7.2. Legal framework, legal services, supervision

Within the **clarification of the legal frameworks and regulations**, the governments can enact clear and comprehensive laws that define and regulate rental or tenancy agreements. This legal clarity helps both tenants and landlords understand their rights and responsibilities in rental and tenancy arrangements. Clear regulations would also help: Act LXXVIII of 1993 on rental apartments and premises (Housing Act), as well as specific rules for their alienation, and the review of local government housing regulations. Starting with the current halved interpretation of costs to the regulation of landlord and tenant rights, almost everything is necessary since most of them were shaped by customary law (well, and parliament) rather than logic. It does not even cost money. The "rental industry" is an existing phenomenon affecting significant supply and demand layers. However, the situation of the two sides is not balanced; the tenants are practically vulnerable.⁶⁰ Furthermore, this enables usury-like contracts and other abuses.

The Housing Act stipulates that if the parties do not agree separately on these matters, the tenant is responsible for the maintenance and renovation of the dwelling, and the owner is responsible for the replacement of the elements and equipment of the dwelling. If the tenant's conduct causes damage, the tenant must also bear the costs of replacement and replacement. However, it is difficult to draw the line between what the tenant's obligation is to renovate and maintain (e.g., repainting walls or repairing the boiler) and what the tenant's behaviour is in the case of equipment failure. It seems that the law is not well-placed to clarify maintenance obligations.

⁶⁰ Kavecsánszki, É. (2019): Gondolatok az ingatlan kiürítés végrehajtásához-polgári peres vagy nemperes eljárás. Debreceni Jogi Műhely, 16(1-2). and Hegedüs, J., Horváth, V., & Somogyi, E. (2016): A magánbérlet-szektor működése és lehetséges szerepe a közösségi lakáspolitikában—a szociális lakásvállalatok koncepciója. and Józsa Zoltán (1985): Az albérlet jogi szabályozásának társadalmi vonatkozásai. in Acta Universitatis Szegediensis

Among the other practical problems, we highlight that the obligation of ownership towards utility service providers involves the requirement of data provision, creating administrative challenges for property owners. The right to terminate is constrained by excessively strict deadlines, potentially limiting flexibility for both landlords and tenants. The application of legal sanctions is time-consuming and often yields dubious outcomes, raising concerns about the efficacy of the current enforcement mechanisms. The obligation to convert into a condominium has expired, introducing complexities related to property ownership structures. Real estate agents and property appraisers are governed by separate regulations, necessitating a review for harmonization.

The following changes would be helpful. Practical simplification of the rules of apartment rentals aligned with the new Civil Code would enhance clarity and ease of compliance. Formulating legal sanctions that can be enforced through more straightforward legal means would expedite the resolution of disputes. Addressing improper use, damage, rent, or utility fee debt issues would provide a more comprehensive legal framework. Cancellation or rationalization of tenant designation would streamline administrative processes. Clarifying the scope of responsibility related to the technical condition of properties would improve accountability. Abolishing or at least narrowing down different regulations imposed by local governments would simplify compliance for property owners.

Due to the **requirements of the rental system**, support for labour mobilization is essential for creating a dynamic and responsive rental market. Increasing the proportion of rental apartments within the housing stock is crucial for meeting diverse housing needs. Assistance in creating rental housing of better technical quality is necessary to ensure tenants' overall well-being. Ensuring appropriate territorial distribution of rental properties contributes to a balanced housing landscape. Encouraging, or at the very least not hindering, private investments in the sector is vital for sustained growth and development.

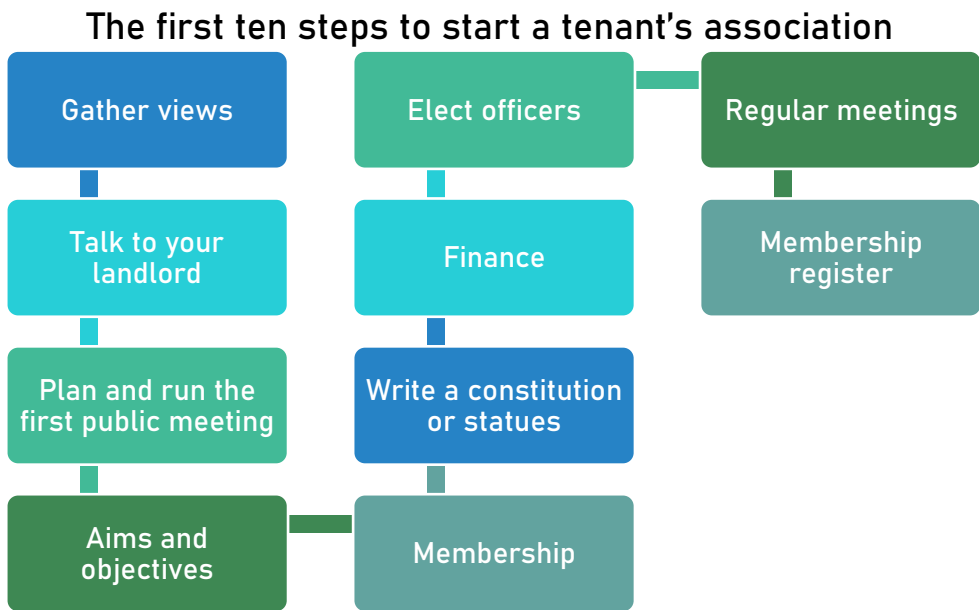
Some authors recommend a possible solution, a separate code on real estate.⁶¹ A unified system in the form of a Real Estate Code could regulate various aspects, including condominiums, housing associations, and different forms of apartment utilization. It would delineate the differences between housing association regulations and non-apartment rental rules, providing

⁶¹ Telek Zoltán (2020): Lakástörvény. Egy szellem a múltból!

clarity for both property owners and tenants. The book could establish standardised rules for real estate practice, encompassing treatment, evaluation, and mediation, fostering consistency in the industry.

Beyond the legislation, other legal services can improve the rental market. The **mediation or dispute resolution services** specific to rental can help resolve conflicts between tenants and landlords, ensuring smoother and more stable rental and tenancy arrangements.⁶²

To improve the renter's situation, **tenant advocacy** through **tenant supporting associations** can advocate for the rights and interests of tenants engaged in rental or subletting.⁶³



Source: own compilation based on <https://www.iut.nu/policy/set-up-a-ta/>

⁶² Kasumu, T. O. (2017). Effectiveness of the Citizens Mediation Centre in landlord-tenant alternative dispute resolution in Lagos State (Doctoral dissertation, Ph. D. Thesis submitted to the Department of Sociology, College of Business and Social Sciences, Covenant University, Ota).

⁶³ Chisholm, E., Howden-Chapman, P., & Fougere, G. (2017). Renting in New Zealand: perspectives from tenant advocates. *Kōtuitui: New Zealand journal of social sciences* online, 12(1), 95-110. and Hill, K., Padley, M., & Stone, J. (2016). Exploring affordability: what can housing associations do to better support their tenants?. and Preece, J. (2018). The impact of welfare & tenancy reforms on housing associations. UK Collaborative Centre for Housing Evidence.

A tenant association (or tenant organisation) may be made up of tenants who live in a certain building or development, or membership may be on a larger scale -- i.e. renters in a city who belong to a county or citywide local tenants' association.⁶⁴ These groups are formed and maintained with a number of goals in mind, including:⁶⁵

- informing tenants of their rights under local, state, and federal law;
- organising and lobbying on behalf of tenants and tenants' rights, especially at city and county levels of government;
- improving tenant-landlord relationships, building conditions, and services for tenants under a "strength in numbers" model;
- encouraging regular communication and community awareness among tenants.

The **International Union of Tenants (IUT)** is a non-governmental, non-profit membership organization representing global tenants' associations.⁶⁶ Established in 1926 in Zürich, Switzerland, the IUT has operated its head office in Stockholm, Sweden, since 1956, complemented by a representative office in Brussels since 2008. With a network comprising 74 member organizations across 51 countries, our financial support is derived from membership fees. (There is no Hungarian member.) The cornerstone of our initiatives is the **Tenants' Charter**,⁶⁷ guiding our efforts in advocating for the rights and interests of tenants worldwide. The first version of the Tenants' Charter was adopted at the IUT Council meeting in Bergen, Norway, in 1974. Thirty years later, in 2003/2004, the second version was adopted by the IUT Congress.



Different tenant protections, such as **anti-retaliation measures**, can complement these solutions.⁶⁸ Implementing laws that protect tenants from

⁶⁴ Rolf, H. (2021). A Union for Tenants: Tenant militancy in Gothenburg as a historical example. *Radical Housing Journal*, 3(1), 167-186.

