

SETTLEMENT SIDE OF LIVING CONDITIONS AND QUALITY OF LIFE

HOUSING CONDITIONS

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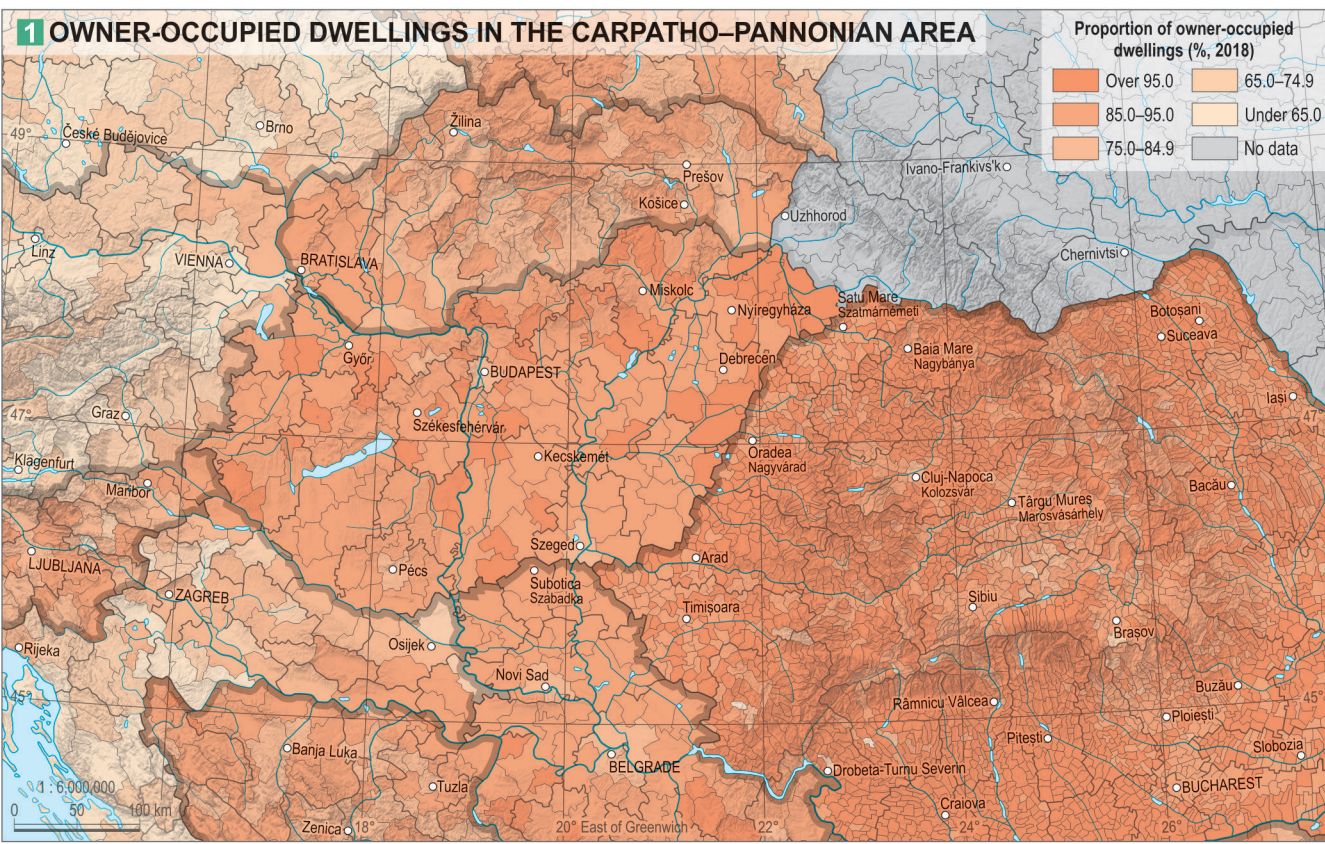
A safe, healthy and affordable home is a basic human need in every community. The size, age and facilities of a dwelling have far-reaching effects on physical and mental health, on social relationships, and on the life-style and satisfaction of the people living in it. Thus, housing conditions can inform us about living conditions and quality of life in society. Moreover, a change in housing conditions will be indicative of changing lifestyles and social conditions. The purchase of a home is usually the most important decision in any household. As a valued asset, a dwelling serves also to reflect the social situation of its owner. The development of the housing stock in a region or settlement and the number of dwellings built or renovated, reflect not only the needs of the population living there but also their income situation. Therefore, when examining living conditions and quality of life, special attention should be paid to housing conditions [1].

Housing conditions in the Carpathian Basin

In terms of home ownership, two major models have emerged in Europe and around the world: one is based on rental housing and the other on owner-occupied private housing. A rental housing system (whether public, community or private) in many ways removes the burden of housing from the shoulders of families and promotes their mobility (i.e. residential mobility). Further, households can choose housing according to their size, desires and financial means. However, renting a home can also mean vulnerability when household incomes fall or when, in old age, people become reluctant to change their usual environment. Owning a home makes it difficult to move in space, as the house must be sold and another one bought, which can involve costs and risks. Yet, although home ownership hinders flexible adaptation in the labour market, it can provide security at times of crisis. Moreover, housing is seen by families as a safe and value retaining investment in the long term.

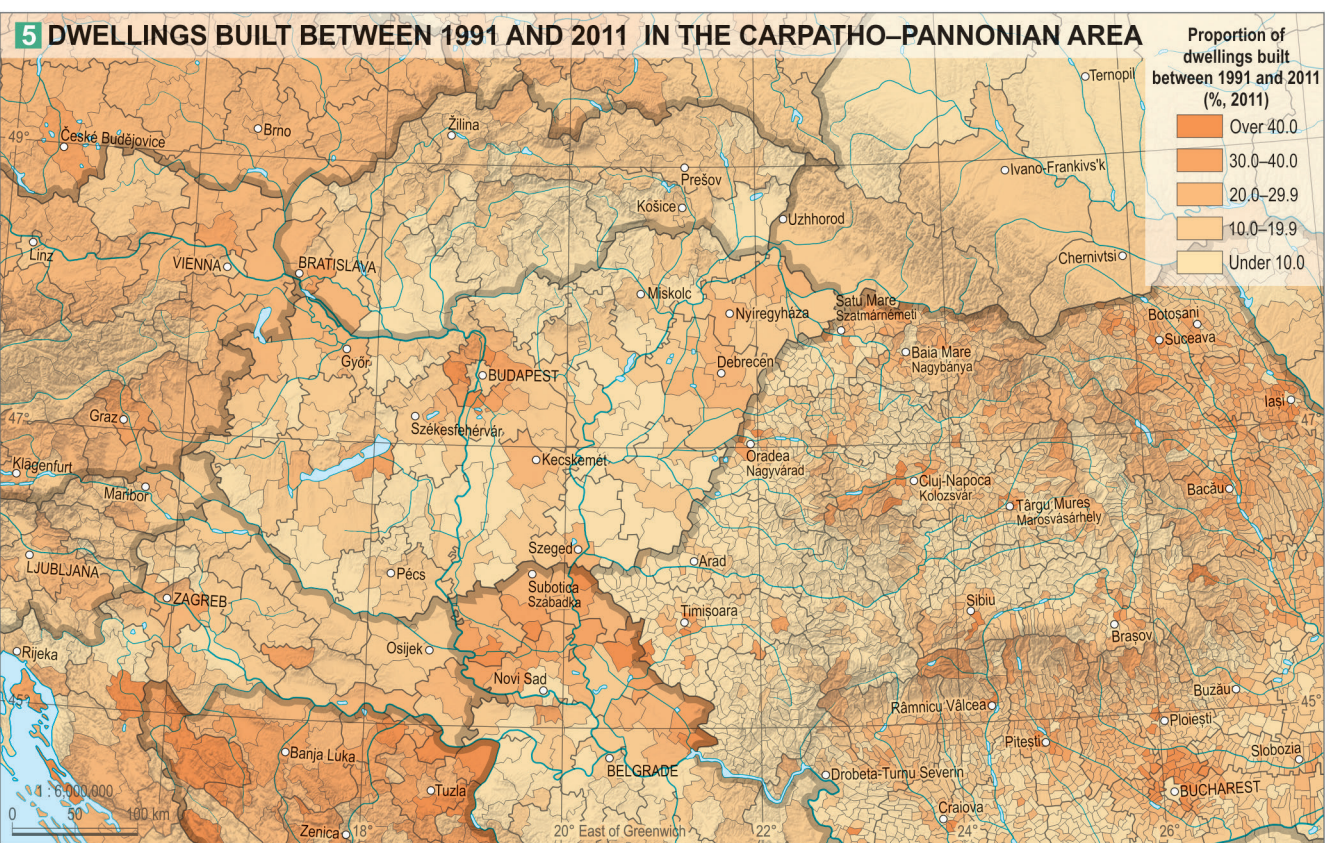
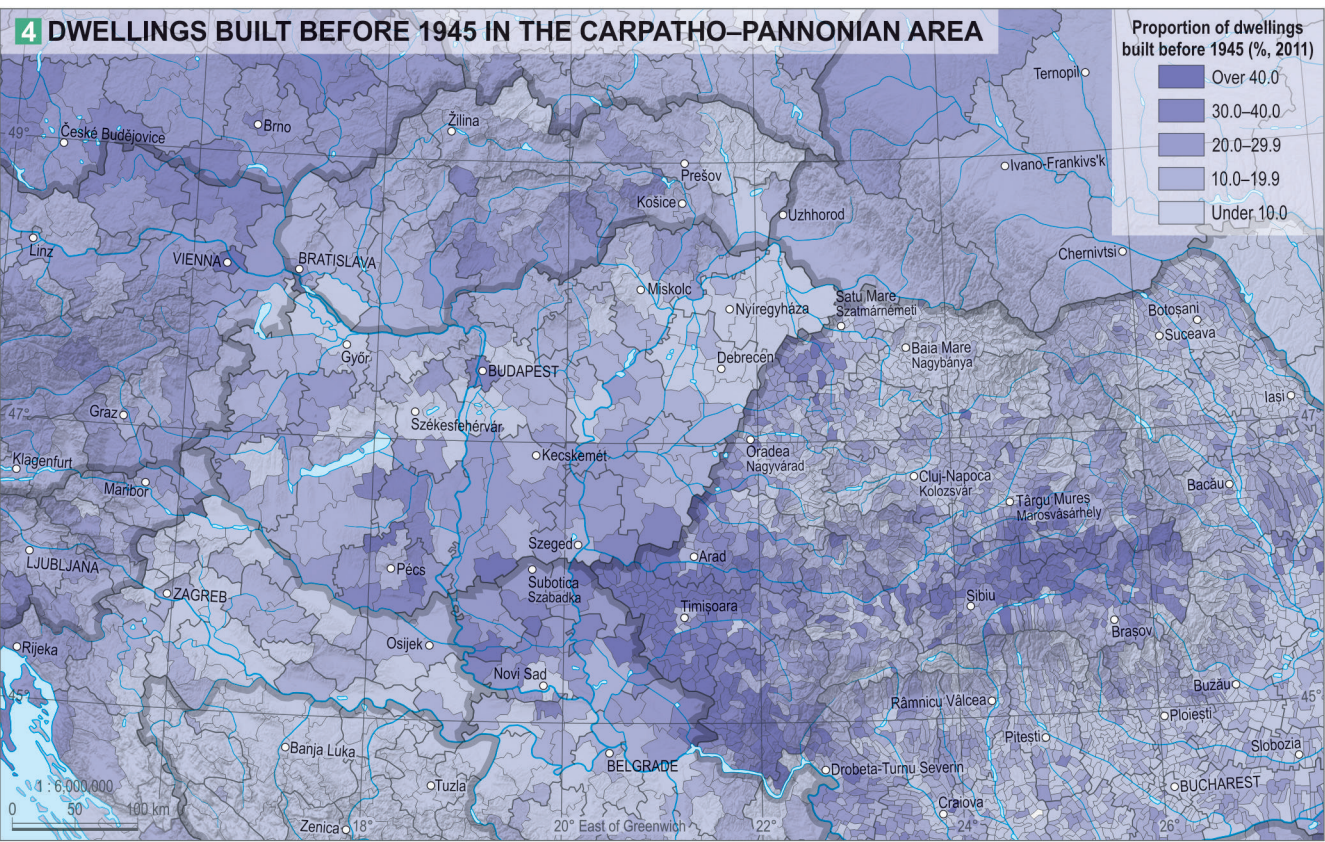
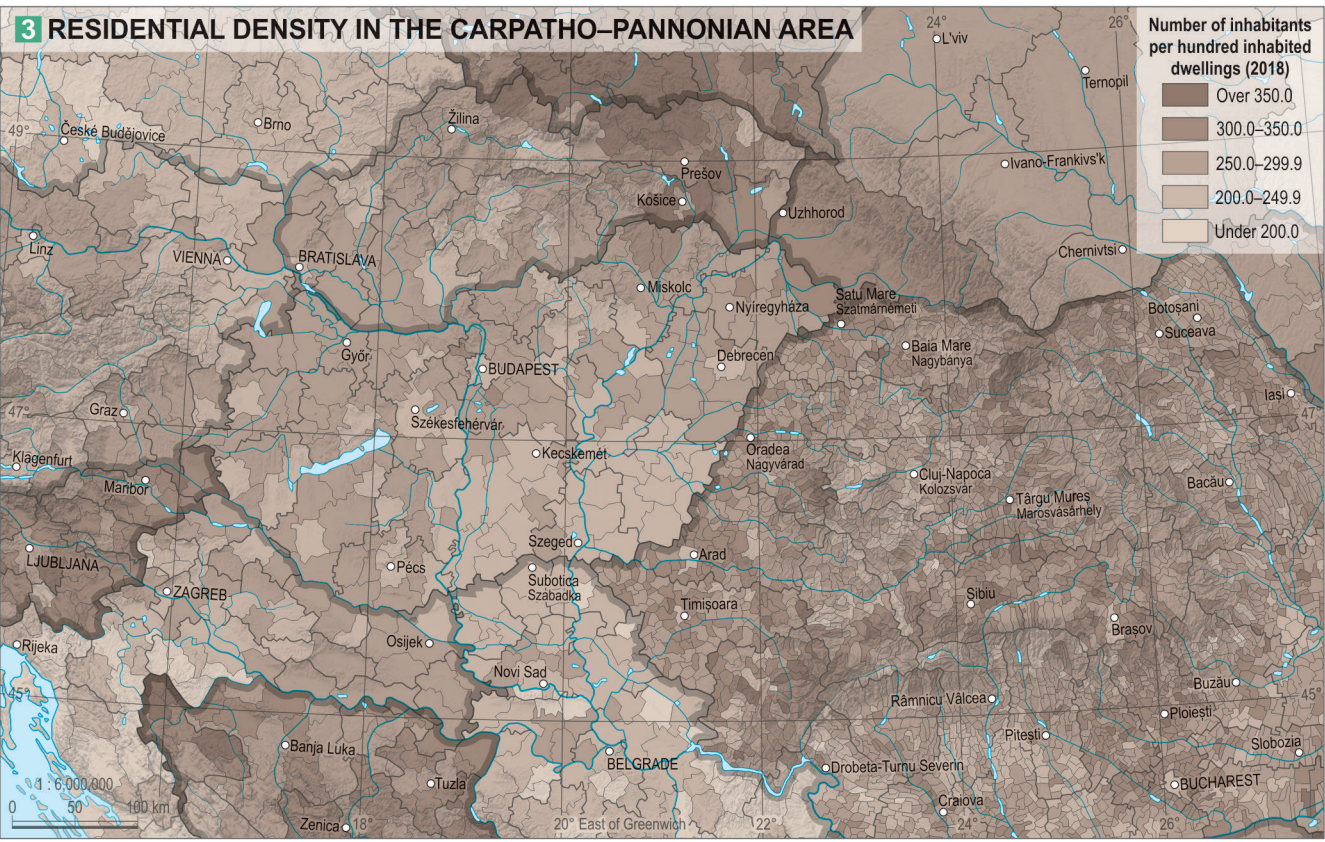
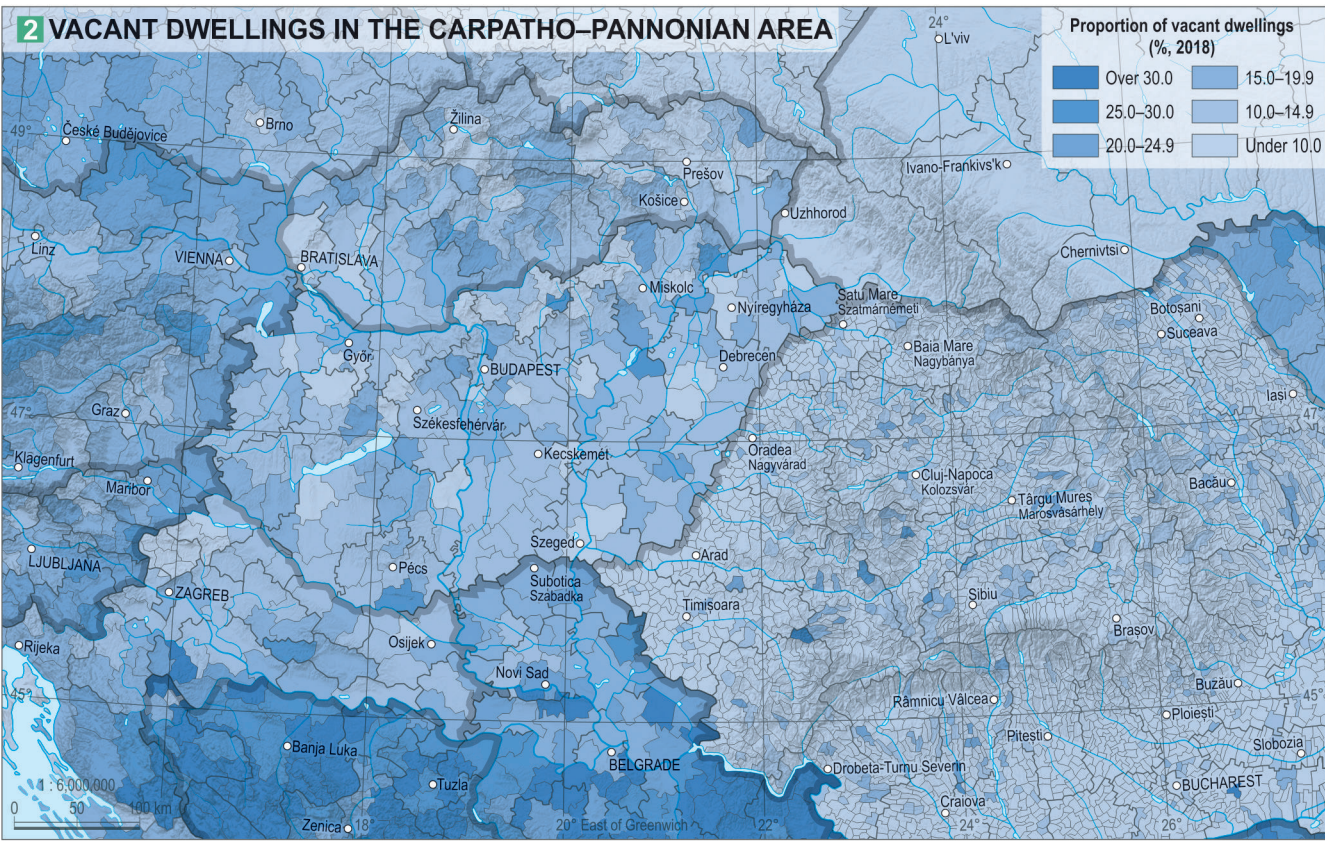


