ORIGINAL PAPER Received: 01.10.2021

Accepted: 02.11.2021

DISPERSED PRIVATIZATION OF COUNCIL HOUSING: SOME STRUCTURAL EFFECTS IN THE MUNICIPAL HOUSING STOCK IN OLSZTYN, POLAND

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ABSTRACT

Council (public) housing privatization, as the basic instrument for transforming housing systems, has significantly affected the tenure structure and created millions of new owners across Europe. In Poland, the concept of the dispersed privatization was adopted and implemented in the long term primarily through preferential sales of council dwellings from the municipal housing stock to sitting

The aim of the study was to analyze the effects of the dispersed privatization of municipal dwellings in the spatial and ownership structure of the municipal housing stock of the city of Olsztyn in Poland. The results showed that poorly controlled processes of the dispersed privatization of municipal housing caused unfavorable structural effects in the surveyed housing stock. The stock has shrunk significantly, losing buildings in better locations and conditions and the undesired fragmentation of municipal ownership and its mixing with private ownership has increased. The results and proposals are important to other cities and countries facing the challenge of slow privatization of public housing.

Keywords: housing privatization, council dwellings, municipal housing, public management, cities

INTRODUCTION

Council housing privatization in Poland primarily involves transferring the ownership rights to dwellings held in municipal housing stock (MHS) to private entities. Through the market-based housing reallocation mechanism, it was intended to play a key role in shaping local housing markets and provide an opportunity to alleviate significant public housing problems from the previous system that emerged after this stock was taken over from the State Treasury and during the transition to a market economy. Since the beginning of the transformation period, the primary privatization form of municipal dwellings has been their sale to sitting tenants. From the point of view of rational MHS management, taking into account the obligations of municipalities to meet the housing needs of low-income households and other vulnerable social groups with the help of this stock, such privatization has shown inconsistency with other elements of local housing policy and has caused numerous social and economic controversies.

One of the reasons for many privatization problems is the improper manner of its implementation.



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The processes of selling municipal dwellings have been conducted almost exclusively in an uncontrolled manner, using the dispersed privatization method, where any eligible tenant could purchase his or her housing unit in any building. This privatization method led to a gradual scattering of municipal housing ownership, the initial effect of which was to divide MHS into two segments. The first (S1) Segment includes municipal dwellings in buildings which constitute the sole property of local authorities. In this segment, the municipality, as the only owner, has full autonomy in making decisions and performing property management activities. The second (S2) Segment of MHS includes municipal dwellings in buildings owned by Homeowners' Associations (HOAs). Here the municipal ownership is connected to the respective co-ownership shares in the land and common parts of the building (as the common property), which are jointly owned by all the dwelling owners. In these buildings, the municipality, as one of the many dwelling owners and a mandatory HOA member, has limited impact on decisions and management activities concerning the common property. The limitation is determined by the size of the municipality's share in the common property that is expressed by the ratio of the floor area of municipal dwellings to the floor area of all units in the HOA building. Observation of practice shows that dispersed privatization of municipal dwellings changes not only the size of the MHS, but also its internal structure, due to the flow of buildings from the S1 to the S2 Segment and the gradual shrinkage of the S2 Segment as a result of the exit of municipalities from HOAs after selling off the last dwellings in those buildings. Structural changes in MHS caused by such privatization, although common, have not yet been studied more intensively in the space of individual municipalities.

The main aim of this paper was to analyze the effects of the dispersed privatization of municipal dwellings in the spatial and ownership structure of the MHS of the city of Olsztyn in Poland. This type of analysis is of great importance because the privatization of municipal housing, by continuously modifying the spatial and ownership structure

of the MHS, has considerable implications for the sustainable spatial development of large urban areas, as well as for effective governance (decision-making) and management of those housing assets. Furthermore, these effects influence the extent to which municipalities fulfil their statutory obligations to meet the housing needs of local communities.

Following the Introduction, this paper contains four sections. The first section outlines the literature review on the premises and effects of municipal housing privatization in Poland; the second section induces material and methods used for achieving the aim of the study; the third section presents and discusses the results of the empirical research, while the fourth section concludes the results and formulates recommendations for future research.

LITERATURE REVIEW

Privatization of public housing in the European perspective

The late 20th century marked a turning point in both Eastern and Western European housing policies and other continents. Europe, Australasia and the USA were characterized by a receding involvement in public housing and a general instability within different housing systems in the 1980s, and this trend has continued through the 1990s and into the new century [Forrest & Lee, 2003; Gruis et al., 2009]. As part of these changing policies, a significant portion of public housing stock was sold to tenants [Jones & Murie, 2006]. Public housing privatization has significantly affected the tenure structure and created a new class of homeowners in Western, Central and Eastern European countries. In Western Europe, abandoning public housing since the mid-1970s was motivated by an ideological turn to the right and by the effort to decrease public spending by reducing the welfare state. The premises and effects of council housing privatization in Western Europe has been well documented [e.g. Doling, 1994; Boelhouwer et al., 1997; Priemus et al., 1999; Priemus & Dieleman, 2002; Goodlad & Atkinson, 2004; Aalbers & Holm, 2008; Scanlon & Whitehead, 2008; Holm, 2011; Elsinga