⁶⁵ <https://www.findlaw.com/realestate/landlord-tenant-law/tenant-associations.html>

⁶⁶ <https://www.iut.nu/about-iut/>

⁶⁷ <https://www.iut.nu/about-iut/the-tenants-charter/>

⁶⁸ Sharp-Wasserman, J. As HSTPA Enhances Anti-Retaliation Protections for Tenants, Don't Forget About New York's Anti-SLAPP Law. *NY Real Property Law Journal*, 7. and Gindler, A. M. (2021). The Workplace Poster: A Simple Model for Informing Residential Tenants of Their Rights and Improving Access to Adequate Housing. *Journal of Affordable Housing & Community Development Law*, 30(2).

retaliation by landlords when engaging in rental can encourage tenants to explore rental options without fear of negative consequences.

Regular monitoring and enforcement mechanisms can be established to ensure rental and tenancy arrangements comply with existing laws and regulations. These **compliance checks** help maintain fairness and transparency in the rental system.

7.3.Housing allowance

Direct **and indirect housing support** would also help a lot in the change. It can be received by socially disadvantaged people, university students, etc. - with conditions developed for each of them, even as a partial refund. The larger the group that receives the more significant discounts, the more its beneficial effect will be felt.

According to the latest KSH survey (2015), 7% of households received housing maintenance subsidies. In the history of housing maintenance support, 2015 was a transition year; at that time, the normative housing maintenance support's central element was abolished. Housing maintenance support can be considered well-targeted: 36 % of households in the lowest income group received support, 13 % in the second income decile, and 7 % in the third. For groups higher than this, this indicator is below 5 %. National statistics show that in 2014, the total housing subsidy expenditure was about HUF 20 billion, so the monthly subsidy per subsidised family was HUF 4,000, which was 10% of the average housing expenditure. Despite the effective targeting, due to the low magnitude of the subsidy amounts, this program was not able to significantly influence social inequalities in housing affordability. According to the calculations of the Hungarian Energy and Public Utilities Regulatory Office, in 2015, utility costs decreased by HUF 242 billion, but this affected the entire population without social or need considerations.

In 2015, the KSH also prepared a calculation that analyzes the effects of a HUF 190 billion housing maintenance cost reduction in the case of an assumed targeted program and a general program that helps everyone. In the case of the targeted program⁹, in our calculations, those who spend more than 30 % of their income on housing receive support, and the size of the support is equal to the housing cost minus 30 % of income. The program

covering all households reduces housing expenses by an average of 10.3 % for each household.

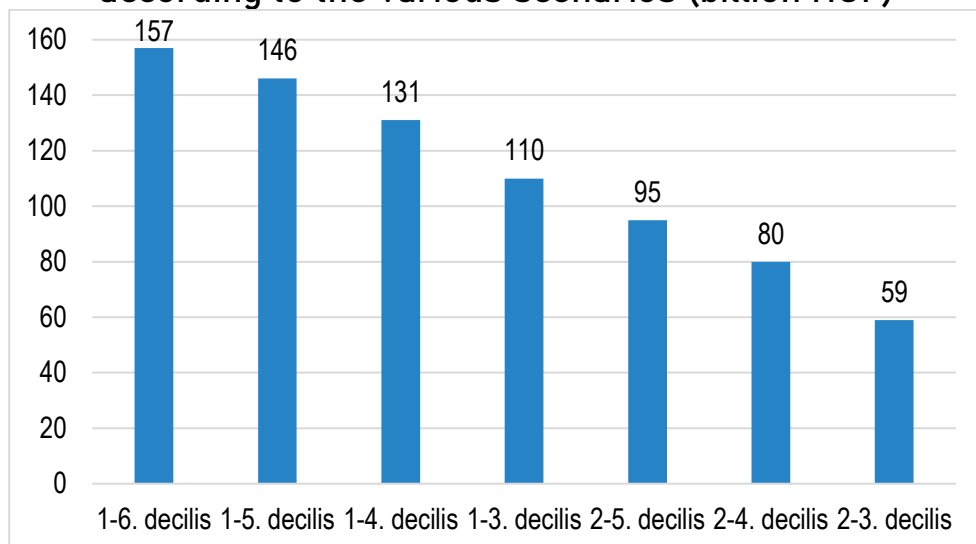
General and targeted housing maintenance support impact on affordability

Income tithe	Original affordabil- ity index, %	New affordability indices, %		Index change, %		Distribution of support, HUF billion	
		general over- head re- duction	tar- geted sup- port	general over- head re- duction	tar- geted sup- port	general over- head re- duction	tar- geted sup- port
1	39	35	24	4	15	16	51
2	31	28	23	3	8	17	36
3	26	23	21	3	4	17	23
4	25	22	21	3	4	7	21
5	21	19	19	2	2	21	15
6	20	18	18	2	1	20	11
7	19	17	17	2	1	19	10
8	16	14	15	2	1	19	7
9	16	14	15	2	1	20	10
10	12	11	12	1	0	22	7
Overall	22	20	19	2	4	190	190

Source: own compilation based on Hegedüs József – Somogyi Eszter (2015): A lakások megfizethetősége és a társadalmi egyenlőtlenségek – a KSH 2015-ös lakásfelvétele adatai

In the model, the difference between the two types of programs is best shown by the distribution of the total subsidy amount between income groups. In the case of the general utility reduction, families belonging to the top two income deciles receive a larger share of the subsidies than the two lowest groups: HUF 44 billion, compared to HUF 33 billion for the bottom two deciles. In the case of targeted support, the same proportion is reversed, and the two lowest income groups receive HUF 87 billion, and the families in the top two income tenths receive HUF 17 billion in support. **Income-dependent housing maintenance support is a much more effective and fairer solution from a public policy point of view.** The general overhead reduction is justified only to the extent that it does not require special state support, i.e. it forces service providers to operate more efficiently. However, if the overhead reduction forces state support for the service, or if the network or service deteriorates, then it is not justified. Here, political decision-makers should think about which deciles to prefer.

Budgetary impact of targeted housing support according to the various scenarios (billion HUF)



Source: own compilation based on Hegedüs József – Somogyi Eszter (2015): A lakások megfizethetősége és a társadalmi egyenlőtlenségek – a KSH 2015-ös lakásfelvétele adatai alapján

A broader scheme (1st-6th decile) is worth 157-131 billion HUF, a narrower scheme (2nd-4th decile) 95-59 billion HUF. Policymakers can easily convert these amounts into other public spending (for example, typically on stadiums, which amount to HUF 350 billion), 0.7 - 0.2 % of a budget of around HUF 20,000 billion.

7.4. Rental apartment construction

Governments may adopt policies that require a certain percentage of new housing developments to include affordable units, potentially creating more opportunities for rental within affordable housing projects, i.e. inclusionary zoning. Policies that promote rentals within affordable housing initiatives contribute to meeting housing demands and improving accessibility to affordable rental options.

The construction of **municipal apartments** is out of the question; there are so few of them. In the great wave of privatisation, everyone bought an apartment, those who could not get it stayed with the rental or sublet. This is how the former council apartments sold out, and no one thought about what

would happen to those who did not have enough money to move in or were left behind for other reasons – millions of people, the lowest wealth decade. In the West, rental housing is a proven form; the majority of people live this way. True, the historical background is different. An additional advantage of the appearance of a large number of state-municipal rental housing is that it could break down rental and housing speculation and - not only incidentally - would be socially fairer than at present. The government also sees the need for social housing - let us call it municipal or state housing - it is not a little. The only possibility of a cultured solution is for those with little money, those who have slipped down in society, and some people experiencing homelessness. Building an adequate amount would also significantly change rental prices, and the owner would also be able to monitor this sector. Even Western societies, much more prosperous than ours, could not get around this problem in any other way.

It is possible to help rent out **empty municipal apartments**. In Budapest alone, nearly 4,000 municipal apartments are vacant (3,909 at the end of 2018). More and more are available; in 2011, there were only 2,235.⁶⁹ The variance per district is considerable: XIII district, which has the most rental apartments, all the 6,000 apartments of the district are utilised, while in the VIII district, 889 of the available 4,417 apartments are vacant. The latter is a large number even if the technical condition of half of it has significantly deteriorated.