[1] The 'Village House' (Faluház) in Óbuda (District III, Budapest) is the largest residential building in Hungary. Built using prefab technology in 1970, it could have housed the entire population of the spa town of Hévíz (Zala County)



In western and northern parts of Europe, the proportion of rental housing is significant. Indeed, in many areas, less than half the population live in owner-occupied dwellings. For instance, in 2011, as few as 36.3% of dwellings were owner-occupied in Switzerland, and similar proportions were found in Sweden (42.2%) and Germany (45.4%). In contrast, in southern parts of the continent, private housing is predominant (in Italy, Portugal and Greece, the proportion of owner-occupied homes is 72-73%). In the post-communist countries, the public housing sector was dismantled after 1990, thus by 2011 private property had dominated everywhere. Over 80% of the housing was owner-

occupied in Bulgaria, Slovakia, Croatia, and several Baltic states. To a certain extent, the duality is also reflected in the map showing the proportion of owner-occupied dwellings in the Carpathian Basin [XII. 2. 1. 1.]. Whereas in Burgenland (Austria) 74.7% of dwellings are owner-occupied (compared with 51.6% in the whole of Austria and 20.8% in Vienna), the corresponding rates are 84.9% in Slovakia, 86.2% in Vojvodina, 91.6% in Hungary and 92.7% in Transylvania. The map also shows that the share of owner-occupation is the highest in rural areas, while in major cities (even in the post-communist states) rental dwellings are more common. However, many of the rented dwellings recorded in



the last census are now privately rather than municipally owned. In Budapest, in 2011, 5.1% of inhabited dwellings were let to tenants by the local governments and 6.0% by private landlords.

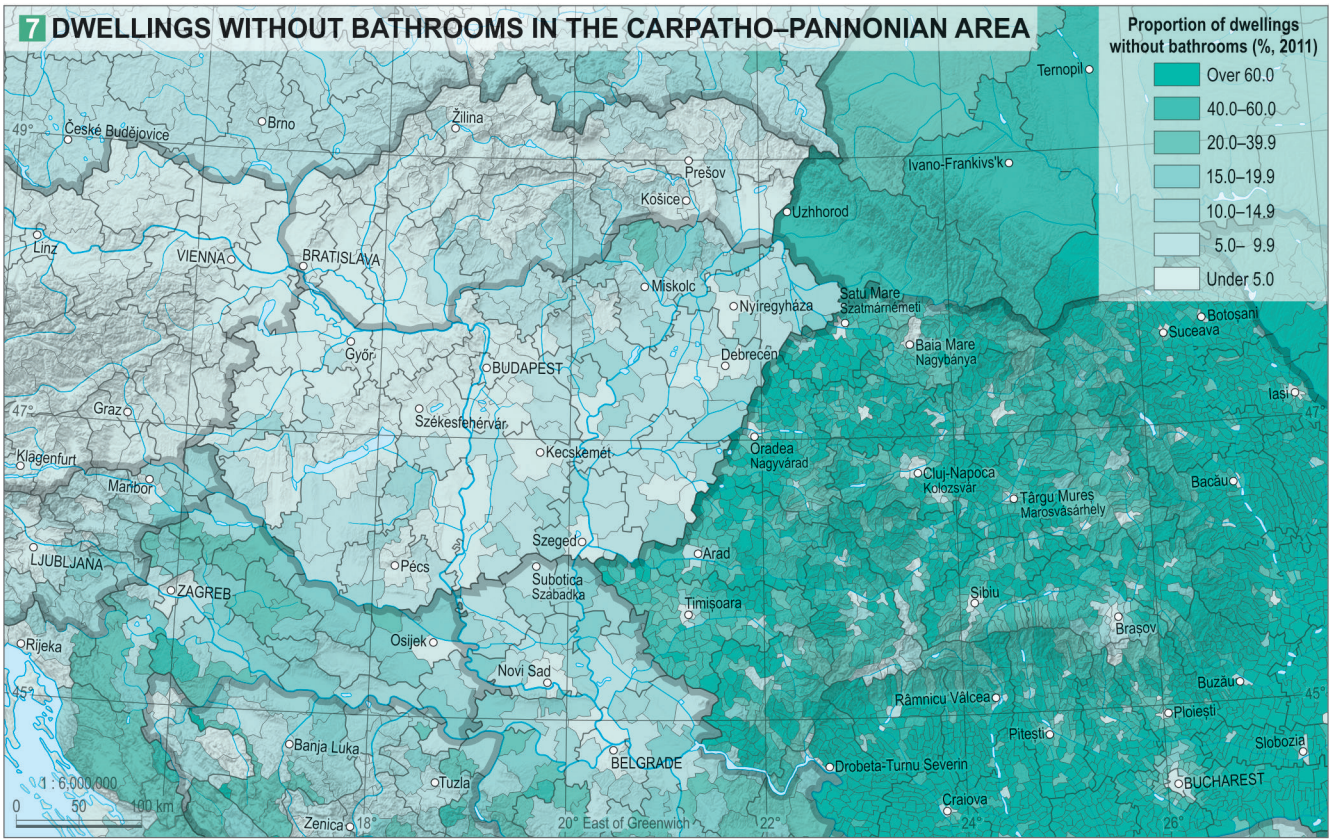
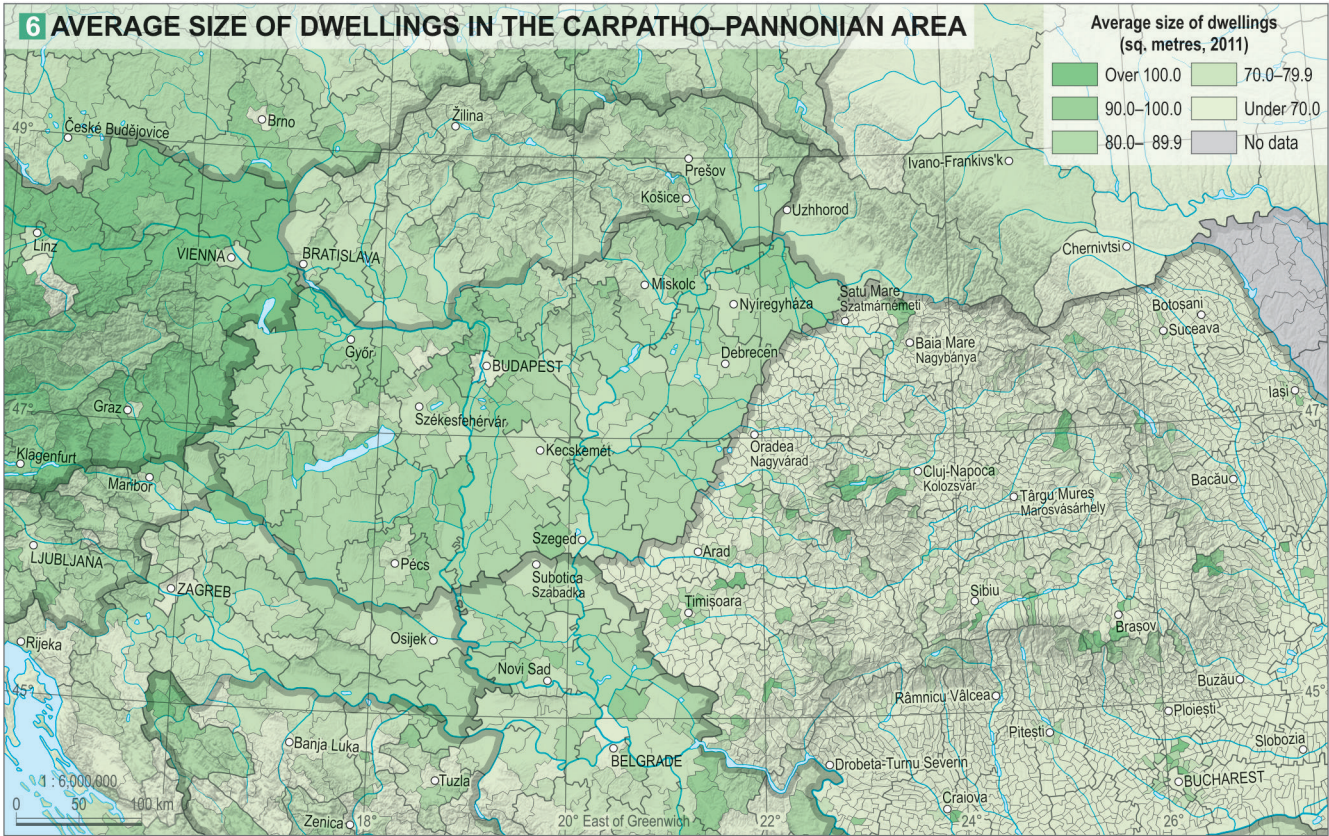
A natural concomitant of the housing market is the presence of vacant housing units. Without this, flex-

ible relocations and a balance between market demand and supply would be inconceivable. However, a vacancy rate of 10-15% or more, which is several times higher than the annual rate of house moves, is indicative of a problem in the housing market. This may be an unfavourable regional distribution of the housing

stock (i.e. the fact that dwellings are not where the current socio-economic processes would require them). There are, furthermore, risks associated with letting private properties to tenants, and such risks may hamper the use of the existing housing stock. In welfare societies an increasing proportion of families have a second home that they rent out or use as a holiday home. Difficulties in collecting such data should also be taken into account. In many cases, tax evasion related to rental income distorts the statistical data and shows a higher proportion of unoccupied dwellings than is actually the case. A relatively large number of vacant dwellings are found in the Carpathian Basin. A high proportion of vacant rental dwellings is typical in the relatively prosperous western areas (Austria, Czechia and Slovenia), whereas such dwellings are also prevalent in areas affected by the Yugoslav Wars (Krajina in Croatia, Bosnia and Herzegovina) and in the depopulating areas (Central Serbia, Moldova, Central Slovakia and the northeastern part of Hungary). In these latter areas, ongoing out-migration is a major factor [XII. 2. 1. 2.].

In addition to the proportion of vacant dwellings, another important factor influencing housing conditions is residential density, which is expressed by the number of inhabitants per hundred inhabited dwellings [XII. 2. 1. 3.]. Due to the improving housing conditions and population ageing, the residential density rate is becoming more and more favourable in Hungary and the surrounding countries. While after World War II, there were 372 people per hundred inhabited dwellings in Hungary, in 1990 there were only 280 people, and in 2011 there were 248 people. Based on these figures, Hungary was in a favourable position within the Carpathian Basin. There were 306 people per hundred dwellings in Slovenia, 273 in Romania and 270 in Slovakia. Only Austria (242 people) and Czechia (214 people) had more favourable indicators than Hungary. The data on residential density also reveal marked regional differences within individual countries. High rates can be found in the northeastern part of Hungary more densely populated by Roma families and in the suburban area of major cities. Regarding the size and facilities of dwellings, in the former case high housing density is an obvious concomitant of poverty, but this is not valid for the latter case. It can also be stated that at regional level the lowest housing density can be found in the Southern Alföld in Hungary. Slovakia is characterised by a strong east-west divide: while in the eastern districts – more likely to be populated by Roma people – residential density is over 350 people, in Bratislava it is barely more than 200. In general, major cities are characterised by lower residential densities. There are 214 people per hundred inhabited dwellings in Budapest, 223 in Belgrade, 225 in Vienna and 245 in Bucharest.

The age of dwellings affects their state, the level of comfort, the quality of life of the occupants, the maintenance costs and the market value of the dwellings. An old dwelling, however, does not necessarily mean lower quality of life, because if it is built of durable building materials, maintained and renovated to a high standard and continuously, it can provide suitable housing conditions for hundreds of years. Conversely, the high-rise prefabricated housing estates that are statistically young but which had numerous technical problems even at the time of their construction, do not necessarily offer better housing quality. In practical terms, this is reflected in the regional pattern of dwellings built before 1945 in the Carpathian Basin [XII. 2. 1. 4.]. Moving from northwest to southeast in the region, the proportion of old dwellings gradually decreases, except for in some areas in Hungary (Tolna,



Baranya), Central Slovakia, Vojvodina, Banat, Satu Mare (Szatmár) and southern Transylvania where ethnic Germans lived in significant proportions before 1945. Their homes, made of high-quality, durable building materials, still offer satisfactory conditions to those who live in them. The people who replaced the ethnic Germans in several waves during the decades after their deportation or emigration, usually brought with them a lower level of housing culture.

The situation is somewhat complex when it comes to the proportion of dwellings built between 1991 and 2011 [XII. 2. 1. 5.](#) On the one hand, the effect of the east-west income gradient can be recognised within the region. Accordingly, whereas in Austria (22.3%) and Czechia (23.7%) the share of such new dwellings is well above 20%, it is much lower in Slovenia (18.2%), Hungary (15.8%), Slovakia (13.4%) and Romania (13.7%). Within the region, there are districts where the proportion of new dwellings is astonishingly high. These can be divided into two major groups. The first comprises the surroundings of major cities (e.g. Budapest, Zagreb, Bratislava), where suburbanisation has brought spectacular changes in recent decades. The second is found in the states affected by the Yugoslav Wars, especially Croatia and Bosnia, where new dwellings had to be built to replace the dwellings destroyed in the warfare. Many dwellings were also built in the Vojvodina region, to which many Serbian refugees

fled in 1995, changing also the ethnic composition in some cases (e.g. Subotica/Szabadka and Temerin).