et al., 2014; Disney & Luo, 2017; Kitzman, 2017]. In Central and Eastern European (CEE) countries, privatization of public housing was introduced more than a decade later, around 1990, as part of a broader process involving a reduction in the role of central governments and public spending on housing, deregulation and decentralization of housing services associated with the transition to a market economy [e.g. Clapham et al., 1996; Struyk, 1996; Lux, 2003; Tsenkova & Lowe, 2003; Mandič, 2010; Hegedüs et al., 1996, 2013; Lux & Sunega 2014; Lis & Zwierzchlewski, 2015; Pojani & Baar, 2016; Broulíková & Montag, 2020, Muczyński et al., 2021]. Notwithstanding the differences between the CEE countries, common features of public (council) housing privatization in these countries include the following: the dominance of selling dwellings at heavily discounted prices (or even giving them away for free) mainly to sitting tenants, the large proportion of low-income households and/or those with low ownership awareness among purchasers of privatized units and the generally poor physical condition of the transferred housing stock, which consisted to a great extent of deteriorated multifamily buildings with neglected repairs and serious technical and functional deficiencies [UNECE, 2006, pp. 6-8]. The rules and scale of the discussed privatization were very different in the individual CEE countries. For example, in Estonia, Romania and Slovakia, large-scale privatization of former public housing took place mainly because of the application of the tenants' right to buy. The legislation defined the general terms for privatization and municipalities had only limited possibilities to influence the scale or the fundamental conditions of privatization. In contrast, in the Czech Republic and Poland, the scale and speed of privatization were much more modest. Tenants in public rental housing did not receive the unrestricted right to buy, and municipalities could decide for themselves the scale and terms for housing privatization [Lux, 2003, p. 249]. Almost one-third of the public housing stock in CEE countries was privatized by 1995 [Hegedüs et al., 1996, p. 103]. Privatization culminated in most CEE countries around the year 2000, but in slow-privatizing

countries such as the Czech Republic and Poland, half of the MHS had been sold by 2002 and 2011, respectively. As a result, the share of public housing in their total housing stock had decreased from 38% and 32%, respectively, in 1991 to about 8% in 2011 [Muzioł-Węcławowicz, 2013, pp. 195–209].

Privatization of municipal dwellings in the Polish perspective

In Poland, privatization of MHS was initiated in the early 1990s and has continued with varying intensity to date. Since the beginning of the transformation period, there has been a tendency at the municipal level to withdraw from housing ownership through its privatization, understood primarily as the sale of housing units to sitting tenants. Among the motives (premises) for privatization of the MHS in Poland, four motives have played an important role [Kucharska-Stasiak et al., 2014, p. 124]:

- Ideological motive: striving to limit the role of public authorities, which resulted from political and systemic reasons and was in line with the direction of the market economy development;
- *Economic motive*: shifting maintenance costs to the private sector and obtaining funds from privatization;
- Pragmatic motive: greater care of the private owner for property (public property treated as "nobody's property"), as well as improving management efficiency;
- *Social motive* growing the group of people with residential property ownership.

In addition, the personal interest of new owners was to expand the secondary housing market by introducing the freedom of disposal of dwellings – the possibility of inheriting, selling, securing loans, etc. Until the end of 1994, privatization of municipal dwellings did not pose any special problems either for municipalities, which had not yet had a full recognition of the technical condition and maintenance costs of the housing stock acquired from the State Treasury, or for purchasers, as all users paid relatively little for the possessed dwellings regardless of whether they were their owners or tenants [Majchrzak, 2003,

pp. 115–117]. The situation changed dramatically in 1995 when the municipal budgets were burdened with the maintenance costs of the acquired housing stock while private owners of housing units were also made fully responsible for the maintenance expenses of the common property in buildings belonging to HOAs. These circumstances, combined with the implementation of the market economy rules, resulted in a stronger emphasis on the economic rationale for MHS privatization and made it much more complicated.

In view of the lack of funds in local government budgets to finance all tasks related to housing needs, most municipalities were not able to cope with the high costs of maintaining the communalized housing stock. In fact, the MHS management had to be subsidized by municipalities because the commonly charged uneconomic rents did not even cover the ongoing exploitation and maintenance costs of the stock. Moreover, it was found that a significant part of the MHS were substandard dwellings, located in buildings with poor technical condition, overpopulated or poorly equipped with basic installations. Hence, the main economic rationale for privatizing municipal housing became the reduction, if not cessation, of subsidies to MHS [Sobczak, 2001, p. 197]. An equally important premise was to limit the scale of the progressive decapitalization of the MHS as a result of many years of neglected repairs. If the MHS were to be completely destroyed, it would be necessary to incur even greater expenditures in the future, as restoring the same number of dwellings would be much more expensive than their renovation. An additional premise for the privatization in question was that municipalities would make ad hoc profits in the form of streams of one-time income from the sale of units and proceeds from property taxes. In general, the privatization of municipal dwellings was to lead to a situation in which the costs of exploitation, maintenance, repairs and management of privatized buildings and dwellings would be borne by new owners, and the funds thus obtained were to be allocated for the repairs of the existing stock and for the development of municipal housing and the creation of a reserve of vacant dwellings enabling rational management of MHS

in the long term [Muczyński & Turbaczewska, 2013, pp. 26–27]. From the point of view of future owners, the purchase of dwellings from municipalities was to mean a reduction in fees for their exploitation and ongoing maintenance, an increase in material interest in maintaining buildings in an appropriate technical condition and more effective financial management, which would make it possible to expand the scope of renovations.