Creation is significantly more sympathetic than taxation. The downside is that it is slower and initially expensive. It is also possible to build dormitories and municipal apartments. We are very far behind in both, even though this would be the best solution, and it is also cheap in the long run. There are 40,000 dormitory places in Hungary - very few. On average, 2.68 people live in one room; most often, there are rooms for 2-3 people. 40% of dormitories share a bathroom with residents of several other rooms, and a third with residents of another room. There are places where there is not even a desk (10%). In many places, consistency preservation, especially development, exists only in the dictionary. In addition, due to ethical traditions - the heritage of the past - joint responsibility means zero responsibility, which the author himself experienced during his education in the countryside, where he

⁶⁹ Horváth Csaba László (2019): Majdnem négyezer önkormányzati lakás áll üresen Budapesten
<https://24.hu/belfold/2019/01/25/alberlet-ures-onkormanyzati-lakas-budapest/>

had a separate room, but the toilet room was shared, with corresponding conditions.

It is refreshing to see the appearance of new, **privately owned dormitories**, where, although the market price is not much lower than the average, it can provide significantly more services. The downside is that there is still very little of it for now. Let us trust that, if it works out, their number will only increase, which is suitable and affordable for university students and a housing solution for tourists in the summer.

It is important to note that the market produces apartments, not only a few. The delivery of newly built apartments is expected to peak this year; 13,500 apartments can be built in Budapest this year. Even today, after the double-digit price increase of recent years, these are proving to be a good investment due to the high rents compared to housing prices. In the capital, mainly Angyalföld, the XI and the IX districts, Győr, Debrecen, Székesfehérvár, and Sopron are also attractive destinations for those buying apartments for investment purposes. According to a professional article, the rental yield of 4-5% is not unrealistic, and there is also a future property value increase.⁷⁰

7.5. Rent control, price ceiling, cap

Historically, the **first-generation rent control** – originated during World War I and persisted until the 1970s – involves implementing a rent freeze, whereby the rental rate is fixed at a certain baseline. The determination of this baseline can take various forms:

- referencing the rent for the same or similar dwellings at a specific historical date, often preceding a significant event like a war or the enactment of relevant legislation (Germany, Poland, and Spain after WWI, as well as in the former Russian Empire during WWI and the Russian Civil War);
- setting a certain percentage of the taxable (book) value of the dwelling (Chile and Portugal);
- establishing an absolute value (Italy in the 1930s and the USSR);
- calculating a value by local authorities based on the structural and locational characteristics of the dwelling (USSR).

⁷⁰<https://piacesprofit.hu/kkv-cgblog/kedvezobbek-lettek-a-lakaskiadas-adozasi-feletetelei/>

The **second-generation rent control** allows a more flexible rental setting when new contracts are established but imposes upper limits on its growth rate within existing contracts. The cap on rent growth can be tied to various factors, such as the annual increase in consumer prices (Colombia, Czech Republic, France, Italy, Poland, and Spain), mortgage interest rates (Switzerland), or a government bonds index (Brazil).

In the **third-generation rent control**, the rent increases are controlled within a tenancy but are unrestricted between tenancies. The distinction between second- and third-generation rent control was made based on how the regulation was targeted.

Speculation can be broken by freezing and maximising **rental prices**. Meanwhile, a ceiling on rents below the market-clearing level leads to a fall in rental property quantity.⁷¹

The impact of rent regulation is context-dependent, requiring a detailed examination of individual cases. Focusing on Nordic welfare states, which share the social democratic welfare model, we can observe variations in their housing regimes. These differences pertain to the fundamental principles governing how housing provision is organised within each country.⁷²

Regulation of rents in 33 European countries.				
	Is there a rent regulation system?	What is regulated: initial rents and/or rent increases?	Generation of rent control	Share of private rental housing
Austria	YES, several systems depending on e.g. the date of tenancy agreement	Initial rents and/or rent increases	Second generation	16,3%
Belgium	YES	Rent increases	Third generation	23%
Bulgaria	NO	–	–	1,7%

⁷¹ Bourne, R. (2015): The flaws in rent ceilings. *Flaws and Ceilings: Price Controls and the Damage They Cause*, 72-95. and Mense, A., Michelsen, C., & Kholodilin, K. A. (2019): Rent control, market segmentation, and misallocation: Causal evidence from a large-scale policy intervention.

⁷² Kettunen, H., & Ruonavaara, H. (2021). Rent regulation in 21st century Europe. Comparative perspectives. *Housing Studies*, 36(9), 1446-1468.

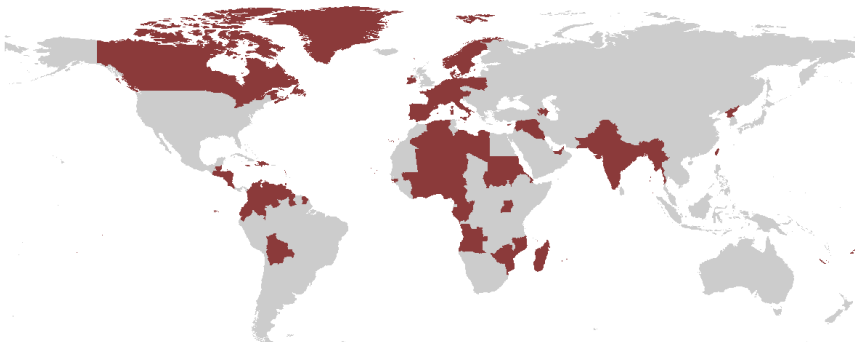
Croatia	YES, in open-ended rental contracts	Rent increases	Third generation	2,9%
Cyprus	YES, in statutory tenancies	Rent increases (maximum increase of 14%)	Mild third generation	18,8%
Czech Republic	NO	–	–	17,6%
Denmark	YES, multiple types of regulation depending on the type and location of the property	Initial rents and rent increases	Second generation	24%
England	NO, except contracts dated before 1989	–	–	18%
Estonia	NO	–	–	7,3%
Finland	NO	–	–	16%
France	YES	Initial rents and rent increases in larger cities; otherwise rent increases	Second generation	23%
Germany	YES	Rent increases (reference rents); 'rental brake' in areas of high demand (rents for new lettings)	Third generation	48%
Greece	NO	–	–	19,8%
Hungary	NO	–	–	8%
Iceland	NO	–	–	11,1%
Ireland	YES, special restrictions on rent pressure zones	Initial rents and rent increases tied to market level or limited to 4% (rent pressure zones)	Mild second generation	18,5%
Italy	NO	–	–	16,3%
Latvia	NO	–	–	14,7%
Lithuania	NO	–	–	9%
Luxembourg	YES, part of private housing	Rent increases (fixed for 3 years)	Third generation	27,7%
Malta	NO	–	–	14,6%
The Netherlands	YES, excl. small amount of housing with high quality points	Initial rents and rent increases (quality points)	Second generation	8%
Norway	YES	Rent increases	Third generation	22,8%
Poland	YES	Rent increases	Third generation	4%

Portugal	NO, except contracts dated before 1990	–	–	18%
Romania	NO	–	–	4,2%
Scotland	YES, special restrictions on rent pressure zones	Rent increases (only permitted annually, Rent Officer investigates claims of unreasonable increases)	Mild third generation	11,6%
Serbia	NO	–	–	5%
Slovakia	NO	–	–	2,6%
Slovenia	NO	–	–	3%
Spain	YES, depending on the date of the contract	Rent increases for the first 3 to 5 years	Third generation	10,1%
Sweden	YES	Initial rents based on utility value system, rent increases based on negotiations between tenant and landlord associations	Second generation	41%
Switzerland	YES	Rent increases	Third generation	52%

Source: Kettunen, H., & Ruonavaara, H. (2021). Rent regulation in 21st century Europe. Comparative perspectives. Housing Studies, 36(9), 1446-1468.