The *average size of dwellings* in the Carpathian Basin reflects income conditions and the partly associated regional characteristics of housing culture [XII. 2. 1. 6.](#) In Hungary, the average floor space of inhabited dwellings was 78 sq. m at the time of the census in 2011. This average value was exceeded in Austria (99 sq. m) and in Slovenia (80 sq. m), while in Romania the average was only 56 sq. m per dwelling. In addition to the east-west differences, it can also be observed that the average floor space of dwellings in major cities is smaller due to the denser, multi-storey build-up. The average size of a dwelling in Budapest is 65 sq. m, but average floor space in Belgrade (63 sq. m) and in Bucharest (53 sq. m) is lower, and the value in Vienna (70 sq. m) and in Zagreb (69 sq. m) is not much higher.

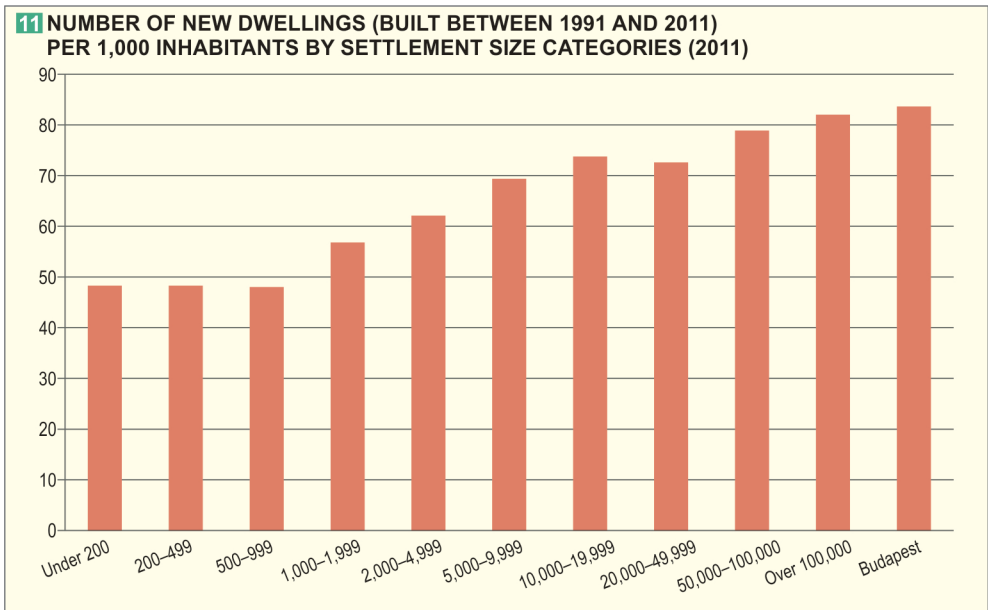
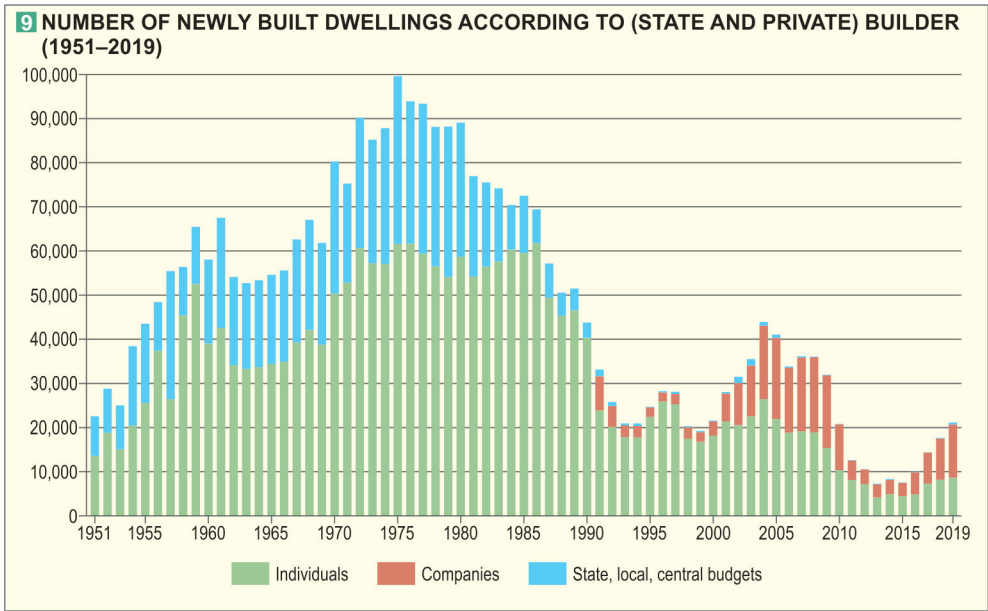
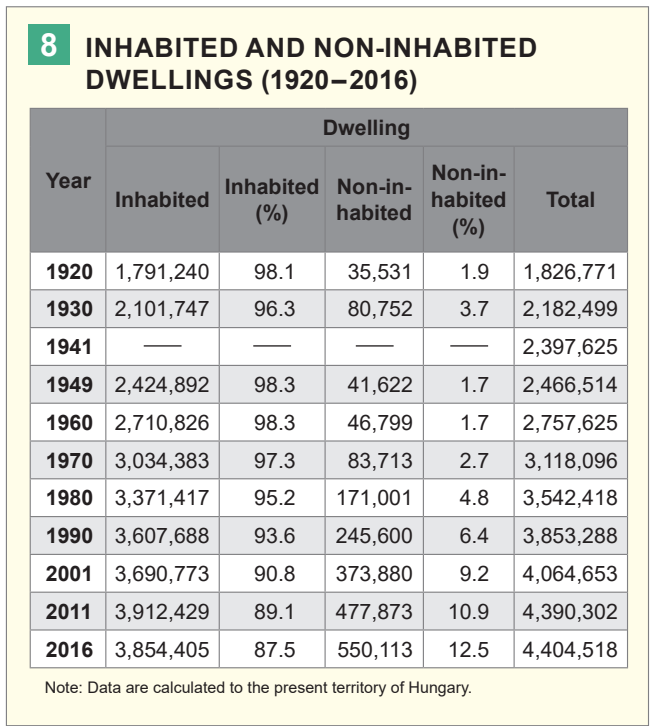
Historically, the differences in income conditions and housing culture are even more evident in the spatial distribution of bathrooms [XII. 2. 1. 7.](#) The proportion of *dwellings without bathrooms* rises gradually from west to east. While only 1.5% of dwellings in Austria do not have a bathroom, the proportion is 3.1% in Slovakia and 5.0% in Hungary. In Transylvania (27.3%) and Zakarpattia (41.3%), however, the proportions are much higher, especially in those rural areas that were doomed to depopulation at the time of Romanian and Soviet communism.

Housing stock of Hungary in space and time

At the time of the census in 2011, there were 4 million 390 thousand dwellings in Hungary, and their number increased to 4 million 404 thousand by 2016 [XII. 2. 1. 8.](#) The change in the number of dwellings is the result of two opposing processes: on the one hand, new dwellings are being built with varying intensity, and on the other hand, they are disappearing in a physical (e.g. demolition) or statistical sense (e.g. amalgamation). Not all dwellings are used as intended. At the time of the census in 2011, 477 thousand dwellings, i.e. 10.9% of the housing stock, were vacant. The process accelerated especially after 1990, when only 6.4% of the housing stock was vacant, but in 2016 the share was already 12.5%, with more than half a million dwellings. Several factors play a role in the increase in the number of vacant dwellings. On the one hand, due to the declining population, some of them are actually uninhabited, which is typical in the depopulating settlements of Hungary especially in the areas with small and tiny villages. At the same time, so-called second dwellings are also numerous: these are dwellings that have been vacated for some reason but whose owners do not wish to sell or let them. Many properties are not used for residential purposes but for holiday or other business purposes (e.g. offices, dental practices, Airbnb rentals). The latter is especially typical of the housing market in major cities, including Budapest.

The number of newly built dwellings fluctuated strongly after World War II, reflecting real needs (e.g. natural increase, creation of new families) and opportunities (e.g. financial and economic situation, land that can be built-up) [XII. 2. 1. 9.](#) From the early 1950s, as a result of demographic trends, the number of new dwellings increased rapidly, largely due to increased state investment and the subdivision of larger dwellings (e.g. forced co-tenancy). However, for many years the rate of housing construction lagged far behind demand driven by demographic trends and compounded by urban migration. In the late 1960s, another period of dynamic growth began, with the proliferation of industrial housing technologies (e.g. prefabricated concrete construction). The peak in this era was in 1975, when almost 100 thousand new dwellings were built in Hungary in a single year. It is characteristic of the specific Hungarian conditions that the majority of the dwellings were built based on private resources, with only 38% of them being the result of state investment (almost exclusively in cities) [2.](#)

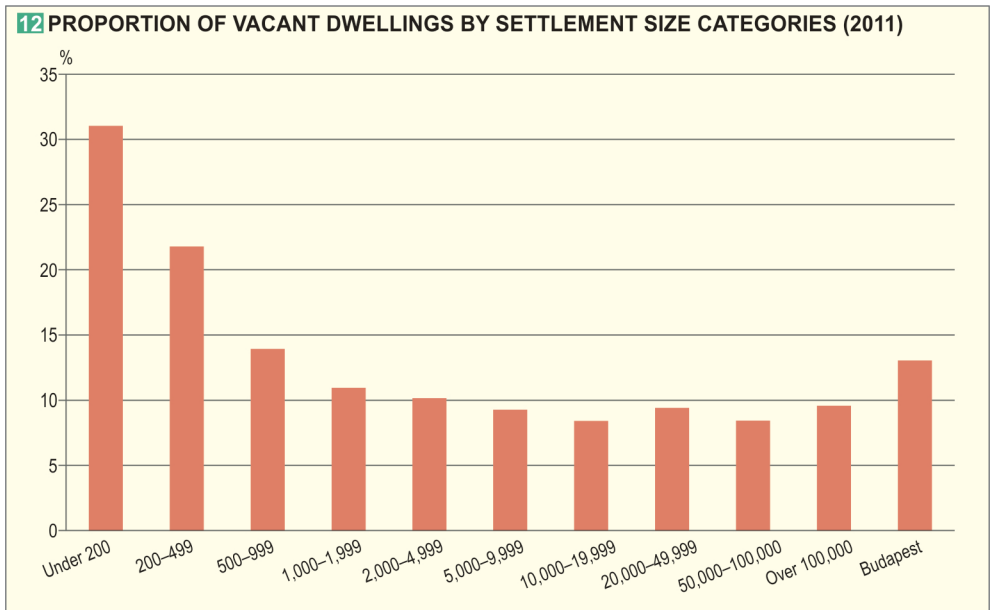
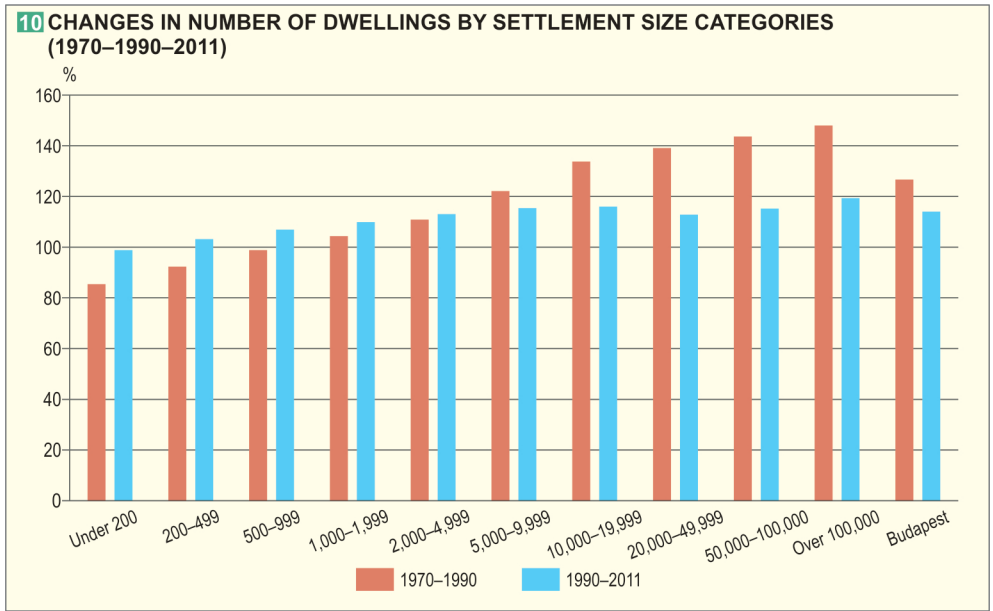
Due to the structural problems of the command economy of the communist period, which led to grow-



ing economic difficulties (indebtedness), the state gradually withdrew from the housing market. As a result, the number of newly built dwellings began to fall sharply from the early 1980s. In view of the economic difficulties and recession that followed the collapse of communism, housing investment continued to decline, and in the early 1990s the number of housing constructions fell to one-fifth of the level seen in the 1970s. From the late 1990s, economic growth, the strengthening of the private sector, and the emergence of mortgage lending after 2001 accelerated the pace of construction again, although the peak of 44 thousand new dwellings in 2004 was barely half the number seen in the 1970s. Of course, these dwellings far exceeded the size and quality of the dwellings that were typical of mass housing construction of the 1970s: the average floor space of dwellings built in 1975 was 62 sq. m, which increased to 93 sq. m by 2004. From 2004 to 2008, the engine of housing market investment became the ever-expanding – initially seemingly advantageous – foreign currency-based bank loans. The financial crisis of 2008 was then exacerbated in Hungary by the prevalence of foreign currency loans in the country's housing sector. After 2008, the number of newly built dwellings began to decline dramatically. The low point



2 *Kádár Cube*: this form of private architecture became popular in Hungarian villages in the 1960s. Egyházaskozár (Baranya County)

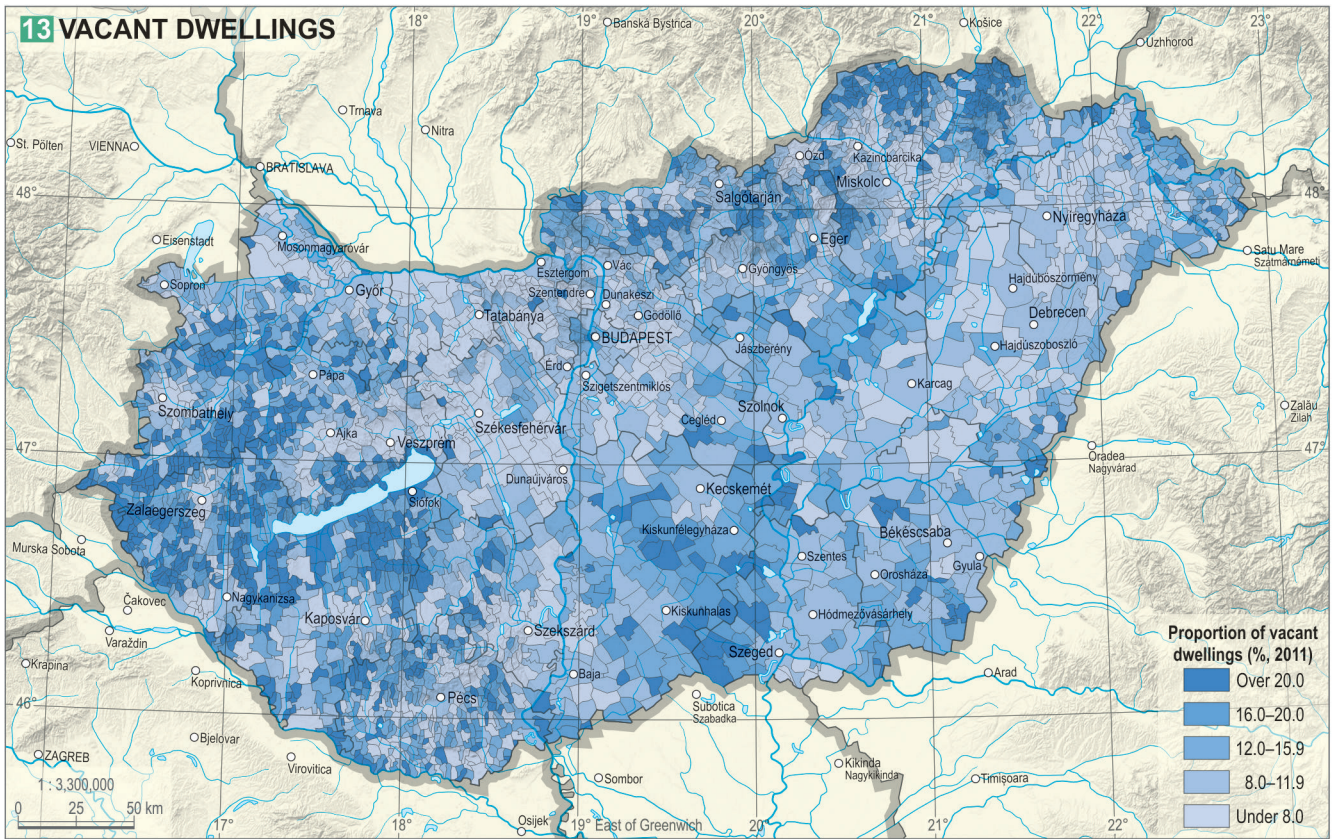


was reached in 2013, with 7,293 new dwellings. Based on previous experience, the new housing market recovery that unfolded after the mid-2010s took place within a framework of tighter controls on loans. A typical feature of the period was the appearance of small private investors in the housing market, who, by buying and letting one or more dwellings for a shorter or longer period, caused a significant recovery and price increases in major cities, especially in the favourable city centre areas of Budapest (see the chapter entitled Budapest and its Region).

The transformation that followed the collapse of communism was also accompanied by the appearance of foreign buyers in the Hungarian housing market. Many of them came from Germany and the surrounding countries, but some arrived from outside Europe (China, Vietnam, Israel). Those who came for work

were primarily looking for housing in the capital, while the retired age group mainly targeted the holiday areas in Transdanubia (e.g. Lake Balaton, Lake Velence, the Orfű area and Örség) and the thermal spa resorts in the Alföld (e.g. Hajdúszoboszló, Mórahalom and Cserkeszőlő). Dwellings with high values in the inner districts of Budapest were mostly bought by Chinese, Vietnamese, Russian and Ukrainian customers for investment purposes. The purchases of foreigners accounted for 12% of the total turnover in Budapest in 2018, and this proportion was even higher in the inner districts of Pest, 26 out of every 100 HUF spent on real estate purchases.

The distribution of dwellings within the settlement hierarchy differs somewhat from the distribution of the population. As much as 32.3% of the housing stock is located in settlements with a population of more than



100 thousand people, while these settlements contain 28.4% of the population. This shows that in more populous cities, and especially in Budapest, many dwellings are not intended for those who live there permanently (e.g. foreigners, students) or are not used as dwellings. If we take a look at *the dynamics of the housing market for each settlement size category*, a different picture emerges in the periods before and after 1990

XII. 2. 1. 10. The housing stock of settlements with less than a thousand inhabitants shrank, while the stock of cities with more than 50 thousand inhabitants grew at a rate of over 40% in the two decades before 1990. This coincided with political intentions at the time: the state favoured major cities, leading to the spatial concentration of central housing construction, while it neglected smaller settlements. After 1990, however, the situation changed, reflecting the elimination of unjust resource allocation and the dynamic growth of smaller settlements around major cities (suburbanisation). Although the housing stock of the tiniest settlements decreased even after 1990, and the housing market of settlements with less than 5,000 people grew at a slower than average rate, the previous extremes within the settlement system disappeared. This is confirmed by a *change in the number of new dwellings per thousand inhabitants between 1990 and 2011*

XII. 2. 1. 11. While in the case of settlements with less than 5,000 inhabitants, 50-60 dwellings were built per thousand inhabitants during the two decades, in the more populated groups of settlements as many as 70-80. Taking into account demographic conditions as well, these ratios seem justified.

The distribution of *empty dwellings* by settlement size shows that their proportion increases mainly in settlements with fewer than one thousand and more than 100 thousand inhabitants. The reasons for this are to be found in demographic erosion in the case of smaller settlements and in an increasing number of business uses (e.g. offices, clinics, guest accommodation) in the case of major cities

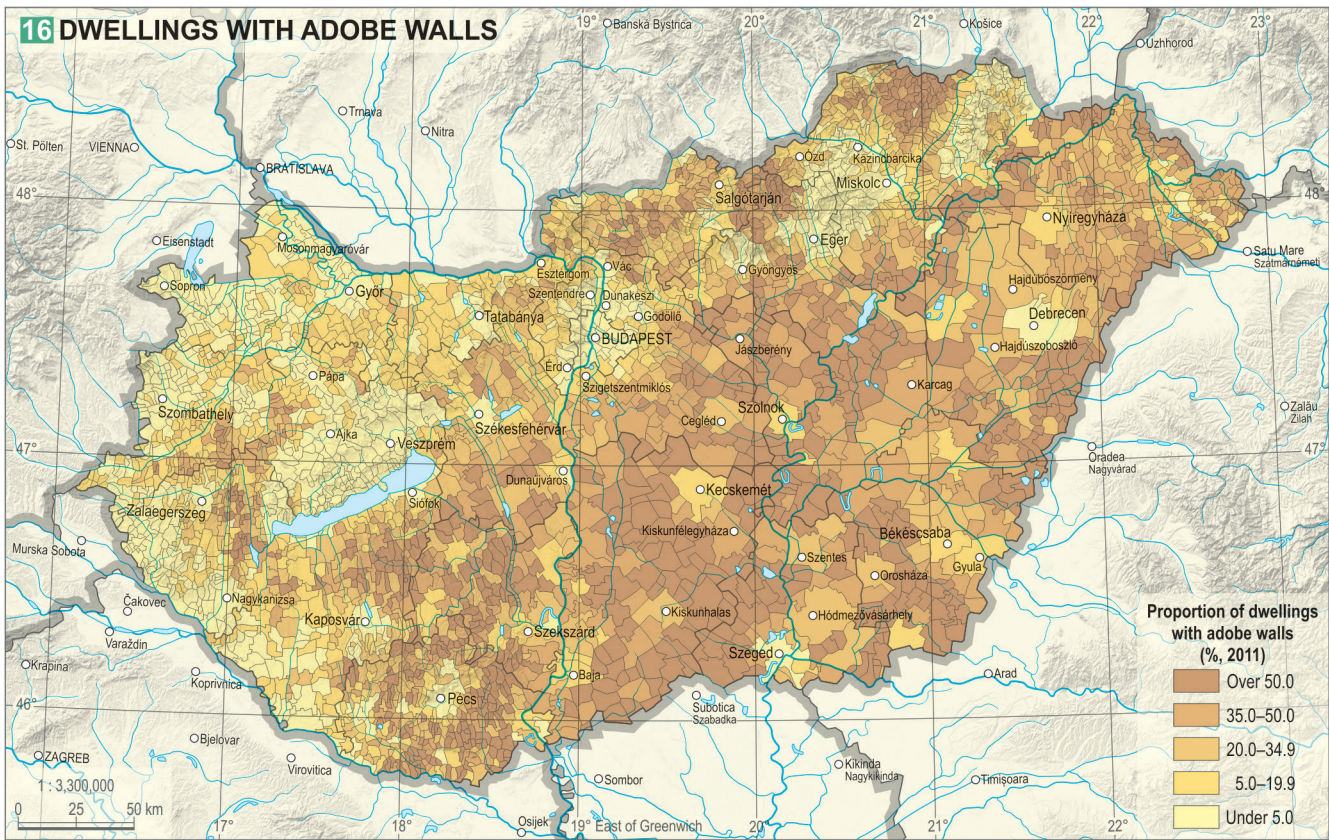
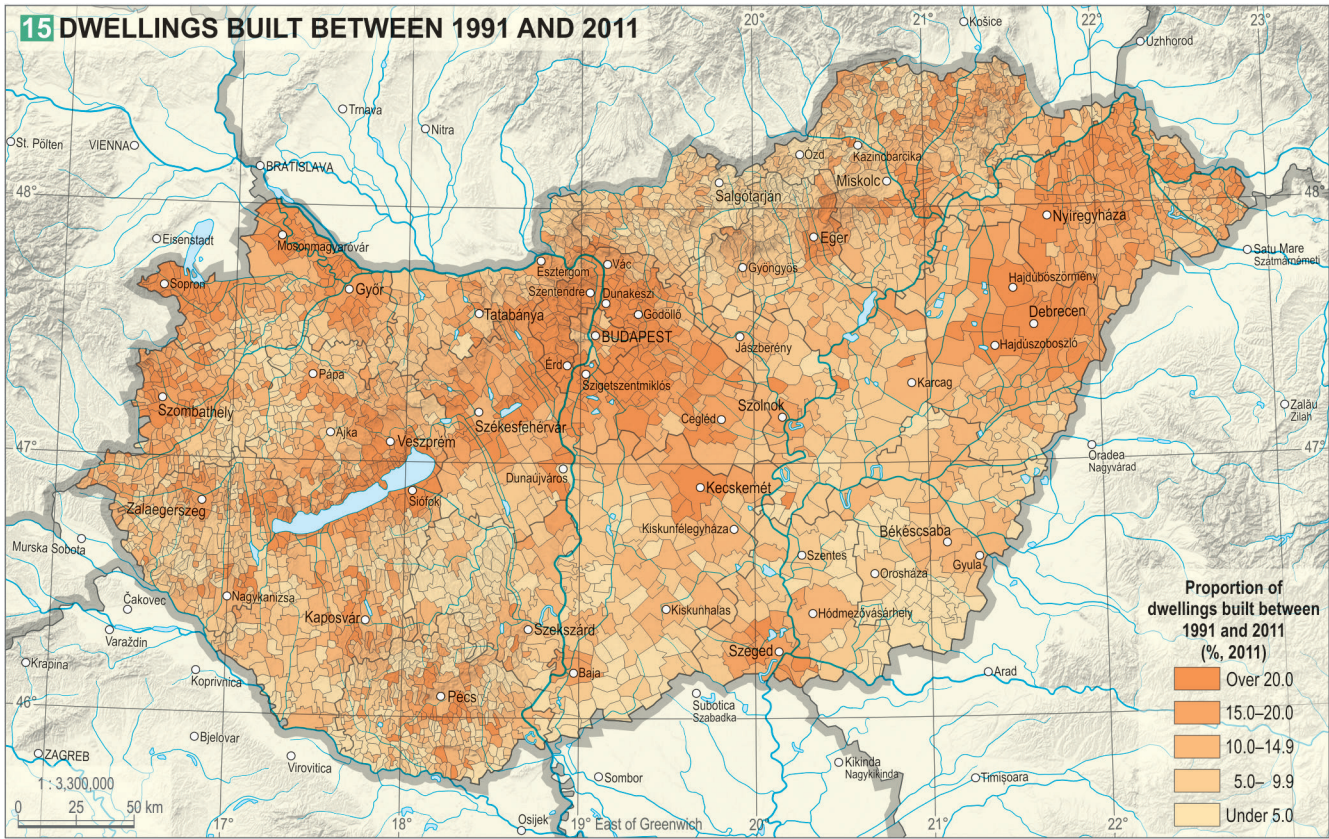
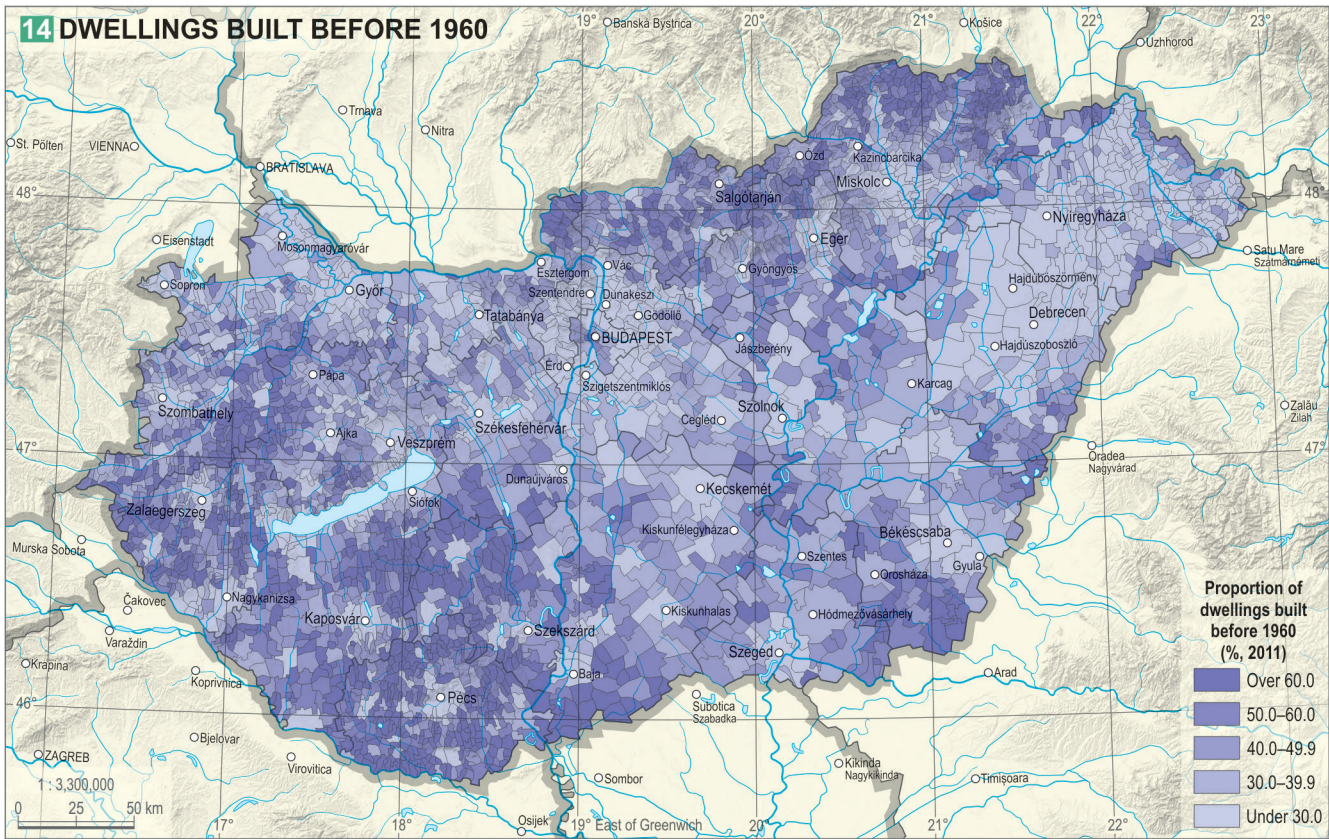
XII. 2. 1. 12.

Geographically, most empty dwellings are found in areas of the Southern Alföld with scattered farmsteads (tanyas), in regions of the Alföld with tiny villages (e.g. Bihar, Szatmár), in the peripheral areas of Northern Hungary, partly also with small and tiny villages (e.g. Cserehát, Tokaj Mountains and Nógrád), and in some districts of Transdanubia

XII. 2. 1. 13. In the latter region, in addition to the areas with small and tiny settlements in Vas and Zala counties, a relatively large number of empty dwellings can be found in the vicinity of Lake Balaton, right where the pace of housing construction has been the most dynamic in recent decades. All this indicates that in Hungary, since the turn of the millennium, the difference between first and second dwellings has gradually blurred. Evidently, more and more dwellings have been built for business investment, while others are used by the owners for leisure purposes.