Countries that are still using rent control

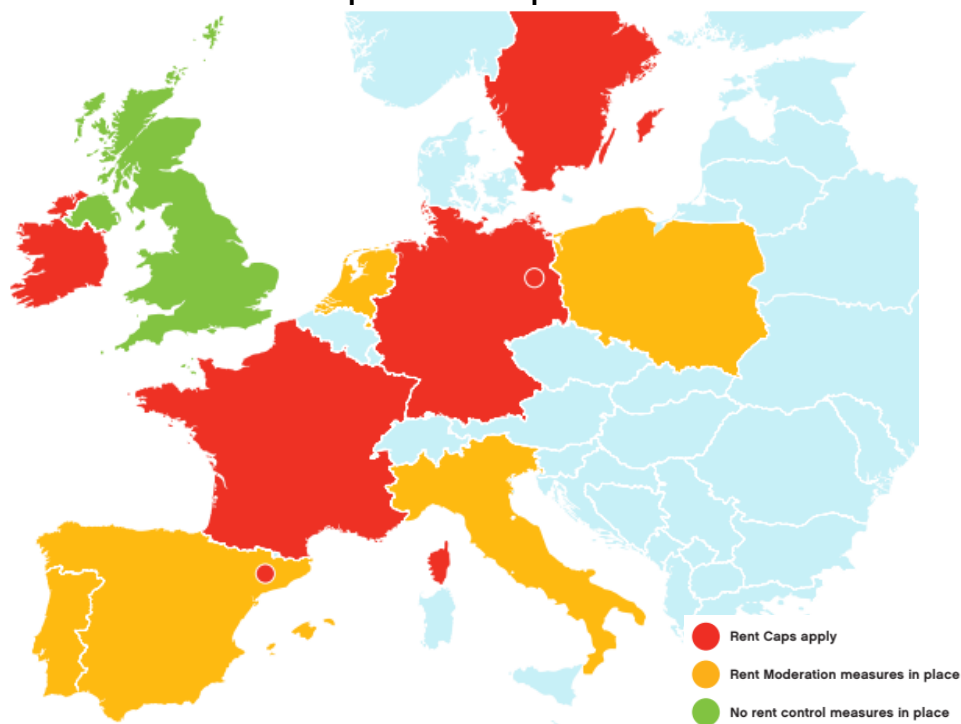
■ still exist ■ no or unknown



Source: Kholodilin, Konstantin A. (2020): Lectures on housing economics: A European text.

Nevertheless, a resurgence of interest in rent control is evident in numerous countries. For instance, restrictions on setting rent prices were implemented in Paris and Lyon (France) in July 2019 and March 2020, respectively. California introduced statewide rent growth restrictions in January 2020, which are slated to remain in effect until January 2031. Additionally, Berlin (Germany) froze rents for a period of five years starting in February 2020, among other instances. The onset of the Covid-19 pandemic has amplified the significance of such measures. Following the imposition of widespread sanitary restrictions, including lockdowns, in March 2020, the resulting income loss triggered a global trend of eviction bans and rent freezes. Hence, historical housing market regulations have played a pivotal role and continue to hold relevance in the present day.

Map of rental policies



Source: Day, Jones (2020): Mapping Out Rent Controls Across Europe

The galloping of prices in the rental market - because it is there - was solved, for example, by the municipality of the city of **Berlin** by freezing the prices for 5 years (2020–2025) by decree. In addition: (i) in respect of existing rentals of residential space built before 1 January 2014, rent is frozen at

the level of rent agreed as of 18 June 2019 (and in any event, it must not exceed certain Rent Caps); (ii) in respect of residential space built before 1 January 2014, which is let for the first time or re-let after 23 February 2020, certain Rent Caps apply. As for Berlin, the average rent is 10 euros/m², i.e. an approx. The monthly rent for a 60 m² apartment is €600, converted to HUF 190,000, essentially the same as in the frequented places in Budapest; of course, there are also very significant income differences.⁷³ The Berlin municipality plans to introduce a five-year moratorium from January 2020 due to the already unbearably high fees there, and in Hungary, especially in Budapest, these costs are also under siege for many families.

In **Germany**, where a new residential lease is concluded within an area with a “tense housing situation”: the (1) rent must not exceed 10% higher than the customer comparative rent or subject to specific conditions, the level of rent in the previous lease; and (2) the rent must not increase by more than 20% over three years and, in any event, must not be more than 10% higher than the comparative rent. Certain exceptions apply, including concerning student housing.

In densely populated **French** areas, rent renewals are constrained, and rents may be capped by reference to a predetermined “reference median rent,” ensuring affordability.⁷⁴ In **Italy**, the parties are free to determine the initial rent, provided that the minimum term of the rent is four years, with an automatic renewal for a further four-year period. Annual rental fee increases cannot exceed the cap of 100% of the National Institute of Statistics (ISTAT) Index variation. No Rent Caps apply in Portugal, but limited Rent Moderation measures are in place, with annual rent reviews not exceeding the government-published legal coefficient.⁷⁵ No Rent Caps are in place in Spain, but rent increases must not exceed the Consumer Price Index (CPI). The proposed government measures aim to introduce rental controls in response to “exorbitant increases,” potentially leading to stricter rent controls. Neverthe-

⁷³ Deschermeier, P., Haas, H., Hude, M., & Voigtländer, M. (2016). A first analysis of the new German rent regulation. *International Journal of Housing Policy*, 16(3), 293-315. and Mense, A., Michelsen, C., & Kholodilin, K. (2018). Empirics on the causal effects of rent control in Germany.

⁷⁴ Malard, L., & Poulhes, M. (2020). Rent control in Paris: Small room dwellings more constrained by rent ceilings. *Economie prevision*, 217(1), 1-41.

⁷⁵ Mendes, L., Duarte, L., & Pincha, J. (2021). Tom Slater on rent gap and rent control:: Commentary and interview. *Finisterra*, 56(118), 271-275.

less, in **Catalonia**, new rentals in "difficult access to housing" areas are subject to rent limits based on reference rental prices and the competitiveness guarantee index.

In the **Netherlands**, the rental market is divided into social and private sector housing, with the Rent Tribunal empowered to determine the reasonableness of rents.⁷⁶ In the private sector, freedom of contract prevails, but recent proposals suggest potential stricter rent moderation measures. In **Sweden**, indirect rent caps apply through the Rent and Tenancy Tribunal, determining reasonable rent based on the property's "utility value." Landlords of newly constructed residential property can seek higher "Presumption Rents" under certain conditions.⁷⁷

In **Poland**, while no rent caps apply, Rent Moderation measures restrict rent increases, capped at 3% of the restoration value of residential space per year.⁷⁸

In **Ireland**, the rent must not surpass the "market rent," ensuring fair pricing. Furthermore, in Rent Pressure Zones (RPZs), rent increases are restricted to 4% per annum, offering protection to tenants against excessive rent hikes.⁷⁹

In **England**, the rent controls are not directly imposed, but London developments mandate 35% affordable housing, serving as a quasi-rent control measure. The proposed abolition of "no-fault" evictions might impact landlords' ability to increase rent, adding complexity to tenancy agreements. The 2021 London Mayoral Election is characterised as a referendum on rent control, highlighting the significance of this issue in the political landscape.

⁷⁶ Huisman, C. J. (2020). Insecure tenure: The precarisation of rental housing in the Netherlands. and Jonkman, A., Janssen-Jansen, L., & Schilder, F. (2018). Rent increase strategies and distributive justice: the socio-spatial effects of rent control policy in Amsterdam. *Journal of housing and the built environment*, 33, 653-673.

⁷⁷ Einefors, R. (2018). Airbnb and the Swedish Tenancy Legislation: An Analysis of Unexplored Possibilities. *NJCL*, 172.

⁷⁸ Rubaszek, M. (2019). Private rental housing market underdevelopment: Life cycle model simulations for Poland. *Baltic Journal of Economics*, 19(2), 334-358. and Skale, O., & Uitz, R. (2015). The ECtHR standards before the Constitutional Courts: Balancing rent-control and property rights in Poland, Croatia and Slovenia.

⁷⁹ Bohle, D., & Seabrooke, L. (2021). From asset to patrimony: The re-emergence of the housing question. In *Bricks in the Wall* (pp. 138-160). Routledge.

IV. Summary

In conclusion, the research has undertaken a comprehensive examination of various facets of the housing landscape, shedding light on critical dimensions that collectively shape the housing market. The research has delved into seven distinct areas, each contributing unique insights to our understanding of the challenges and opportunities within the housing sector. The exploration of affected groups, encompassing population demographics, identification of vulnerable groups, and the examination of demand and housing affordability, has elucidated the intricate interplay between societal structures and housing dynamics. By dissecting these elements, we have gained a nuanced perspective on the specific segments of the population facing the brunt of housing challenges.

Moving on to apartment rentals and sublets, our investigation into the housing portfolio, rental patterns, and associated economic factors such as fees and prices has provided a detailed panorama of the rental market. The effects of these dynamics on the broader community and an insightful comparison with European Union counterparts have expanded our comprehension of the rental landscape. The exploration of alternative rentals, particularly in the context of platforms like Airbnb and the pertinent taxation considerations, has highlighted the evolving nature of the housing market. We underscored the need for adaptive policies to address the challenges posed by emerging trends in accommodation preferences and platforms.