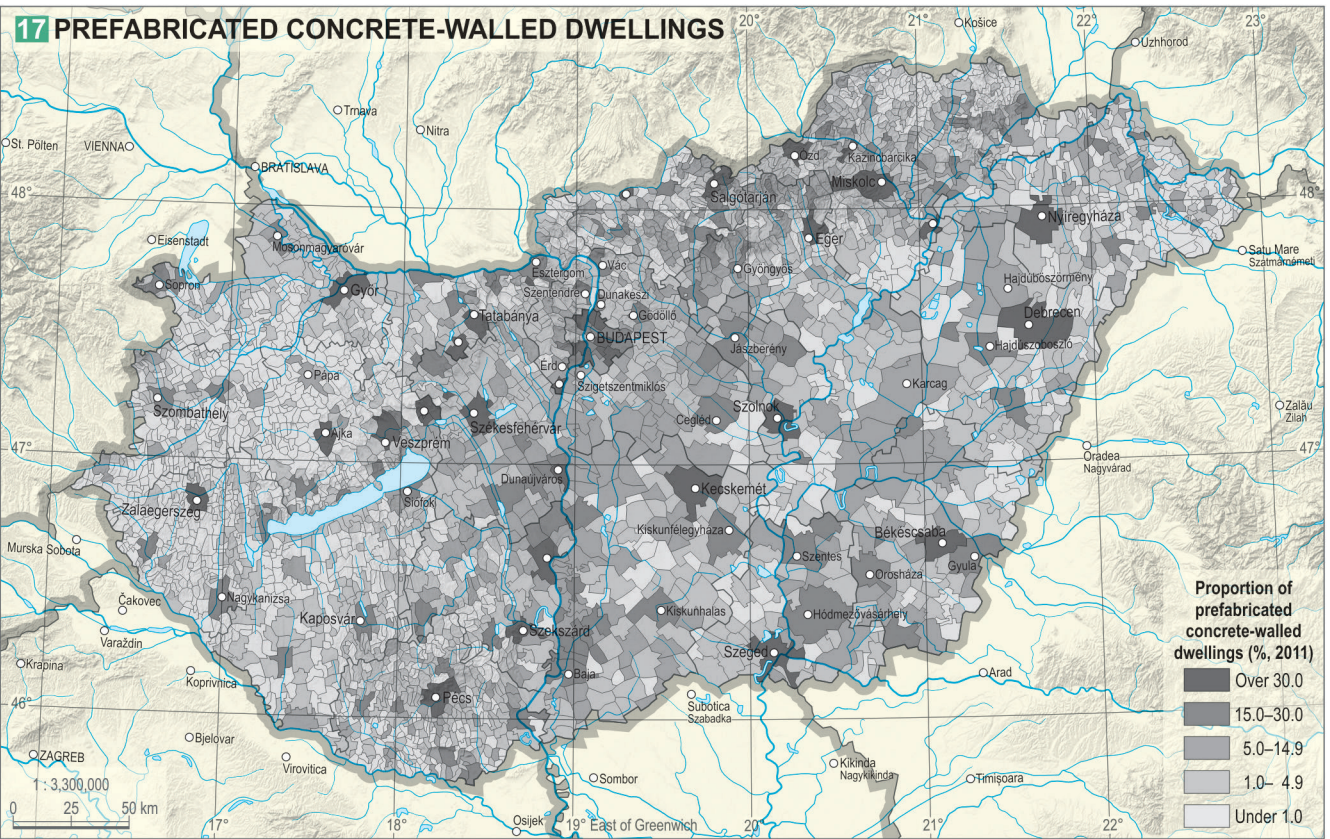
In order to obtain a better resolution in the study of the housing stock of Hungary by age. Dwellings built before 1960 and dwellings built after 1990 were considered old and young respectively. It transpired that 30.4% of the inhabited dwellings in Hungary were built before 1960 and 15.8% after 1990. Areas where the proportion of dwellings built before 1960 is relatively high can be clearly identified on the map showing the old dwellings

XII. 2. 1. 14. These include the southern and western rural areas of Transdanubia, the peripheral parts of Northern Hungary, and some island-like areas in the Alföld. In contrast, the whole Alföld, especially its northeastern part, is in a remarkably favourable situation in terms of the age composition of the housing stock, in which, in addition to the relatively more favourable demographic situation, specific factors such as serial floods also play a role. As a result of several reconstructions, the proportion of dwellings built before 1960 in the stock is the lowest in Szabolcs-Szatmár-Bereg County (only 22%), while



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in Tolna it is approaching and in Nógrád County it exceeds 40%. Of course, the durability of the buildings also plays a role in the age composition of the dwellings: dwellings made of brick or natural stone masonry in Transdanubia are much more durable than dwellings with adobe walls in the Alföld.



In Budapest, 41% of inhabited dwellings were built before 1960. Such a proportion is also typical of settlements with 1-2 thousand inhabitants. An even more unfavourable rate can be found only in small villages with less than 1,000 inhabitants (52%), where out-migration has been the highest in recent decades and where no central housing construction has taken place. The proportion of old dwellings is the lowest (19%) in cities with more than 50 thousand inhabitants, mostly with the function of county seats. Housing construction in the 1970s and 1980s was most dynamic in such towns, in line with the goals of communist housing policy. Data on the *proportion of dwellings built between 1990 and 2011* reveal areas in Hungary where the expansion of the local housing stock was the most dynamic after the collapse of communism

XII. 2. 1. 15. These include the eastern half of Hungary, which is inhabited by a population with relatively high fertility, the main migration destinations (the Budapest agglomeration and the vicinity of Lake Balaton), as well as the economically prosperous areas that turned into immigration destinations (Western Transdanubia). A high proportion of newly built dwellings can be found in the settlements surrounding regional centres, but also in the vicinity of towns at a lower level in the hierarchy, such as Eger, Dunaújváros or Nagykanizsa. Specific developments have taken place in settlements along the Austrian and Slovakian border, where new dwellings have been built specifically to meet demand from across the border, such as Rajka, which is easily accessible from Bratislava, or in the immediate vicinity of the Austrian border, such as Harka, Nagycenk or Zsira.

Different construction technologies and – closely related to this – residential buildings of varying quality can be associated with the main periods of housing construction. Significant regional differences can be observed in the *distribution of dwellings by masonry*, which can be explained primarily by the various construction techniques of different periods, but also by the natural conditions, architectural traditions and, to an extent, the income conditions in Hungary. At the time of the census in 2011, 63.5% of occupied dwellings in Hungary were buildings with brick walls, which is the most common building material in Hungary. The proportion of brick dwellings is the highest in the North Hungarian Range and in the western and northern parts of Transdanubia (above 85%). In these areas, due to petrological conditions, the residents of settlements have long been able to use fired brick and natural building stone in construction. In contrast, in the AL-

föld and in parts extending into Transdanubia (e.g. Mezőföld) and in the hilly areas of Southern Transdanubia, which are further away from natural building stone quarries and combustible clay deposits, the proportion of *dwellings with adobe walls* is sometimes above 50%

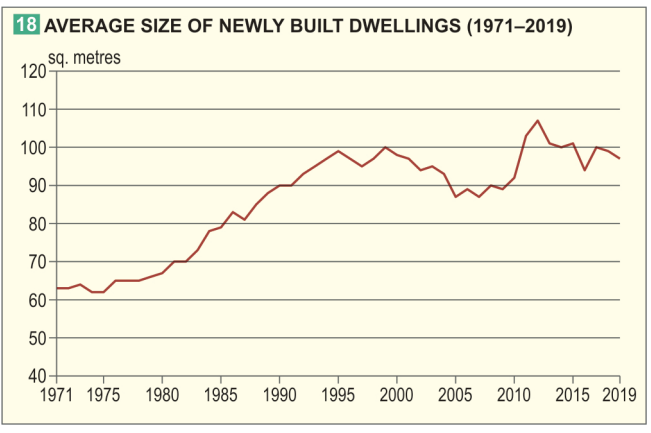
XII. 2. 1. 16. [3] In contrast to fired clay bricks, adobe made without firing, although environmentally friendly, is less durable. In 2011, 14.9% of the dwellings in Hungary were in adobe buildings.

The spatial distribution of *prefabricated concrete-walled dwellings* built with the housing construction technologies typical of the communist period reflects clearly the settlement development principles of the era

XII. 2. 1. 17. At the time of the census in 2011, the number of prefabricated concrete-walled dwellings in Hungary reached 777 thousand, corresponding to 19.8% of the inhabited dwellings. The map shows a very concentrated distribution of prefabricated concrete dwellings; they are essentially present practically only in the housing stock of cities and towns. Their proportion is particularly high (above 50%) in the ‘socialist new towns’ (e.g. Tiszaújváros: 59.2%, Dunaújváros: 58.5%, Kazincbarcika: 58.2%), as well as in more populous regional centres and county seats. Their proportion is also significant in the capital, with 31% of the occupied dwelling stock.

Dwelling size, residential density, housing quality

The population of Hungary has been declining since 1980, decreasing by 940 thousand people in the last forty years. Meanwhile, the housing stock, although at a slowing rate, has been growing steadily, and in 2019 there were already 900 thousand more dwellings in Hungary than forty years earlier. In the meantime, the structure of Hungarian households has also changed: the number of households has increased, while their



3 Although adobe buildings are environmentally friendly, they are less durable. Okorág (Baranya County)

average size has shrunk. The number of people living alone has increased for demographic, social and lifestyle reasons. At the time of the microcensus in 2016, 28 out of 100 dwellings were occupied by one resident only. This value was even higher in Budapest, with 37% of dwellings occupied by a single person. As a result of opposite processes, residential density has been steadily declining since 1990, even while the proportion of vacant dwellings has doubled.

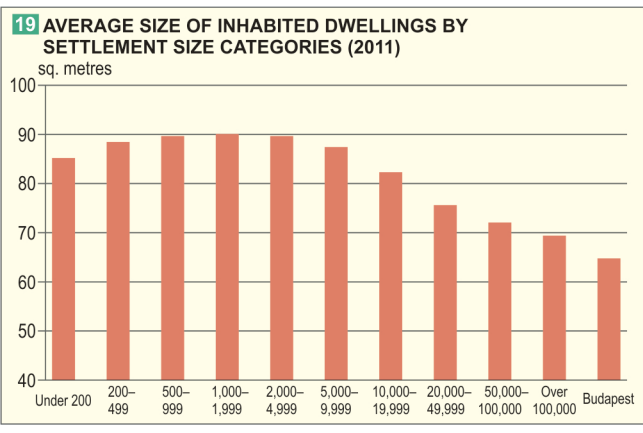
The growing number of dwellings over time was also accompanied by increasing *dwelling size*

XII. 2. 1. 18. Until the end of the 1970s, dwellings built to meet mass housing demand were generally less than 70 sq. m in size. As the demand for housing underwent changes and families desired better and larger homes, the average size of new dwellings also began to increase. At the same time, housing construction by investors after the collapse of communism was still characterised by smaller dwelling units of around 60 sq. m, while single-family homes, usually built for own use, became gradually larger, with an average size exceeding 100 sq. m. This duality is also reflected in the fluctuations in the floor space of new dwellings since 1990. At the peak of the market prosperity (between 2002 and 2009), a significant proportion of dwellings were built for business investment, in the form of buildings with multiple flats, as a result of which the average floor space of dwellings decreased. The crisis in the housing market, and with it the decline in housing construction for investment, as well as the growing dominance of single-family houses resulted in a renewed increase in the size of dwellings after 2010.

The average *size of dwellings* within the settlement hierarchy shows significant differences: the average size of dwellings decreases from smaller villages to larger settlements. The size of dwellings reaches its peak in settlements with between 500 and 5,000 inhabitants

XII. 2. 1. 19. The average size of apartments (57 sq. m) is significantly smaller than that of single-family houses exceeding 90 sq. m. Accordingly, in villages with less than 5,000 inhabitants, where detached houses are almost the only form of construction, the average size of dwellings is almost 90 sq. m. In contrast, the average floorspace in cities and towns outside Budapest is around 70 sq. m, while in Budapest dwellings are even smaller on average (65 sq. m).