Shifting our focus to housing construction, a thorough overview has been presented, capturing the essence of the industry's current state. The study emphasizes the pivotal role of construction trends in shaping the overall housing scenario, acknowledging both challenges and innovations. The examination of brownfield areas and rust zones, drawing on foreign examples, Hungarian surveys, and a focused analysis of Budapest, has illuminated potential avenues for urban renewal and sustainable development. The section emphasised the significance of repurposing underutilized spaces to address the pressing issue of space scarcity.

Housing policy and options have been scrutinised, offering a critical evaluation of existing policies and proposing potential avenues for improvement. The spectrum ranges from regulatory frameworks to incentives aimed at fostering an inclusive and sustainable housing environment. Finally, the study delves into the role of state support for the rental system, spanning tax

reform, legal frameworks, supervision, housing allowance, rental apartment construction, and considerations related to rent control. This section provided a comprehensive policy-oriented perspective, advocating for a holistic approach to ensure a balanced and equitable housing system.

We explored various means of state intervention, focusing on tax reform, legal frameworks, housing allowances, rental apartment construction, and mechanisms for controlling rental prices. We suggest that altering the taxation system can be a swift and effective tool. Governments may provide financial incentives, such as subsidies or tax breaks, to stimulate the rental market. However, challenges arise concerning the fairness of these incentives, with considerations for different income groups and potential unintended consequences on housing affordability. Direct and indirect housing support is considered essential, targeting socially disadvantaged groups, university students, and others. We discussed the history of housing maintenance subsidies, highlighting the need for more targeted and impactful programs to address social inequalities in housing affordability.

A clear and comprehensive laws governing rental agreements are proposed to enhance the legal framework. This includes the regulation of maintenance responsibilities and tenant obligations. The thesis argues for the necessity of legal services, such as mediation and dispute resolution, to ensure stability in rental arrangements and advocates for tenant protection measures to prevent retaliation by landlords.

We recommend policies mandating a percentage of new housing developments to include affordable units, promoting inclusionary zoning. It argues for the construction of state or municipal rental housing to counterbalance housing speculation, create social fairness, and meet the needs of those with limited financial means. The conclusion is pending for rent control and price ceilings, leaving the reader and policymakers eager to explore potential solutions related to rent control, price ceilings, and caps, which will likely provide insights into addressing and stabilizing rental prices.

We advocate for a balanced mix of policies and measures to ensure immediate relief and sustained and equitable improvements in the rental housing sector.

Appendix

http://www.ktk-ces.hu/barnamezo_adatbazis.html

Budapest brownfield real estates

Name	City	Size of the property, m ²	The value of the property, HUF m
Iskolabútorgyár - Kereskedelmi központ	Budapest IV.	17 408	
Terra-Invest laktanya	Budapest IV.	230 000	
Bányagépgyár telephely - Lakóterület	Budapest IV.	30 845	
Masterfil munkásszálló - Fecskeház	Budapest IV.	2 488	
Újpest Tanács kisvállalalata - Harcon lakópark	Budapest IV.	15 015	
Fűrész lemezgyár - Baumax áruház	Budapest IV.	25 963	
Volánpack Telephely - Lakóterület	Budapest IV.	30 497	
Vágóhíd	Budapest IV.	21 251	
Masterfil sportpálya - lakóépület és intézmény-együttes	Budapest IV.	29 635	
Volánpack vállalat telephelyének egy része - Nagyváradi Liget lakópark II. ütem	Budapest IV.	51 866	
Budapestlift telephelye - Szolgáltató telephely	Budapest IV.	52 028	
Táncsics Bőrgyár - Városközponti épület-együttes létesítése	Budapest IV.	52 364	
Budalakk telephely - Kereskedelmi-szolgáltató(ipari) telephely létesítése	Budapest IV.	51 278	
Régi Sörgyár területe	Budapest X.	114 034	
Hungarocamion területe (több ingatlan)	Budapest X.	19 147	
Globus konzervgyár területe (több ingatlan)	Budapest X.	41 020	
RÁBA terület	Budapest XIX.	202 406	
GRÁNIT Gyárterület	Budapest XIX.	79 613	
Kézmű gyárterület	Budapest XIX.	35 000	
Üllői út 807., volt szovjet laktanya	Budapest XVIII.	97 105	776,4
Szemere telep (pakura tavak)	Budapest XVIII.	50 460	484,6

Pacsirtamező utca - Perc utca	Budapest, III.	n.a.	
Bogdáni út - Szentendrei út	Budapest, III.	44 000	
Szentendrei út - Záhony utca	Budapest, III.	187 000	
Jégtörő utca - Északi vasúti összekötő - Duna	Budapest, III.	n.a.	
Szentendrei út - Csetz János utca	Budapest, III.	66 272	
Veder utca - Vihar utca	Budapest, III.	12 735	
Nagyszombat utca - Lajos utca	Budapest, III.	18 699	
Volt Budai Nagy Antal laktanya	Budapest, III.	200 974	
Pusztakúti út - Határ út - Temes utca - Valéria utca	Budapest, III.	125 667	
BRG Polgár utca - Tavasz utca - Flórián tér - Kórház utca	Budapest, III.	14 422	
Szépvölgyi út volt MMG terület	Budapest, III.	101 739	
Hajógyári sziget hajógyári területe	Budapest, III.	225 460	
Egyetemi campus és INFO-park (észak)	Budapest, XI.	400 000	
Lágymányosi iparterület	Budapest, XI.	kb. 2500000	
Volt házigyár	Budapest, XI.	120 000	
Volt Kinizsi laktanya	Budapest, XI.	120 000	
Volt Csepel Művek területe	Budapest, XXI.	1 730 000	
Honvédségi terület (Szövet utcai laktanya)	Budapest, XXIII.	150 420	
Volt Csepel Művek területe	Budapest, XXI.	1 730 000	

Southern Great Plain - brownfield real estates

Name	City	Size of the property, m ²	The value of the property, HUF m
Ipari telep	Kunszentmiklós	68 357	
Rudolf Laktanya	Kecskemét	n.a.	2 500
Volt TŰZÉP-telep	Bácsalmás	14 884	28
A KUNÉP építőipari vállalat volt telephelye	Bácsalmás	8 435	50
Laktanya-Ipari park	Csongrád	89 000	
Gábor Áron tüzérekaltanya	Kiskunhalas	39 795	
Présház	Kistelek	4 345	50
Üzem	Kistelek	5 810	40
Présház	Kistelek	20 732	60

Mezőhegyesi Cukorgyár	Mezőhegyes	360 000	60
Géptároló telep és gumiüzem	Mindszent	38 400	
Konzervgyári telep	Mindszent	46 400	
Volt honvédségi laktanya	Szabadszállás	763 765	
Kisegítő gazdaság	Szabadszállás	118 501	
Budalakk-Florin-SZÜD Ipartelep	Szeged	153 433	
IKARUS Ipartelep	Szeged	186 257	
Magyar Posta Rt. - MÉH Fémhulladéktároló	Szeged	253 291	
Téglagyár Ipartelep	Szeged	199 060	
FORDAT-AGORA Ipartelep	Szeged	140 964	
Mary Cipőgyár Rt. Ipartelep	Szeged	8 204	
Regős Bendegúz Szabadidőközpont	Szeged	17 689	
Szegedi Paprika Iparterület - MÁV Tisza rendező pályaudvar	Szeged	107 970	
Óthalmi volt szovjet laktanya	Szeged	1 782 000	
Békés Megyei Általános Építőipari és Vállalkozási Rt. telephely	Szeghalom	5 873	
Vegyépszer II. üzem	Tiszaújváros	1 430	13

South Transdanubia - brownfield real estates

Name	City	Size of the property, m2	The value of the property, HUF m
Egykori honvédségi és logisztikai raktárbázis	Dombóvár	37 163	
Volt fűtőmű területe	Dombóvár	1 700	
Tüskei gépműhely	Dombóvár	15 000	
Tüskei sertéstelep	Dombóvár	12000 + 12000	
Dombóvári Ipari Park	Dombóvár	35000	
Kaposvár, Külső Füredi út (volt Hunyadi) laktanya	Kaposvár	199 960	kb. 600
volt SÁÉV (Bázis) telep	Kaposvár	21 000	
Videoton Ipari Park	Kaposvár	20 000	
Raktár utca Iparterület	Kaposvár	40 000	
Ipari park	Komló	304 515	
Zobák akna	Komló	300 035	
Anna akna	Komló	65 272	
Hármas akna	Komló	75 000	