The size of the dwelling is indirectly reflected in the

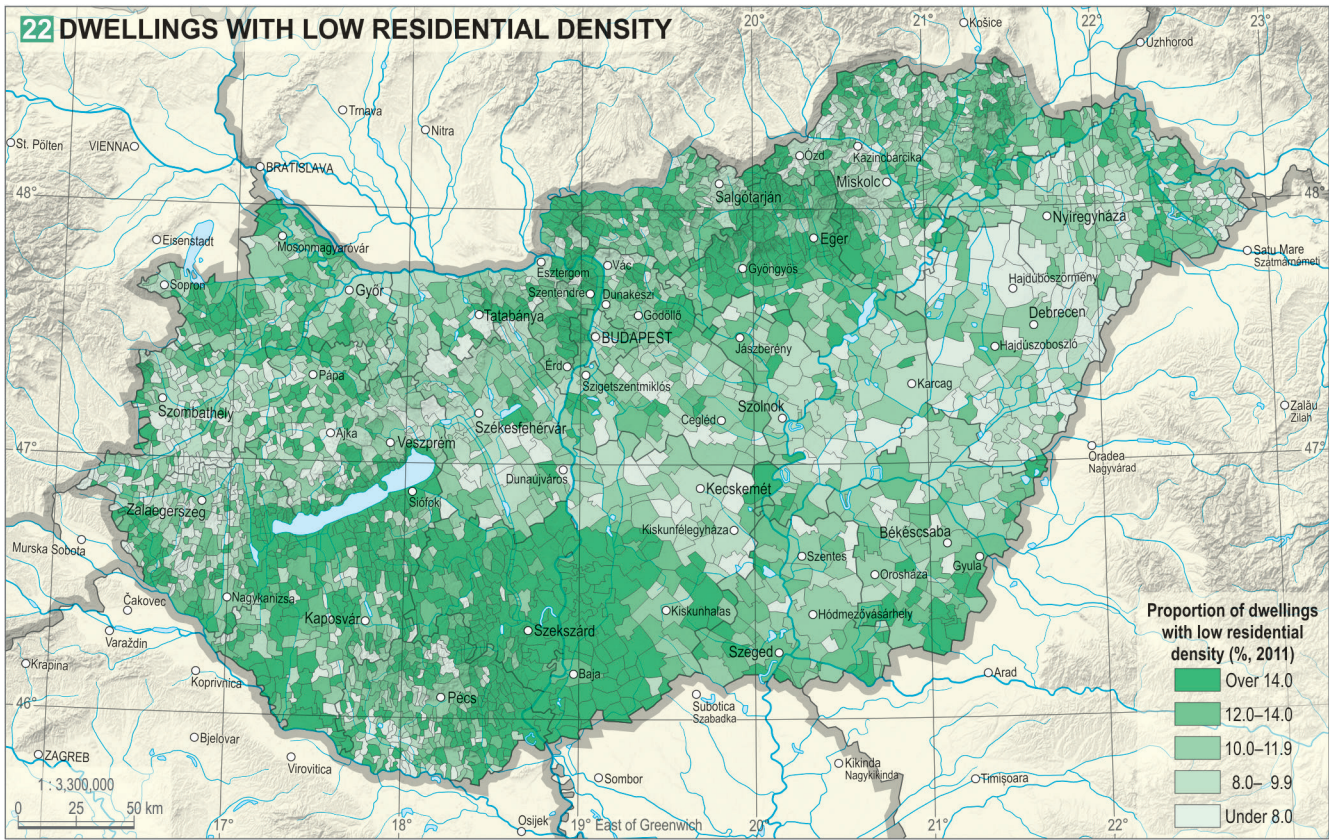
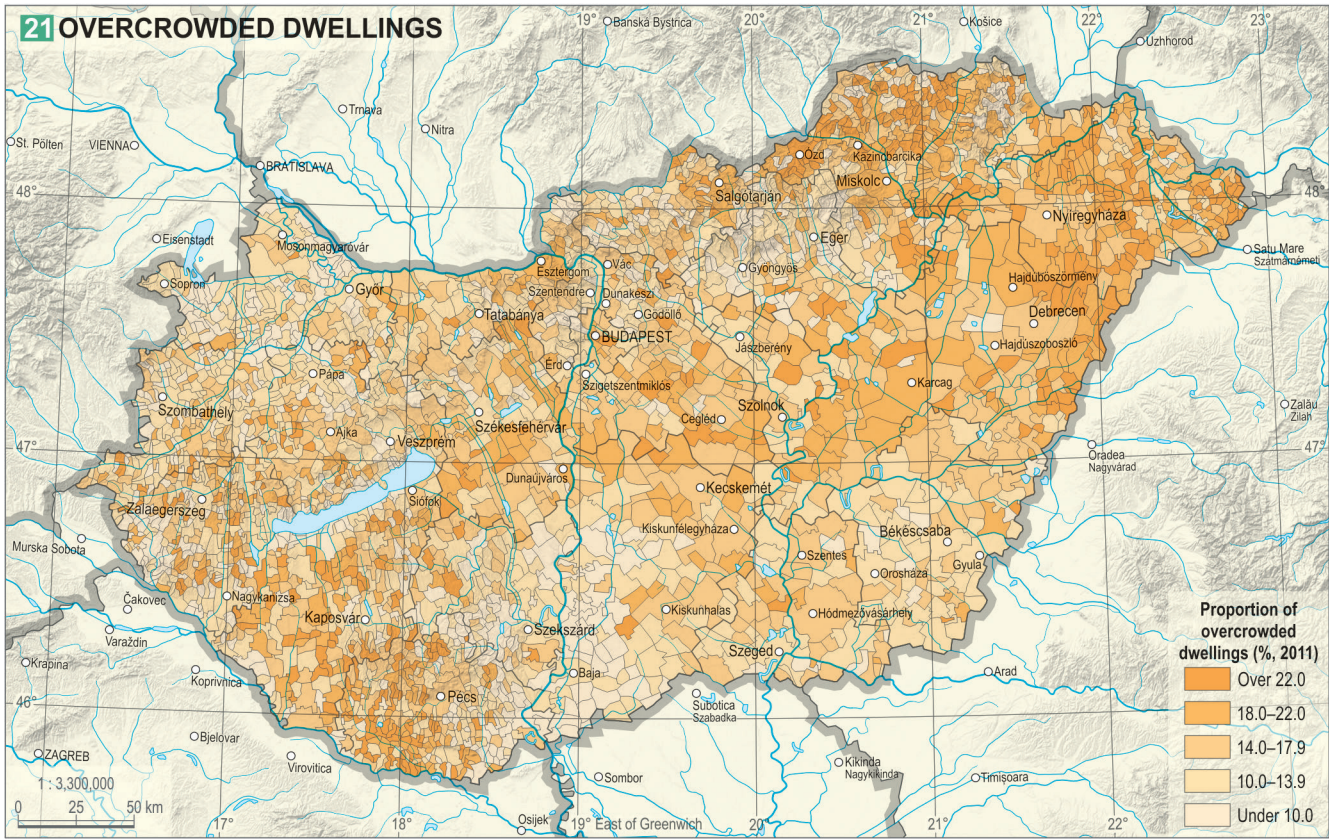
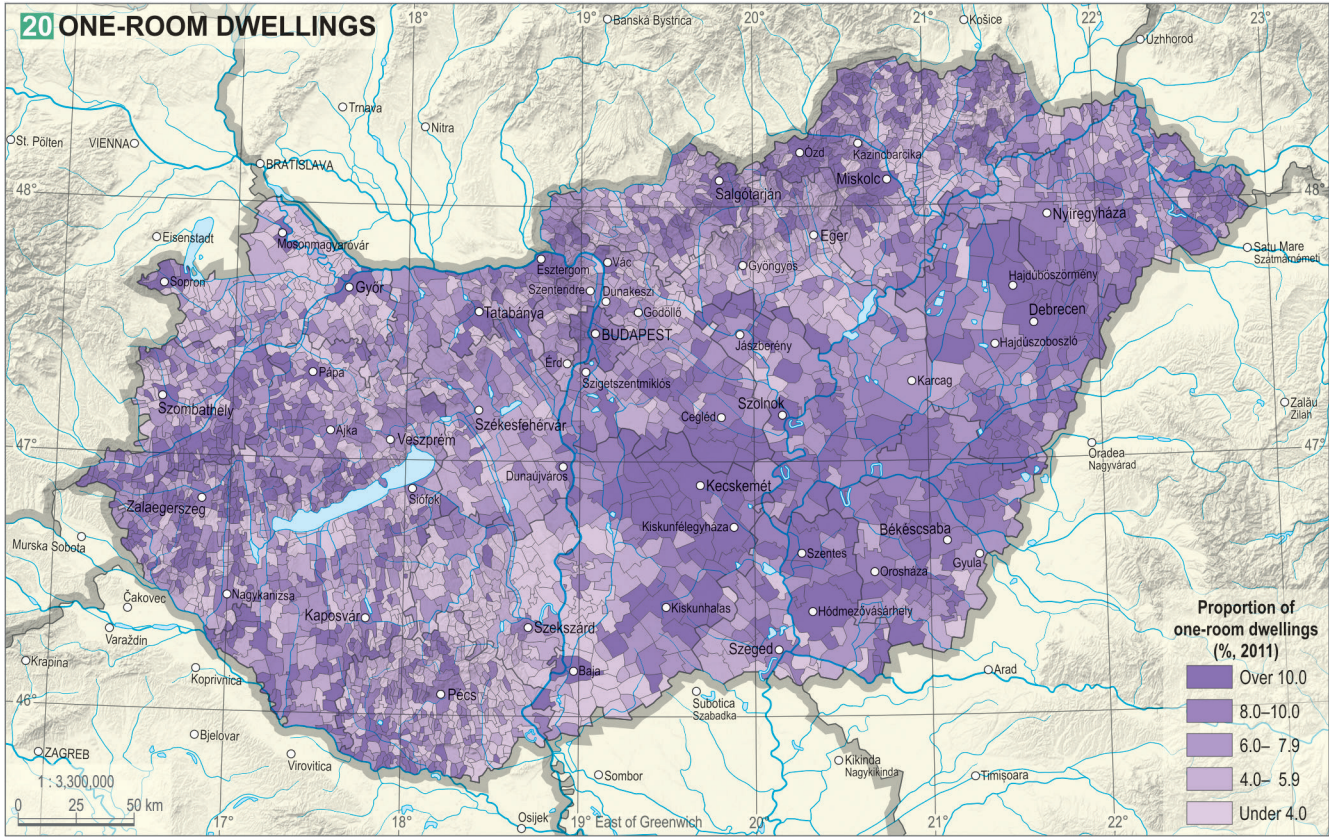




4 In urban neighbourhoods with ageing populations, residential density is relatively low. Józsefváros, Budapest

number of rooms. Most Hungarian dwellings belong to the two-room (37.3%) and three-room (32.6%) groups. The situation of *one-room dwellings* is special. Until the late 1960s, before the start of studio flat construction in housing estates, this dwelling type was considered a measure of poverty. At the time of the census in 2011, 9.1% of dwellings in Hungary, and almost every fifth dwelling in Budapest (17.1%), had only one room. In terms of the proportion of one-room dwellings, the Alföld and Budapest stand out in Hungary XII. 2. 1. 20. One-room dwellings are also common in the peripheral regions of Northern Hungary and in the areas of Transdanubia with tiny villages. Despite the doubtless differences in development, regarding this indicator, reference should also be made to the building habits arising from the rural, folk way of life. This resulted in mixed-use spaces (e.g. dining kitchen) in the Alföld, where porches taking the role of a living room are also the most common. All this resulted in an increase in the proportion of one-room dwellings in the statistics for this region, without any direct indication of the quality of life.

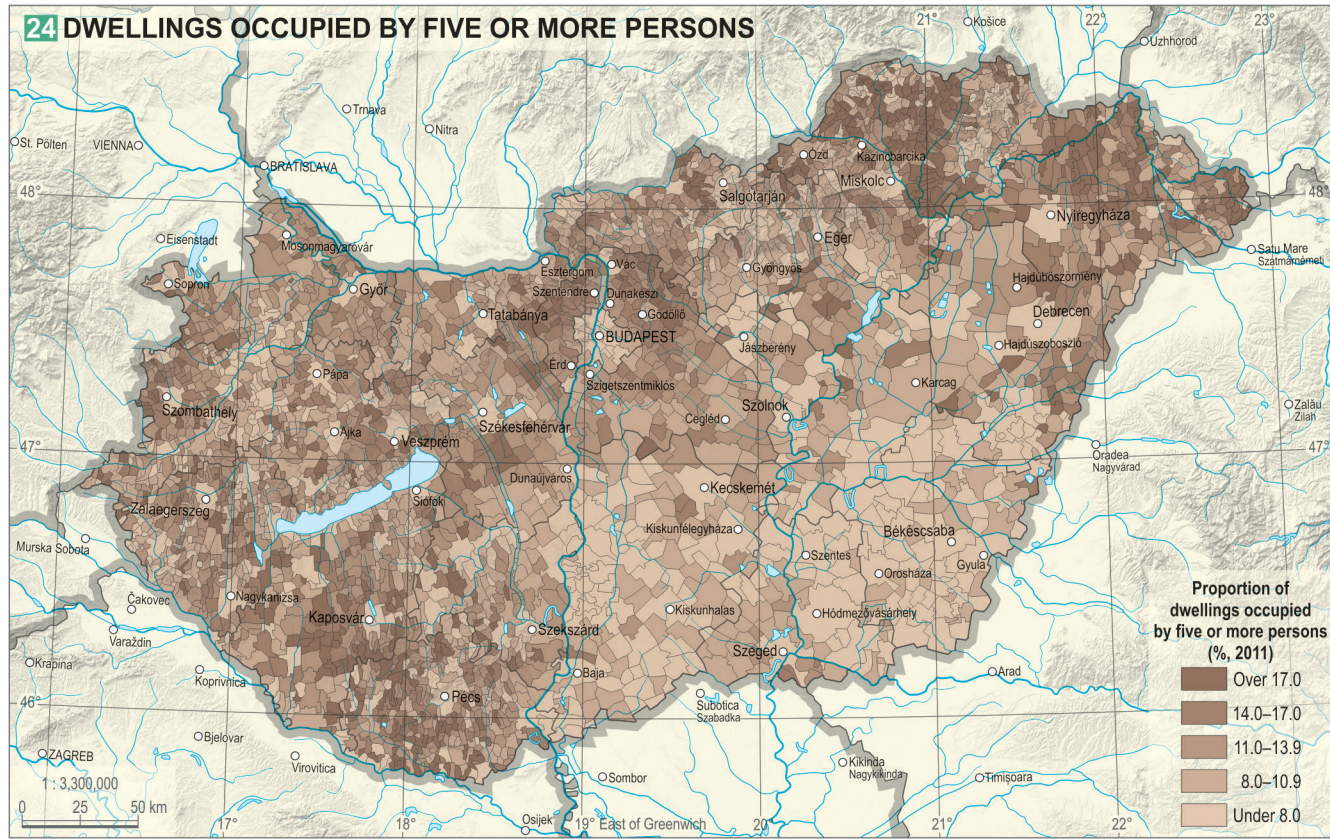
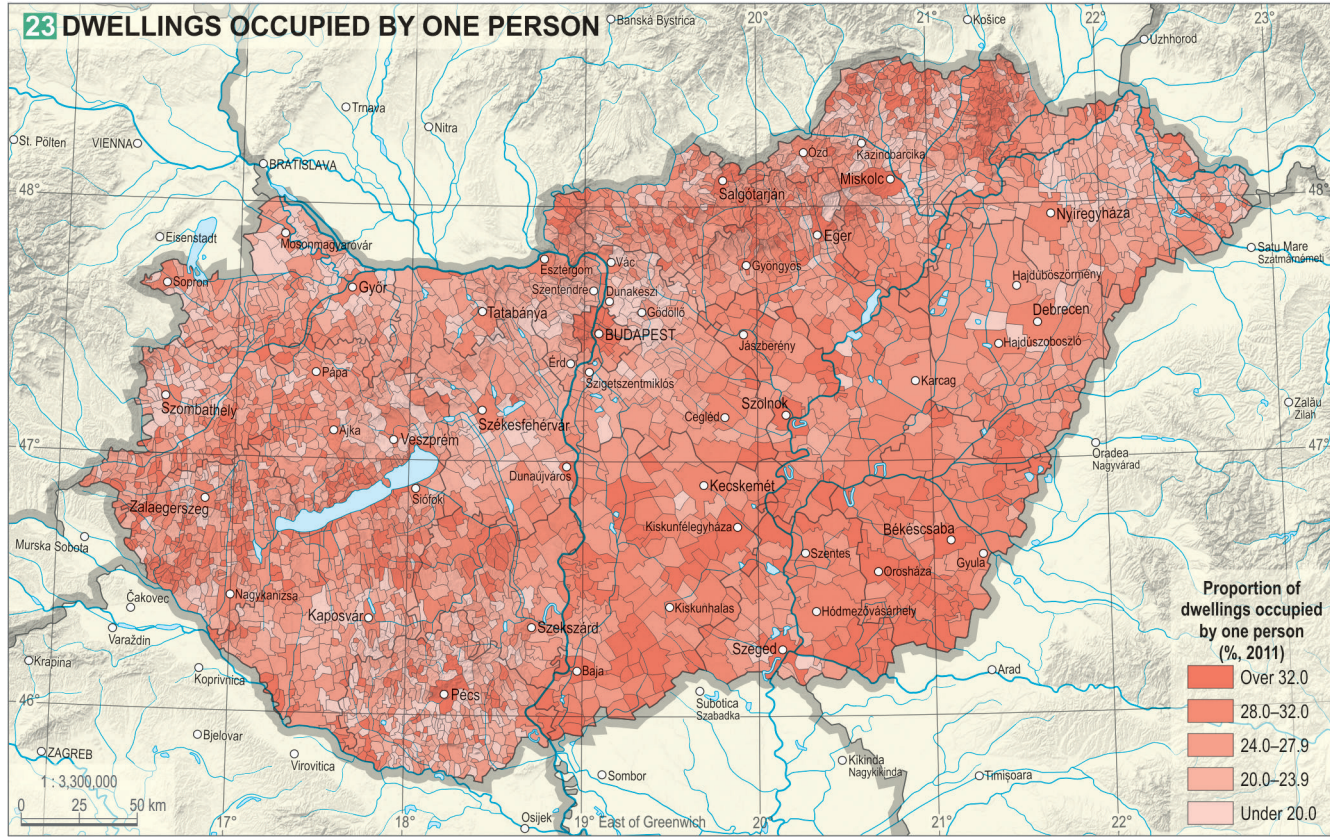
The data on residential density reflect both demographic and living standard differences measured through the comparison of the population and number of rooms. In defining *overcrowded dwellings*, the European statistical practice was followed, according to which, for example, for a household consisting of two parents and two teenaged children of different sexes, a three-room dwelling with a kitchen is considered to be of sufficient size, while anything smaller than that is considered crowded. In 2011, 15.2% of the dwellings in Hungary were classified as crowded. Their proportion was lower than the national average in Budapest and in towns with more than 50 thousand inhabitants, while in villages, especially in small and tiny villages, it was significantly higher. Considering regional differences, it can be stated that the proportion of crowded dwellings is well above the national average in the eastern and northeastern parts of the Alföld and in Borsod-Abaúj-Zemplén County; in addition, crowded dwellings are abundant in contiguous areas in Southern Transdanubia XII. 2. 1. 21. The spatial distribution of crowded dwellings is therefore very similar to the regional distribution of the Roma population in Hungary VI. 3. 9. Dwellings with low residential density include those where half the number of rooms exceeds the number of occupants, thus each person has at least two rooms. The proportion of dwellings with low residential density is higher in Budapest and in the lower levels of the settlement hierarchy with ageing populations, while it is lowest in small towns (especially at suburban locations) with 5-20 thousand inhabitants, where population growth and housing construction was particularly dynamic in the decades following the collapse of communism. Considering geographical distribution, the housing market share of dwellings with low residential density is high espe-



cially in the Lake Balaton region, in Southern Alföld and in northern parts of the country XII. 2. 1. 22.

The effects of household structure on the housing market can also be discerned by examining the number of people per inhabited dwelling. The proportion of dwellings occupied by one person shows regional di-

chotomy. On the one hand, the proportion is high in those areas of the eastern part of Hungary where ageing and out-migration have been considerable in recent decades, such as in Bihar and southern Békés in the Alföld or in Nógrád, Abaúj in the North Hungarian Range XII. 2. 1. 23. On the other hand, this type is also



common in Budapest and in major cities, where, in addition to elderly people left on their own, the proportion of people living a single lifestyle is the highest. The spatial distribution of dwellings occupied by five or more people is also characterised by duality XII. 2. 1. 24. The proportion of such dwellings is high in the areas characterised by large families and households (in many cases Roma), but high values can also be found in the vicinity of major cities, especially Budapest. Obviously, the relatively youthful age structure, the higher number of children, and the large floor space play a role in this. Consequently, a high number of people per dwelling is a sign of poverty in the rural periphery, while in the vicinity of major cities it is rather a sign of prosperity.

Facilities within the home are an important factor in living conditions and quality of life. The proportion of the housing stock with a bathroom, flush toilet or central heating does not depend solely on the financial situation and preferences of families, as such facilities are difficult to put in place in the absence of suitable utilities (e.g. sewerage, a gas connection). The standard of facilities in Hungarian dwellings has significantly improved since 1990. The improvements are largely the result of public utility development programmes sponsored by local governments and the central government. A large-scale development of the gas supply network took place in the first half of the 1990s,

as a result of which the supply of piped gas to residential dwellings increased from 41% to 79% by 2015. Then, in the second half of the 1990s, the rapid development of sewerage was begun, with spectacular results, especially in the middle part of the settlement hierarchy (typically in small towns). Since 1990, the number of dwellings connected to the public sewerage system in Hungary has doubled, and their proportion has approached 80%.

Largely owing to public utility investments, the proportion of dwellings equipped with basic utilities and modern heating (with all conveniences) increased from 40% to 61% between 1990 and 2011. Even though the situation in the smaller settlements has improved since 1990, the 'all conveniences indicator' indicating the standard of facilities in dwellings within the settlement hierarchy still clearly correlates with the size of settlements. Budapest and cities with more than 100 thousand inhabitants are in the most favourable situation, with the proportion of all-convenience dwellings exceeding 70% in 2011. This indicator is below 50% in settlements with fewer than 5,000 inhabitants and barely reaches 25% in villages with less than 200 inhabitants XII. 2. 1. 25. 1. All this indicates that despite favourable political intentions the principle of economies of scale often precludes costly communal developments in smaller settlements.

Bathrooms can now be considered an elementary

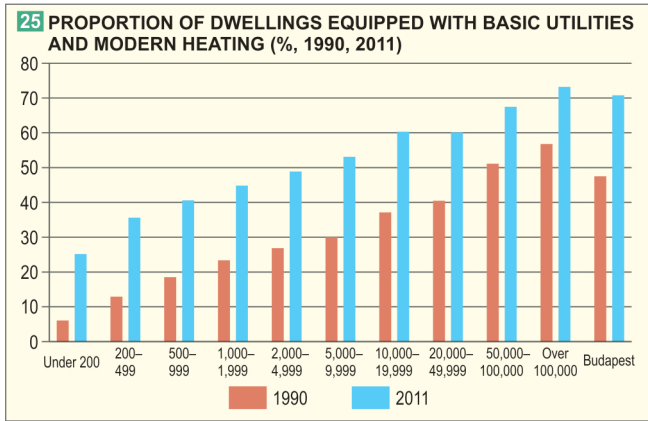


5 Substandard overcrowded dwellings are typically found in disadvantaged regions

requirement in dwellings. As a result of utility developments after 1990, the proportion of dwellings with bathrooms increased even in small settlements. In 1990, 22% of dwellings in Hungary and 35% of dwellings in villages did not have a bathroom. By 2011, the value of the indicator improved everywhere, but the difference remained: 5% of inhabited dwellings and one tenth of village dwellings did not have a bathroom. The proportion of dwellings without bathrooms is high in areas with small and tiny villages (e.g. Southern Transdanubia, Abaúj, Zemplén) and with tanyas (e.g. Danube-Tisza Midland). In such areas, a piped water supply and sewerage are limited due to low population density. In major cities, the situation is more favourable XII. 2. 1. 26.

The lack of a bathroom coupled with overcrowding indicates an accumulation of problems. Therefore, it serves as a strong indication of deprivation. When it occurs on its own, the former can be explained by the technical and infrastructural disadvantages of small and depopulating settlements and the lack of modernisations. However, the *overcrowding of dwellings without bathrooms* indicates a level of persistent poverty that necessarily affects young people and children in large numbers 4. Poor housing conditions also affect the school performance of children and thus their chances of social advancement. Although the national value of this indicator is low (1.8%), it shows a high concentration in several disadvantaged regions in eastern parts of Hungary and in Southern Transdanubia, while it rarely occurs in and around Budapest and in Western and Central Transdanubia XII. 2. 1. 27.

In the microcensus in 2016, major *housing renovations* (e.g. insulation, renovation, heating modernisation, utility development, window replacement) carried out in the previous ten years were also recorded. According to the results of the survey, the majority of dwellings built before 2001 (61%) underwent one or more of the listed renovations, but comprehensive works renovating the dwelling as a whole were rare. The extent and pace of housing renovations are mainly determined by the financial possibilities of the residents and the available housing renovation support. As many as 71% of *high-rise prefab buildings* were renovated, mainly due to the impact of targeted renovation programmes (with significantly support coming



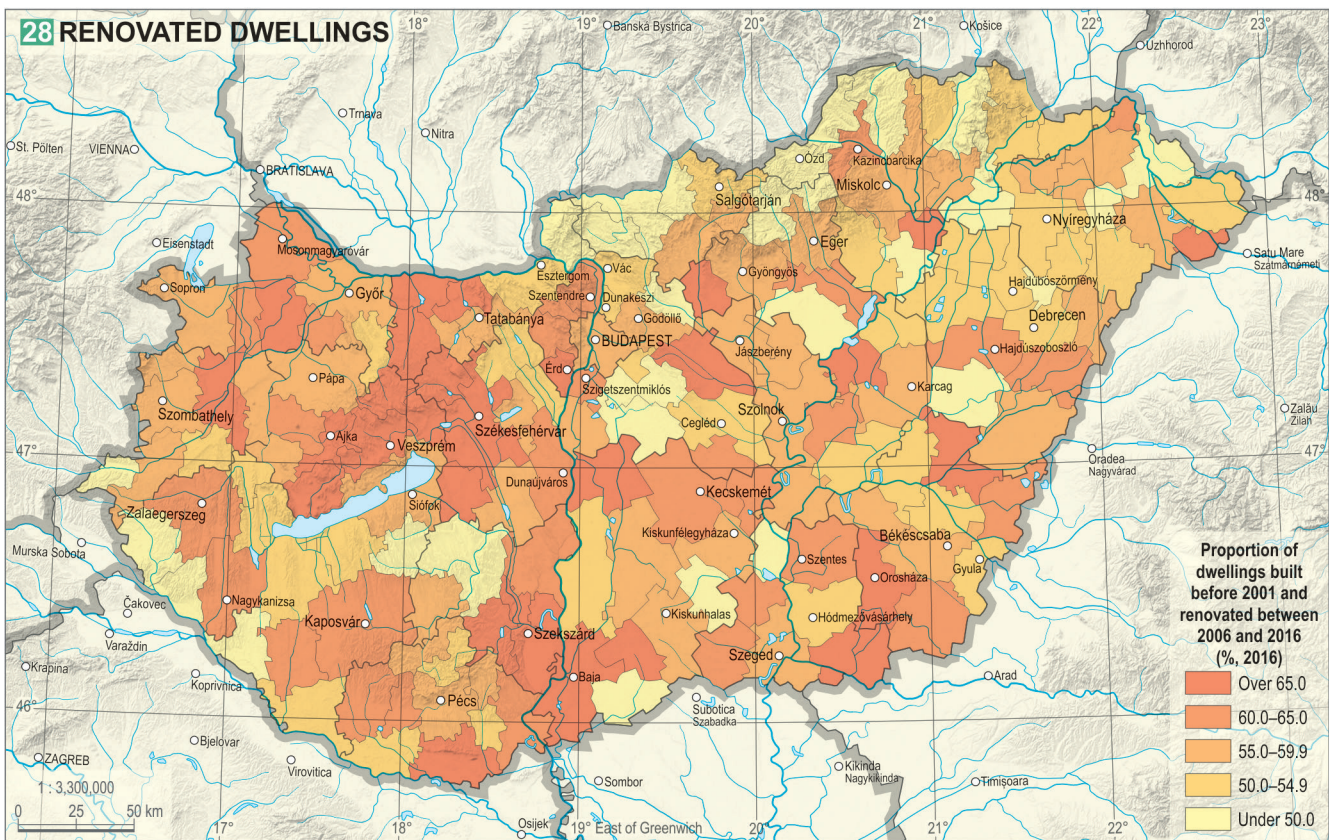
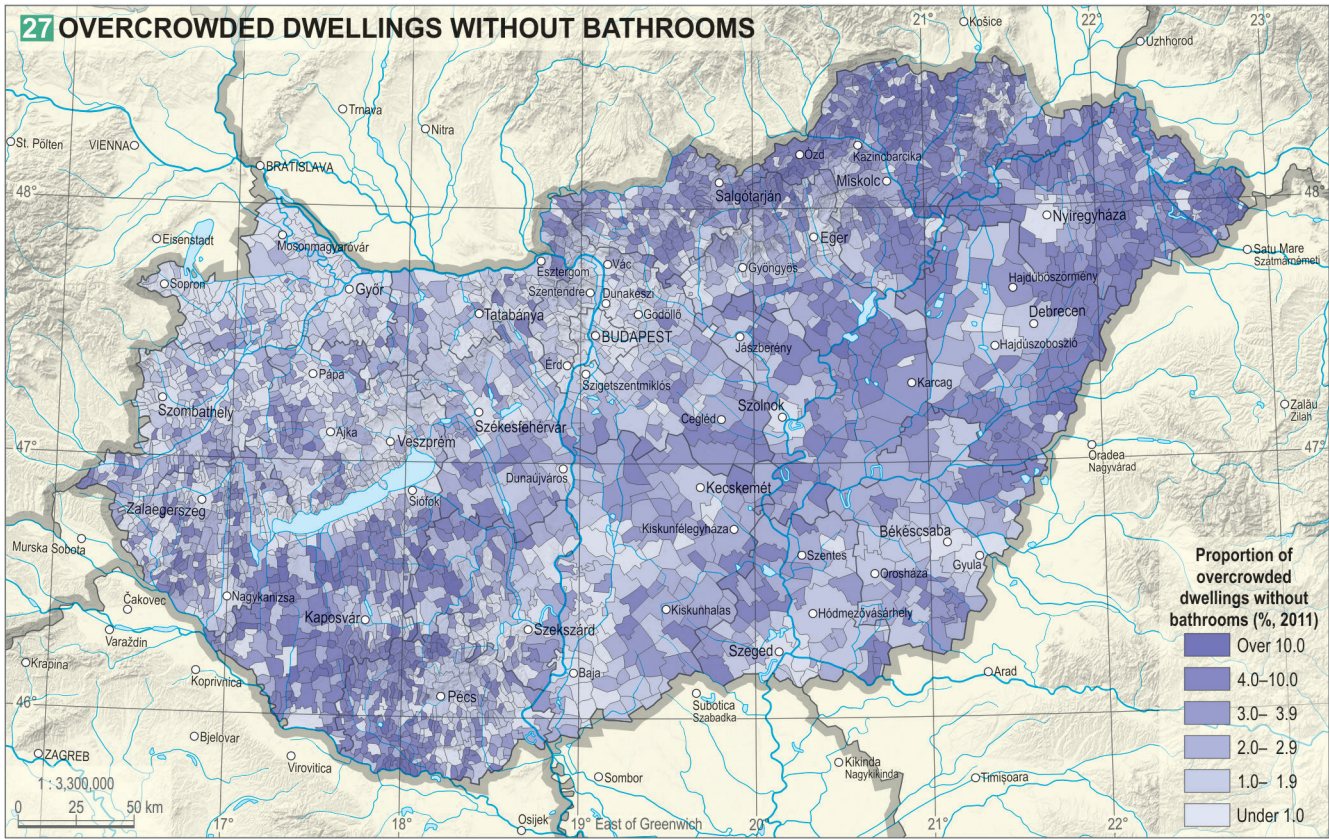
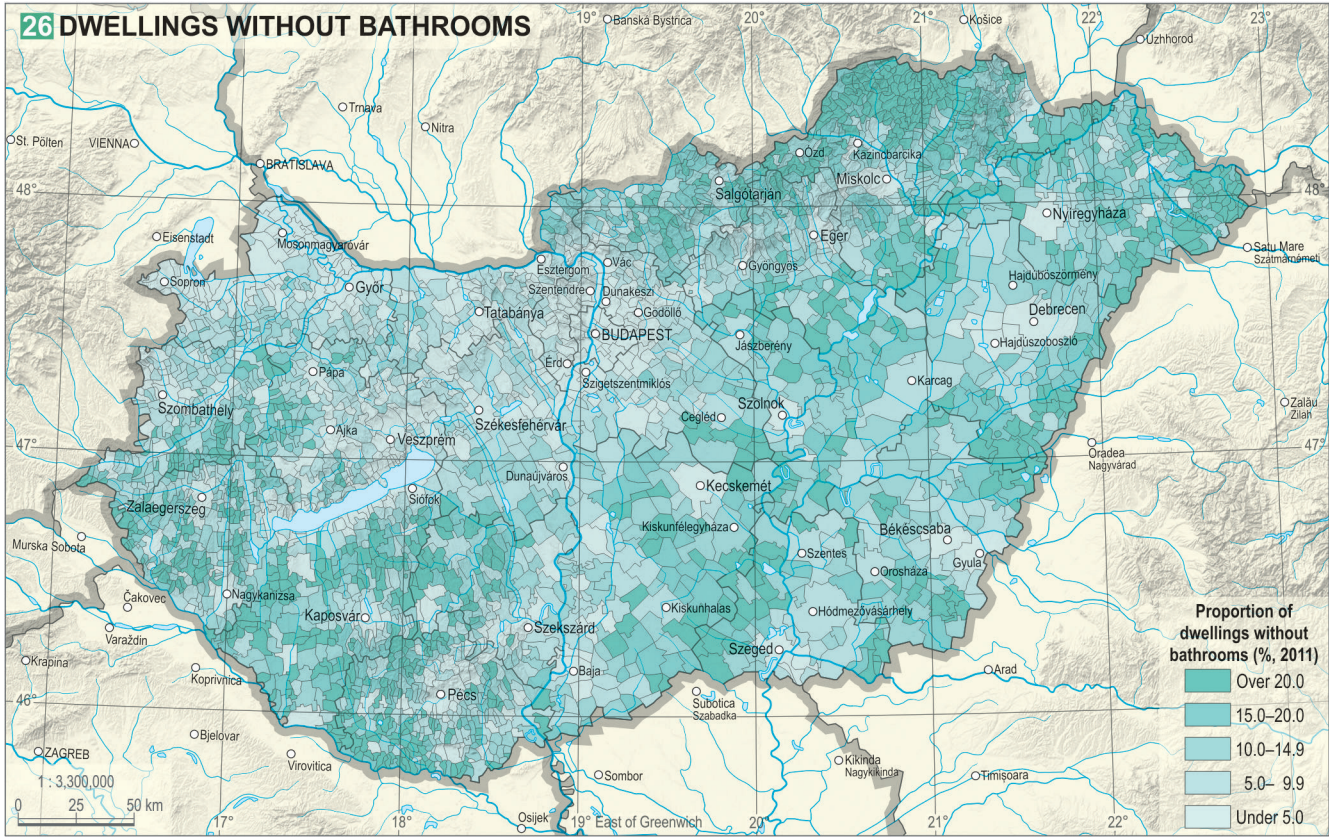
from the European Union sources). The above-average renewal of the housing stock in parts of northern Transdanubia [XII. 2. 1. 28.](#) can be attributed to the combined effect of a particularly favourable rate of high-rise renovation and the *renovation of detached family houses* due to the better financial situation. High levels of housing renovation can be observed in several agglomeration areas, driven by demand coming from families who have moved there. At the other end of the spectrum, districts with a housing renovation rate of less than 50% are found mostly in peripheral areas, which lag behind the national average in social and income terms. The disadvantaged status of people living in such areas is also reflected in the pace of housing renewal. This problem was the motivation for the launch of the *Hungarian Village Programme* in 2019. The main goal of the programme, which covers more than 30% of the population and 91% of settlements, is to increase the population retention capacity of settlements with fewer than 5,000 inhabitants, to strengthen the way of life in small settlements and to promote rural housing opportunities. The programme's measures help, among other things, to *create rural family homes* (the measures are known as the rural CSOK). In settlements supported by the rural CSOK, the average price of second-hand dwellings increased by 12% after the programme's introduction, and the number of dwellings sold also increased.

Processes in the housing market

The development of a *modern housing market institutional system* in Hungary began with the advent of democracy. The ownership structure changed and there was greater access to new dwellings. At the same time, the old housing distribution channels ceased to exist. The transfer of the state housing sector to municipal ownership, followed by its privatisation, and the consolidation of former OTP (National Savings Bank) housing loans, fundamentally changed the ownership situation of hundreds of thousands of families. The population faced extreme housing market fluctuations during this period. There was an unprecedented decline in housing construction, and housing loans essentially ceased to exist. The housing opportunities available to young people under communism were abandoned. The turning point came in the 2000s, when housing loans resumed with state support. Until 2004, these state-supported housing loans were the engine of the housing market recovery. However, after the reduction of state support, foreign currency-based mortgage loans took over its role. The increasing number of such loans boosted the housing market until 2008. The outcomes were a rapid rise in dwelling prices, an increase in the number of housing constructions, and the advent of a more modern structure of professional housing construction businesses. The back-drop to these developments was the establishment of an institutional system and network of housing loans [XII. 2. 1. 9.](#) The recovery was halted by the financial crisis of 2008, which in Hungary was made worse by the financing crisis surrounding the foreign currency based loans. Only in 2015 were there signs of a recovery palpable, strengthened by a number of government economic stimulus and family support measures.