Kossuth akna	Komló	220 090	
Béta akna	Komló	45 038	
Marcali Város Barnamezős Terület	Marcali	5 500	
Pécsi Bőrgyár területe	Pécs	150 000	1 500
Tüskésréti Tó és Centrál Park	Pécs	1 500 000	
Bajcsy Zs. laktanya területe	Pécs	70 000	1 500
A/1 laktanya	Pécs	682 482	10 000
Pécs-Széchenyi akna	Pécs	74 836	5 000
István akna	Pécs	100 000	1 000
Zsolnay Porcelángyár Man. Rt. területe	Pécs	n.a.	5 000
Pécs EXPO építése	Pécs	kb.30000	3 000
Ipari terület	Simontornya	350 000	3 000
Ipari terület	Simontornya	190 000	100
Ady Endre utcai Borpalackozó	Villány	15 230	
Ady Endre utcai Szőlőfeldolgozó	Villány	28 381	
Gépgyártó Üzem	Villány	51 852	
BB Rt Központi Gépműhelye	Balatonboglár	kb. 55000	50-60

Northern Great Plain - brownfield real estates

Name	City	Size of the property, m ²	The value of the property, HUF m
Keményítő gyár és üdítőital palackozó üzem	Demecser	40 000	300
Ipari terület	Nagyhalász	159 094	
Varroda épület	Tiszaöldvár	1 873	28,8
Cipőgyártó üzem	Tiszaöldvár	5 000	
Cipőgyártó üzem	Tiszaöldvár	5 000	
Volt honvédségi laktanya (hrsz:5376)	Karcag	146 163	640
Növényvédő Állomás	Kenderes	83 572	120
Mátraplast Műanyagüzem	Kenderes	2 908	30
Cipőüzem	Kenderes	1 749	15
Huszárlaktanya	Jászberény	50 245	
Gyulai-tanya (méregraktár)	Kunhegyes	46 336	
Lőtér	Kunhegyes	199 870	
Volt gépállomás	Vámospercs	n.a.	
GE Hungary Rt telephelye	Hajdúnánás	85 092	
Honvédségi terület	Hajdúnánás	120 000	
Felhagyott iparterület	Komádi	3 411	
Felhagyott iparterület	Komádi	72 875	

Tuka- Kendergyár	Tiszacsege	229 000	
Volt AFIT terület	Túrkeve	160 000	
Póhamarai út iparterület	Túrkeve	300 000	
Mihályhalma-Bombavető tér	Nádudvar	50 300	
Vodka palackozó üzem	Záhony	150 000	
Katonai laktanya	Záhony	20 000	
Cipőgyár	Záhony	9 000	
Polgárvédelmi bázis	Hajdúszo- boszló	51 007	30
Ropazo Kft.	Bak- talórántháza	4 256	15
Báthory István laktanya	Nyíregyháza	159 501	130
Vay Ádám laktanya	Nyíregyháza	242 708	
Simai úti lőtér	Nyíregyháza	1 826 552	
Borbányai gyakorló- és lőtér (II. sz. gyakorlótér)	Nyíregyháza	261 308	
Mester úti volt magyar laktanya	Szolnok	188 489	880
Mester úti volt szovjet laktanya 1.	Szolnok	164 268	
Mester úti volt szovjet laktanya 2.	Szolnok	8 959	
Városmajor úti volt szovjet kórház	Szolnok	22 147	
Városmajor úti volt szovjet laktanya	Szolnok	72 244	
Nagysándor József úti szemétkerakó	Szolnok	76 209	
MÁV konténer pályaudvar	Szolnok	80 056	
József Attila úti volt szovjet laktanya	Szolnok	19 417	
Besenyszögi úti gyakorló pálya	Szolnok	201 818	170 181
MÁV Skanzen	Szolnok	73 109	
Mártírok úti Tejipari Vállalat	Szolnok	7 214	

Northern Hungary - brownfield real estates

Name	City	Size of the property, m2	The value of the property, HUF m
Ózdi Ipari Park volt ÓKU Törzsgyári terület	Ózd	446 355	
Lemezgyár	Borsod- nadasd	83 618	
Volt Felnémeti Őrlőüzem	Eger	87 975	68,5
Volt laktanya és lőtér	Hatvan	565 991	193
Eurofém - Halna Kft.	Miskolc	18 000	1 071
Lyukóbánya	Miskolc	202 822	228,7
Petőfi Sándor Laktanya	Pétervására	10 000	

Central Transdanubia - brownfield real estates

Name	City	Size of the property, m2	The value of the property, HUF m
Lokátorállomás	Balatonalmádi	14 366	
Volt brikettgyári terület	Dorog	37 000	
Feleslegessé vált vasúti terület	Dorog	35 000	
Rákóczi u. - Mária u. - Vasút - Hantken u. által határolt terület	Dorog	72 000	
Frigyes laktanya déli része	Komárom	292 425	87,7
MOL Komáromi Bázistelep	Komárom	1 000 000	
repülőtéri személy- és teherszállítás	Székesfehérvár	3 205 225	230
Egyetemi főiskolai blokk	Székesfehérvár	37 736	250
Turul utca	Tatabánya	50 000	
Salakbánya, homokbánya területe	Tatabánya	150 000	
Tarjáni utca	Tatabánya	110 000	100
Fűtőerőmű, a volt brikettgyár és zagytavuk	Tatabánya	380 000	380
Fatelep, szénmosó, bányagéptár területe	Tatabánya	500 000	300
Mésztelep	Tatabánya	200 000	330
Bánhidai erőmű és zagytere	Tatabánya	580 000	2 000
Cementgyár, alukohó területe	Tatabánya	600 000	
Márgabánya, palahányó területe	Tatabánya	60 000	100
VII-es telep	Tatabánya	120 000	100
VI-os telep	Tatabánya	450 000	
bányaterület	Várpalota	67 200	

Central Hungary - brownfield real estates

Name	City	Size of the property, m2	The value of the property, HUF m
Volt katonai lőtér	Érd	96 000	
Duna-parti használaton kívüli terület	Érd	103 167	100
Katonai objektum	Fót	244 324	
Kivett állami terület	Fót	210 581	
Belső laktanya	Nagykörös	150 383	
Külső laktanya	Nagykörös	378 653	

Western Transdanubia - brownfield real estates

Name	City	Size of the property, m ²	The value of the property, HUF m
Volt posztógyár területe	Kőszeg	69 959	
Tejüzem szabad területe	Mo-sonmagyaróvár	18 000	
E-ON telephely	Mo-sonmagyaróvár	12 484	83
MOFÉM Rt. terület	Mo-sonmagyaróvár	1 240	22
Thúry Laktanya	Nagykanizsa	253 056	
Felhagyott Ipari Terület	Szentgotthárd	68 605	
Volt laktanya	Szentgotthárd	12 800	
Vadászlaktanya	Győr	54 000	
Tejipari vállalat	Győr	6 716	
Rába Engel	Győr	442 906	
Frigyes laktanya	Győr	27 193	
Mészáros Lőrincz úti laktanya	Győr	43 252	
Gardénia Csipkegyár	Győr	40 635	
Olajgyár	Győr	24 238	
Keksz gyár	Győr	31 576	

List of sources

- Alpanda, S., & Zubairy, S. (2016). Housing and tax policy. *Journal of Money, Credit and Banking*, 48(2-3), 485-512.
- Alvarez, K. (2001): A barnamezők és rozsdaovezetek gazdasági újjáélesztési programja az Egyesült Államokban. In: Éri V. (szerk.): *Terjeszkedés vagy ésszerű városfejlődés*. Környezettudományi Központ, Budapest, 75–79.
- Babidiorics J. (2007): Barnamezős területek – probléma vagy lehetőség? *Környezetvédelem*, 6., 20–21.
- Balchin, P. (Ed.). (2013). *Housing policy in Europe*. Routledge.
- Balchin, P., & Rhoden, M. (2019). *Housing policy: an introduction*. Routledge.
- Barnamező-kataszter, ingatlanfejlesztési lehetőségek adatbázisa. Budapest Főváros Önkormányzata, 2014
- Barrios Cobos, S., Denis, C., Ivaškaitė-Tamošiūnė, V., Reut, A., & Torres, E. V. (2019). Housing taxation: a new database for Europe (No. 08/2019). JRC Working Papers on Taxation and Structural Reforms.
- Barta Gy. (2009): Integrált városfejlesztési stratégia: a városfejlesztés megújítása. *Tér és Társadalom*, 23 (3), pp. 1-12.
- Barta Gy. (szerk.) (2004): A budapesti barnaövezet megújulási esélyei. MTA Társadalomkutató Központ, Budapest (Műhelytanulmányok, területfejlesztés)
- Berki M. (2014): Az ipari területektől a barnamezőkig: A fordista termelés válsága és a dezindusztrializáció folyamata Nyugaton és Keleten. In: Berki M. – Halász L. (szerk.): *A társadalom terei, a tér társadalma: megújulás és fenntarthatóság a város- és térségfejlesztésben*. Tanulmánykötet Szirmai Viktória születésnapjára. Art Webber Studio Kft., Budapest, pp. 245-263.
- Bleha, Branislav – Sprocha, Branislav – Vanjo, Bpris. – Földházi, Erzsébet (2014): Population projections for Hungary and Slovakia at national, regional and local levels. INFOSAT Bratislava – Hungarian Demographic Research Institute.
- Bourne, R. (2015). The flaws in rent ceilings. *Flaws and Ceilings: Price Controls and the Damage They Cause*, 72-95.