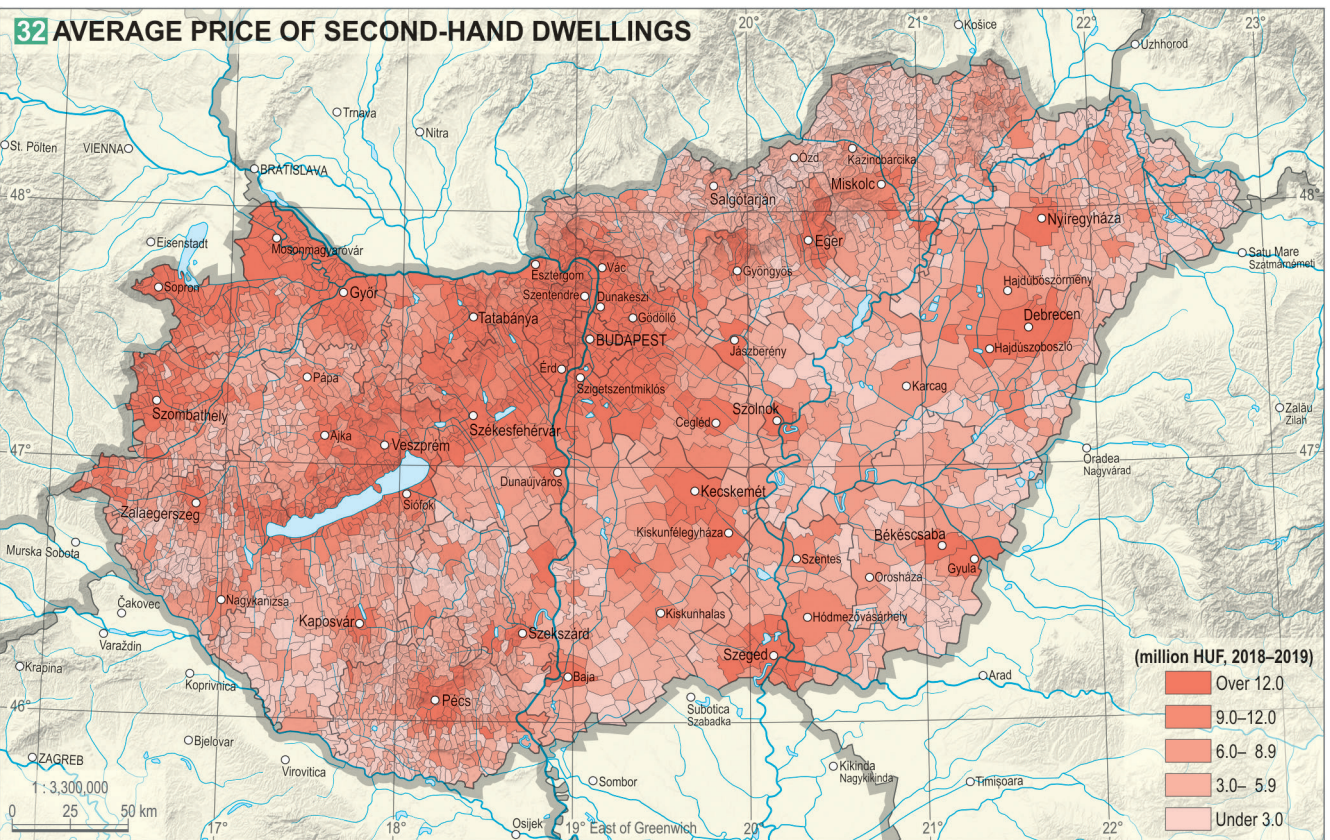
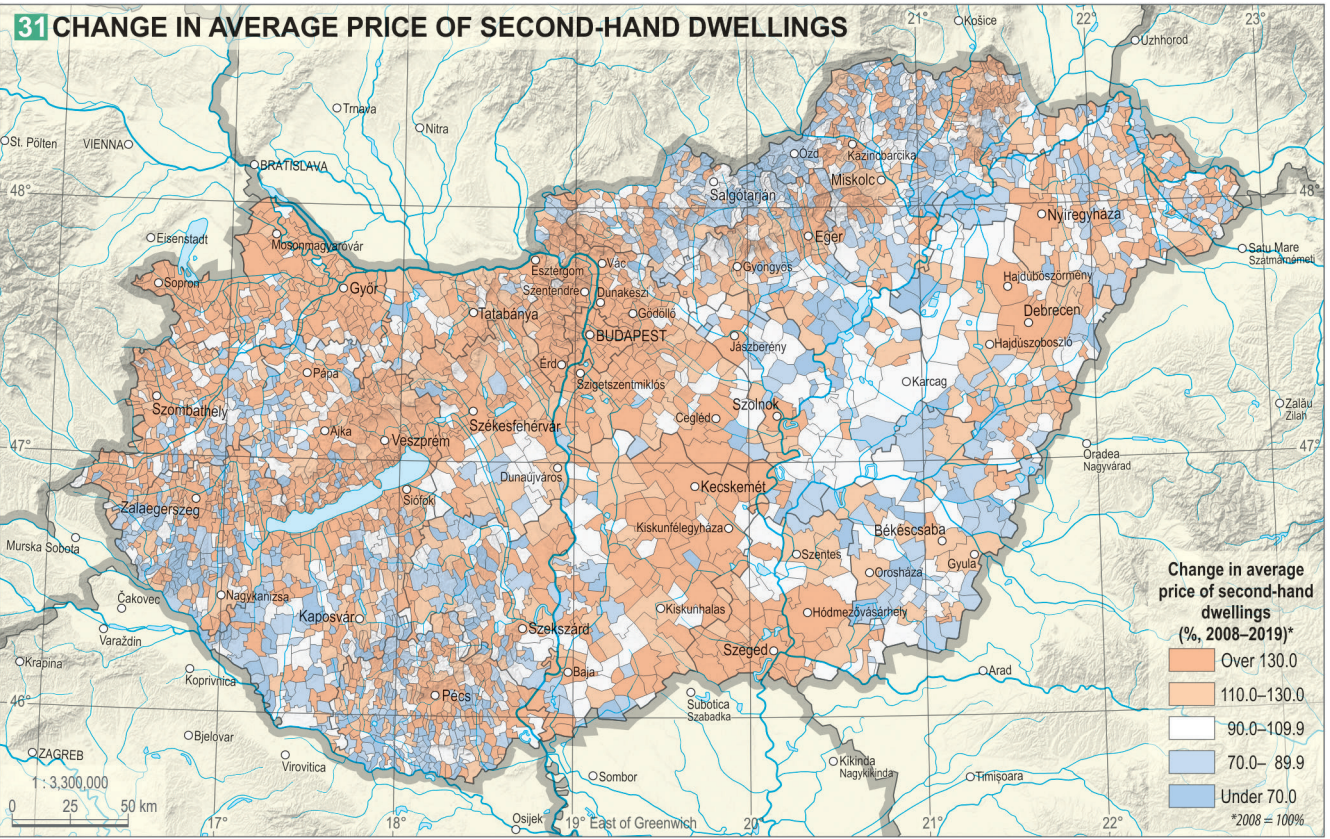
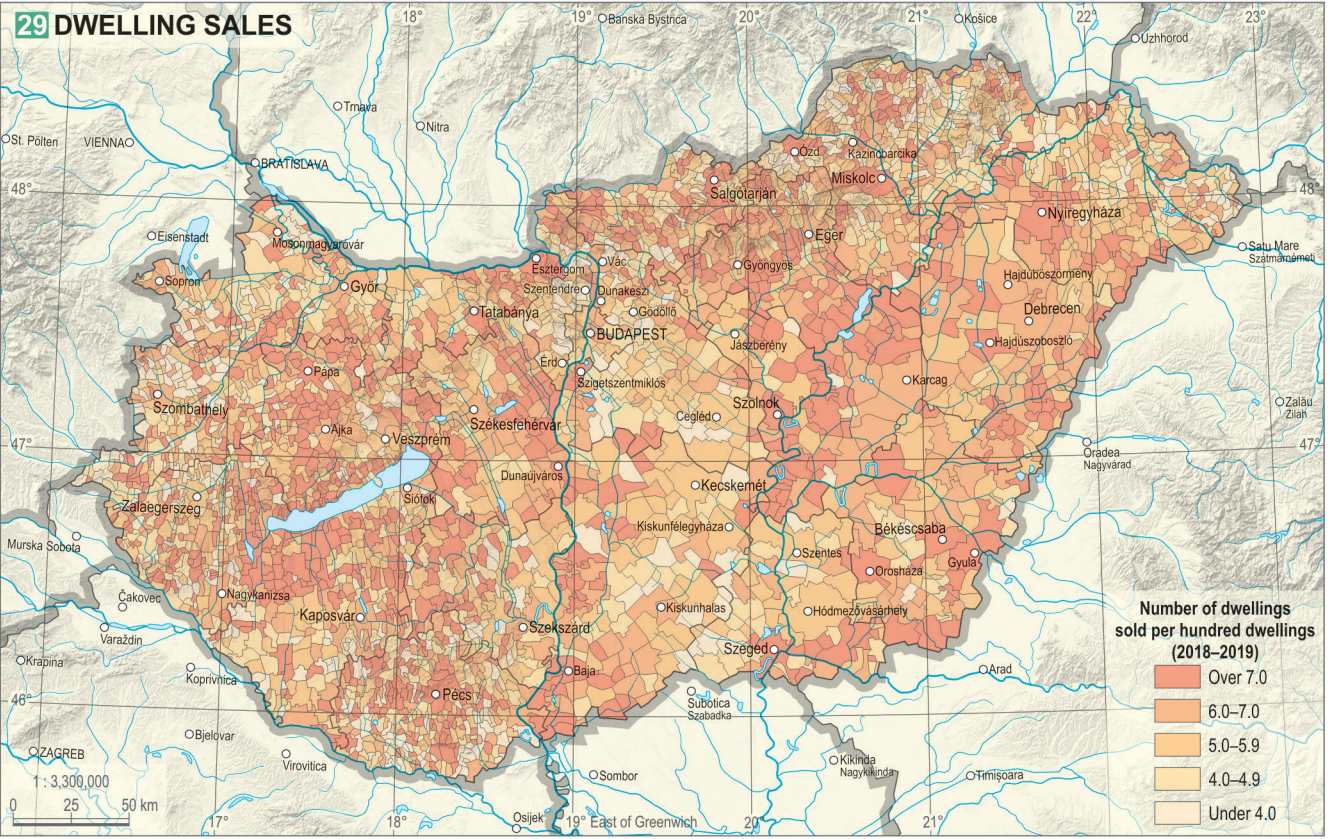
Housing market transactions also fluctuated widely. The number of second-hand dwellings sold annually fell from 190 thousand in 2007 to less than 90 thousand in the period 2010–2013. In 2014, a slow increase began, thus exceeding 160 thousand again.

The number of *dwellings sold* per hundred dwellings



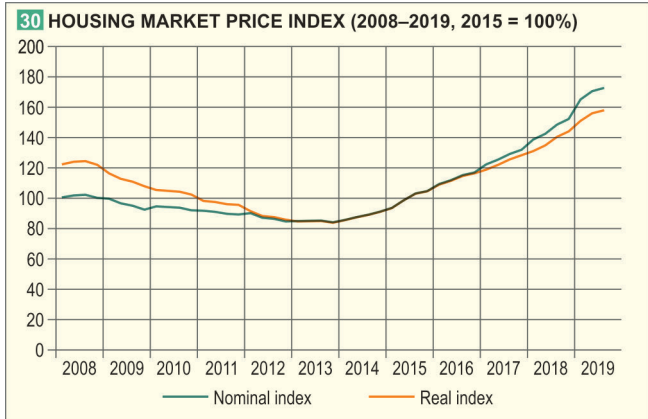
rose from around 2 at the beginning of the decade to 3.5 by 2017. The value of the indicator was typically higher in larger settlements, county and regional centres, Budapest and settlements on the shores of Lake Balaton. It was generally below average in small settlements (e.g. Baranya, Zala and Borsod-Abaúj-Zemp-

lén counties) [XII. 2. 1. 29.](#) There are a number of small settlements in Hungary where no houses have been sold for several years. In Budapest, further away from the city centre, the intensity of housing market transactions also decreased. Values rose significantly in the inner districts of the capital on the Pest side, and the



number of transactions also increased during the housing market recovery started in 2015 [48.](#) Several factors contributed to this: the emergence of new housing for investment purposes (partly for foreign customers) in the areas affected by urban rehabilitation, and the spread of short-term housing rental (Airbnb) re-

lated to tourism. Accordingly, housing transactions surged in districts VI, VII and VIII. In the outer districts of Budapest (particularly in districts XVI, XVII, XXII and XXIII), the number of housing transactions was generally lower than the average. The proportion of detached family houses in these outer districts is



high, and as people living in detached houses tend to be less inclined to move, housing transactions increased at a more moderate rate. In the agglomeration of Budapest, market intensity was significantly higher than the average in a number of settlements affected by extensive residential park developments (e.g. Dunakeszi, Szigetszentmiklós, Halásztelek and Érd). Thus, in these areas, the rapid population and housing construction growth seen in the mid-2000s resumed in the second half of the 2010s.

During the housing crisis and the subsequent decline in prices (until 2014), dwelling prices fell by 17% [XII. 2. 1. 30.](#) The inflation-adjusted value of dwellings decreased by 32% in five years. The price trend reversed in 2015, but it took another two years for real dwelling prices to reach the average of 2008.

However, all this took place with a significant spatial realignment. In areas with favourable housing market conditions, the value of dwellings increased to at least double the level seen ten years previously, whereas in other places prices could not reach the 2008 level even until 2019 [XII. 2. 1. 31.](#) In addition to Budapest, the winners of the realignment of market price ratios were some major towns in Western and Central Transdanubia (Győr, Veszprém, Szombathely and Székesfehérvár), some settlements at Lake Balaton, and some smaller settlements where large-scale price increases reflected the low initial values. In the eastern half of the country, prices only rose rapidly in Kecskemét, Szeged and Debrecen, and these cities also stand out from their surroundings in terms of price level.

In addition to Budapest and the regional centres, the surroundings of Lake Balaton and suburban settlements were also characterised by high housing market prices in 2019 [XII. 2. 1. 32.](#) In some places, price levels in suburban settlements exceed the price levels in the central settlement (e.g. Pécs, Dunaújváros). Similarly, the average price of dwellings in two settlements in the agglomeration of Budapest (Telki and Üröm) exceeded that of the most expensive districts of Budapest. As housing prices in the city centre increased significantly, the price level in District V on the Pest side approached that of the traditionally most expensive districts in Buda (I, II, XII).

The upswing in the housing market along the north-western border can be attributed to the effects of cross-border suburbanisation, which was reflected in both the prices of dwellings and the intensity of housing construction (e.g. Rajka). Commuting to Austria has tended to raise house prices in the settlements near Sopron (e.g. Harka), while the attraction of Győr in the labour market has also raised real estate prices in the surrounding settlements. In contrast, in 2018 there were about a thousand small settlements in Hungary where the average price of dwellings was less than 3 million HUF. Most of these villages are located in the areas of Baranya and Borsod-Abaúj-Zemplén with tiny villages, in Bereg, Szatmár, Bihar and in other border areas of the Alföld.

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FERENC GYURIS

†BÁLINT CSATÁRI
ISTVÁN CSERNICKÓ
GÁBOR DEMETER
GYULA DÉZSI
ZOLTÁN DÖVÉNYI
TAMÁS EGEDY
TIBOR ELEKES
GYÖRGY FARKAS
JENŐ ZSOLT FARKAS
SÁNDOR FRISNYÁK
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KATALIN SZENDE
JUDIT SZÉKELY
PÉTER SZILASSI
SÁNDOR SZÜCS
PATRIK TÁTRA

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TIBOR TINER
GÁBOR TOLNAI
GÉZA TÓTH
PÁL PÉTER TÓTH
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