- Büttl Ferenc (2018): Így viszi fel az Airbnb az albérletárakat! MÉRCE 2018. március 14.
- Cadastre of brownfield areas - construction and monitoring of a brown-field database, assessment of the possibilities of economic exploitation. Budapest Capital Urban Planning Ltd. 2015.
- Chambers, M., Garriga, C., & Schlagenhauf, D. E. (2009). Housing policy and the progressivity of income taxation. *Journal of Monetary economics*, 56(8), 1116-1134.
- Chisholm, E., Howden-Chapman, P., & Fougere, G. (2017). Renting in New Zealand: perspectives from tenant advocates. *Kōtuitui: New Zealand journal of social sciences online*, 12(1), 95-110.
- Csokányi Tamás et al. (2014): National typology of residential buildings in Hungary. Episcopo – Tabula
- Dannert Éva (2016): Terra incognita - Barnamezők és kezelésük Európában, valamint Magyarországon. Pécsi Tudományegyetem
- Darvas Ágnes – Farkas Zsombor – Győri Péter – Kósa Eszter – Mózer Péter – Zolnay János (2013): A szociálpolitika egyes területeire vonatkozó szakpolitikai javaslatok. in esély 2013/6
- Day, Jones (2020): Mapping Out Rent Controls Across Europe
- Einefors, R. (2018). Airbnb and the Swedish Tenancy Legislation: An Analysis of Unexplored Possibilities. *NJCL*, 172.
- Environmental Protection Agency CERCLIS database. A live map of Superfund sites is available at <https://www.epa.gov/superfund/search-superfund-sites-where-you-live#map>
- Eurostat (2020): Housing statistics. https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Archive:Housing_statistics
- Eurostat (2021): House or flat – owning or renting (<https://ec.europa.eu/eurostat/cache/digpub/housing/bloc-1a.html>)
- Eurostat (2021): Short-stay accommodation offered via online collaborative economy platforms. https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Short-stay_accommodation_offered_via_online_collaborative_economy_platforms&oldid=568080
- Ferber, U., Grimski, D., Miller, K., Nathanail, P. (2006): Sustainable Brownfield Regeneration: CABERNET Network Report. University of Nottingham,

- Földházi Erzsébet (2012): A népesség szerkezete és jövője. In: Óri Péter - Spéder Zsolt (szerk.): Demográfiai portré 2012. KSH Népeségtudományi Kutatóintézet, Budapest: 155-168.
- Földházi Erzsébet (2013): Magyarország népességének várható alakulása 2060-ig. Korfa 2013/4, KSH Népeségtudományi Kutatóintézet, Budapest.
- Földházi Erzsébet (2014): Hungarian population projections 2013. Research Highlights no.15, Hungarian Demographic Research Institute, Budapest.
- Földházi Erzsébet (2015): A népesség szerkezete és jövője. In: Monostori Judit – Óri Péter – Spéder Zsolt (szerk.): Demográfiai portré 2015. KSH Népeségtudományi Kutatóintézet, Budapest: 213-226.
- Fürst, D. (2006): Der Beitrag der Regionalplanung zur nachhaltigen Entwicklung. Eine steuerungstheoretische Perspektive. In: Walkenhaus, R. – Machura, S. – Nahamowitz, P. – Treutner, E. (Hrsg.): Staat im Wandel. Festschrift für Rüdiger Voigt zum 65. Geburtstag, Franz Steiner Verlag, Stuttgart, pp. 177-196
- Gindle, A. M. (2021). The Workplace Poster: A Simple Model for Informing Residential Tenants of Their Rights and Improving Access to Adequate Housing. Journal of Affordable Housing & Community Development Law, 30(2).
- Grad, F. P. (1982): A legislative history of the comprehensive environmental response, compensation and liability (Superfund) Act of 1980. Colum. J. Envtl. L., 8, 1.
- Gregorová B, Hronček P, Tometzová D, Molokáč M, Čech V. Transforming Brownfields as Tourism Destinations and Their Sustainability on the Example of Slovakia. Sustainability. 2020; 12(24):10569. <https://doi.org/10.3390/su122410569>
- Gyódi, K., & Nawaro, Ł. (2021). Determinants of Airbnb prices in European cities: A spatial econometrics approach. Tourism Management, 86, 104319.
- Győri R. (2006) Zöldmezős és barnamezős beruházások a magyar nagyvárosokban. Kézirat. MTA RKK, Pécs.
- Hablicsek László (2005): A Kárpát-medencei magyarság demográfiai helyzete és előreszámítása, 1991-2021. KSH NKI Kutatási jelentések 78. KSH Népeségtudományi Kutatóintézet, Budapest.

- Hammel, T. W., & Aleksejewa, M. L. (2017). Fuggerei von jakob fugger als die älteste sozialsiedlung der welt. In Актуальные проблемы профессиональной сферы в современном мире (pp. 70-72).
- Hegedüs József – Somogyi Eszter (2015): A lakások megfizethetősége és a társadalmi egyenlőtlenségek – a KSH 2015-ös lakásfelvétele alapján
- Hegedüs, J. (2020). Understanding housing development in new European member states-a housing regime approach. Critical Housing Analysis, 7(1), 49-62.
- Hegedüs, J., Horváth, V., & Somogyi, E. (2016). A magánbérlet-szektor működése és lehetséges szerepe a közösségi lakáspolitikában–a szociális lakásvállalatok koncepciója.
- Hellawell, E. E., & Hughes, S. J. (2021). Asbestos contamination on brownfield development sites in the UK. Environmental Research, 198, 110480.
- Hill, K., Padley, M., & Stone, J. (2016). Exploring affordability: what can housing associations do to better support their tenants?.
- Holmans, A. E. (2021). Housing policy in Britain: a history. Routledge.
- Holsterkamp, L. – Degenhart, H. (2011): Fonds zur Revitalisierung von Brachflächen. Überblick und Analyse von Ansätzen öffentlich-privater Kooperation. Institut für Wirtschaftsrecht der Leuphana Univ. Lüneburg, Arbeitspapierreihe Wirtschaft & Recht, Nr. 9
- Hőnyi P. (témavezető) (2006): Barnaövek rehabilitációja. Kapos Innovációs Transzfer Központ Kht., Dombóvár, http://www.terport.hu/webfm_send/655 Letöltés: 2010. okt. 2.
- Horváth Csaba László (2019): Majdnem négyezer önkormányzati lakás áll üresen Budapesten
- Horváth G. – Szabó I. – Szacsuri G. (2002): A barnamezők kérdéskörének, jogi gazdasági és környezetvédelmi vizsgálata, különös tekintettel a Borsod megyei régióra. EMLA Alapítvány a Környezetvédelmi Oktatás Támogatására, Budapest, 131 p.
- <https://24.hu/belfold/2019/01/25/alberlet-ures-onkormanyzati-lakas-budapest/>
- <https://hvg.hu/gazdasag/20191625-Budapest-masfelszer-dragabb-az-alberlet-az-orzagos-atlagnal>
- <https://piacesprofit.hu/gazdasag/no-a-szakadek-a-lakastulajdonosok-es-a-berlok-kozott/>

- <https://www.amiotthonunk.hu/epites-felujitas/epitesi-tanacsok/6078-feszekrako-program>
- <https://www.ingatlanet.hu/statisztika/>
- <https://www.vg.hu/vallalatok/eloszor-sorsoltak-a-hazai-lakaslotton-838325/>
- <https://www.vg.hu/vallalatok/ingatlan/komoly-gondban-az-alberlet-kereso-egyetemistak-1008476/>
- Huisman, C. J. (2020). Insecure tenure: The precarisation of rental housing in the Netherlands.
- Hungarian Insider (2020): Family Housing Support Program
- Imre M. (2011): A szabályozó és felügyelő állam (az Európai Unió perspektívájában). Állam- és Közgazdaságtudományi Szemle, Pro Publico Bono Online, Támop Speciál, 2011/1
- Jonkman, A., Janssen-Jansen, L., & Schilder, F. (2018). Rent increase strategies and distributive justice: the socio-spatial effects of rent control policy in Amsterdam. *Journal of housing and the built environment*, 33, 653-673.
- Józsa Zoltán (1985): Az albérlet jogi szabályozásának társadalmi vonatkozásai. in *Acta Universitatis Szegediensis*
- Kádár K. (2013): Funkcióváltás a szovjet katonai objektumok helyén. Barnamezős katonai területek újrahasznosítása hat Magyar megyeszékhelyen. Doktori értekezés, PTE KTK Regionális Politika és Gazdaságtan Doktori Iskola, Pécs, 254 p.
- Kádár Kriszta (2011): Barnamezők Magyarországon. in *Deturope - The Central European Journal of Regional Development and Tourism*, Vol.3 Issue 2 2011 ISSN 1821-2506
- Kasumu, T. O. (2017). Effectiveness of the Citizens Mediation Centre in landlord-tenant alternative dispute resolution in Lagos State (Doctoral dissertation, Ph. D. Thesis submitted to the Department of Sociology, College of Business and Social Sciences, Covenant University, Ota).
- Kavecsánszki, É. (2019). Gondolatok az ingatlan kiürítés végrehajtásához-polgári peres vagy nemperes eljárás. *Debreceni Jogi Műhely*, 16(1-2).
- Kettunen, H., & Ruonavaara, H. (2021). Rent regulation in 21st century Europe. Comparative perspectives. *Housing Studies*, 36(9), 1446-1468.

- Kettunen, H., & Ruonavaara, H. (2021). Rent regulation in 21st century Europe. Comparative perspectives. *Housing Studies*, 36(9), 1446-1468.
- Kholodilin, Konstantin A. (2020): Lectures on housing economics: A European text.
- Kiaghadi, A., Rifai, H. S., & Dawson, C. N. (2021). The presence of Superfund sites as a determinant of life expectancy in the United States. *Nature communications*, 12(1), 1947
- Kiss É. (2010): Területi szerkezetváltás a magyar iparban 1989 után. Dialóg Campus Kiadó, Budapest–Pécs (Studia Regionum sorozat)
- KSH (2012): 4.3 A lakások lakói a lakás használati jogcíme szerint
- KSH (2016): Miben élünk? A 2015. évi lakásfelmérés főbb eredményei
- KSH (2018): Magyarország közigazgatási helynévkönyve, 2018.
- KSH (2018): Private apartment rental, rents - main results of the 2018 rent survey
- KSH (2019): 6.2.1.14. A teljes munkaidőben alkalmazásban állók kedvezmények nélküli nettó átlagkeresete a munkáltató székhelyének elhelyezkedése szerint
- KSH (2019): Gyorstájékoztató, Keresetek 2019 január-április
- KSH (2019): Magánlakásbérlet, bérleti díjak – a 2018. évi lakbérfelmérés főbb eredményei
- KSH (2020): 4.3 A lakások lakói a lakás használati jogcíme szerint
- KSH (2021): 22.1.1.2. A népesség száma és átlagos életkora nem szerint
- KSH Statisztikai Tükör 2019.június 25.
- Li, X., Bardos, P., Cundy, A. B., Harder, M. K., Doick, K. J., Norrman, J., ... & Chen, W. (2019). Using a conceptual site model for assessing the sustainability of brownfield regeneration for a soft reuse: A case study of Port Sunlight River Park (UK). *Science of the Total Environment*, 652, 810-821.
- Malard, L., & Poulhes, M. (2020). Rent control in Paris: Small room dwellings more constrained by rent ceilings. *Economie prevision*, 217(1), 1-41.
- Meenar, M., Howell, J. P., & Hachadorian, J. (2019). Economic, ecological, and equity dimensions of brownfield redevelopment plans for environmental justice communities in the USA. *Local Environment*, 24(9), 901-915.

- Mendes, L., Duarte, L., & Pincha, J. (2021). Tom Slater on rent gap and rent control:: Commentary and interview. *Finisterra*, 56(118), 271-275.
- Mense, A., Michelsen, C., & Kholodilin, K. (2018). Empirics on the causal effects of rent control in Germany.
- Mense, A., Michelsen, C., & Kholodilin, K. A. (2019). Rent control, market segmentation, and misallocation: Causal evidence from a large-scale policy intervention.
- Mester Nándor (2019): A teljes magyar albérletpiac beleremegne - Itthon is befagyasztyják a bérleti díjakat? in *Portfolio*, 2019. június 21.
- Morar, C., Berman, L., Unkart, S., & Erdal, S. (2021). Sustainable brownfields redevelopment in the European Union: An overview of policy and funding frameworks. *Journal of environmental health*, 84(4), 24.
- Obádovics, C. (2018). The structure and future of Hungary's population. *Demographic Portrait of Hungary*, 273-296.
- Office of Education (2019): Higher education statistical data, downloadable reports - Oktatási Hivatal (2019): Felsőoktatási statisztikai adatok, letölthető kimutatások
- Orosz Éva (2012): A barnamező fogalmának változó értelmezése. in *Tér és Társadalom* 26. évf., 2. szám, 2012
- Papp Gy. - Körösi V. - Gyöngyössy Sz. - Búzásné Józsa V. - Dernei B. (2006): Barnamezős területek az Észak-magyarországi régióban. *Regiszter. Észak-magyarországi tényképek*, 1 (2), pp. 5-175.
- Preece, J. (2018). The impact of welfare & tenancy reforms on housing associations. UK Collaborative Centre for Housing Evidence.
- Rink, D., & Schmidt, C. (2021). Afforestation of urban brownfields as a nature-based solution. Experiences from a project in Leipzig (Germany). *Land*, 10(9), 893.
- Rolf, H. (2021). A Union for Tenants: Tenant militancy in Gothenburg as a historical example. *Radical Housing Journal*, 3(1), 167-186.
- Roncz J. – Tóthné Szita K. (2012): A barnamezők revitalizációjának tervezése életciklus elemzés segítségével. *Eco-Matrix*, 1-2., pp. 13-36.
- Rubaszek, M. (2019). Private rental housing market underdevelopment: Life cycle model simulations for Poland. *Baltic Journal of Economics*, 19(2), 334-358.
- Schwartz, A. F. (2021). *Housing policy in the United States*. Routledge.

- Sharp-Wasserman, J. As HSTPA Enhances Anti-Retaliation Protections for Tenants, Don't Forget About New York's Anti-SLAPP Law. NY Real Property Law Journal, 7.
- Siegle, C. (2005): Revitalisierung und Entwicklung von Brachflächen. Diplomamunka, Nürtingen University, Geislingen, 141 p. és WEITKAMP, A. (2009): Brachflächenrevitalisierung im Rahmen der Flächenkreislaufwirtschaft. Doktori disszertáció, Bayerische Akademie der Wissenschaften, Deutsche Geodätische Kommission (DGK), München, 289 p.
- Skale, O., & Uitz, R. (2015). The ECtHR standards before the Constitutional Courts: Balancing rent-control and property rights in Poland, Croatia and Slovenia.
- Steffens, K. – Franzius, V. (2002): Das neue Brownfields-Gesetz der USA. Altlasten Spektrum, Heft 4, pp. 175-180.
- Tachovsky, M. (2021). Environmental Dead Zones: The Evaluation of Contaminated Properties. Appraisal Journal, 89(2).
- Tóth, C. G. (2021). Multi-population models to handle mortality crises in forecasting mortality: A case study from Hungary. Society and Economy, 43(2), 128-146.
- Varjú V. (2008): Barnamezős revitalizáció kultúrával. In: PAP N. (szerk.): Kultúra – Területfejlesztés. Pécs – Európa Kulturális Fővárosa 2010-ben. Imedias Kiadó, Pécs, pp. 201-212. (Geographia Pannonica Nova 2).
- Varjú V. (2010): A környezeti politika fejlesztéspolitikába történő integrációja – a stratégiai környezeti vizsgálat. PhD-értekezés. Kézirat, 194 p
- Woods, John (2020): Hungarian government to give families even EUR 322,000 to build greener homes! Daily News Hungary, <https://dailynewshungary.com/hungarian-government-to-give-even-322-thousand-eur-for-families-to-build-greener-homes/>
- www.magankollegium.hu