As a result of privatization, approximately 1.4 million municipal housing units have been sold since 1991. The successive sales with very limited municipal construction resulted in the MHS shrinking nationally to less than 700,000 units at the end of 2020, representing less than 5% of all housing units in Poland [GUS, 2021]. The privatization of municipal, as well as company and cooperative housing, has caused significant changes in the tenure structure of the housing stock. According to Eurostat data, in 2010 up to 81.5% of the Polish population lived in houses and dwellings for which they held the ownership title, while the EU average was 70.7% (from 53.2% in Germany to 97.5% in Romania). Even in the United States, where homeownership is strongly promoted, only 66.2% of housing units were occupied by their owners [Kucharska-Stasiak et al., 2014, p. 124]. The quantitative changes in the MHS as a result of privatization caused not only a reduction in the number of recovered units but, above all, unfavorable changes in the qualitative structure of MHS [Korniłowicz, 2005, p. 49; Cesarski, 2009, p. 43; Korniłowicz & Uchman, 2011, p. 26; Zaniewska et al., 2014, p. 55], since almost 75% of the units bought back were dwellings in buildings with the best technical condition or attractive location. As an effect of privatization of the best dwellings, the MHS in buildings under exclusive municipal ownership (Segment S1) had a much worse structure than dwellings in HOAs (Segment S2), as it consisted in 2007 of 67% [Korniłowicz & Żelawski, 2007, p. 39] and in 2011 of 69% [Myna, 2014, p. 48] of dwellings built before 1944, while an increasing percentage of buildings are either eligible for demolition or for major renovations for which municipalities could not find funds in their budgets. Thus, such a sales policy

did not contribute to improving the condition of the MHS, as the largest repair backlog accumulated in buildings not covered by the privatization process. The deterioration of the quality structure of municipal dwellings can significantly impede the proper MHS management due to the growing shortage of funds from rents [Żelawski, 2005, pp. 56–57], which poses a significant threat to municipalities' ability to finance renovation and modernization work in both exclusively municipal and common buildings.

Under pressure to reduce subsidies and stop the decapitalization process of the MHS, municipalities decided on preferential sales prices for dwellings, which on average ranged from 5% to 20% of market value and sometimes even less [Zaniewska et al., 2014, p. 55]. Such prices undermined the economic viability of privatization and caused that the revenues from it could not have a significant impact either on financing the renovation of the existing MHS or on acquiring new or adapted municipal dwellings, especially since funds from the sale of dwellings were generally used outside the municipal housing sphere [Muczyński, 2010, p. 52]. This had a negative effect on the economics of MHS management and on the technical condition of the stock and, in the absence of funds for its reconstruction, the housing support provided by municipal governments became increasingly limited. The lengthening waiting time for the rent of municipal dwellings is evidence of this because their allocations in recent years have covered less than 10% of the needs [Korniłowicz & Żelawski, 2007, p. 41]. As a result, the problem of MHS shortage intensified and most municipalities (by promoting the sale of dwellings at low prices) are increasingly failing to fulfil their mandatory housing tasks [Nowak, 2016, pp. 34–37]. Problems of this type were also highlighted by the Supreme Audit Office in Poland [NIK, 2009, p. 11], which has called for stopping the process of MHS shrinkage.

Low sales prices of municipal dwellings resulted in high interest in buying out the units by both indigent and well-to-do tenants, who found it profitable to buy an occupied dwelling, if only for speculative reasons. As a result, there has been widespread sale of public housing through the dispersed method of privatization, resulting in a huge number of public-private HOAs (Segment S2). The scale of the phenomenon is evidenced by the fact that already in 2005 in more than half of the number of municipal buildings at least one dwelling was privatized, i.e. there were owners and tenants living together in them. It subsequently became clear that a large share of the owners of the purchased apartments were low-income people (mainly the elderly), who not only did not have the means for renovation, but even are not always able to cover the costs of current maintenance of their dwellings. Moreover, many dwelling purchasers were unaware of their basic responsibilities as homeowners. It is recognized that, in this situation, the excessive dispersion of municipal property in many HOAs creates many risks and is a negative phenomenon [Majchrzak, 2005, pp. 215-219]. As Myna [2014, pp. 42-43] noted, the mixing of dwelling ownership in multifamily buildings hindered the management of the MHS and the accumulation of funds for major repairs, thus constituting one of the determinants of the decapitalization of this stock. First of all, municipalities did not solve the problems of either ongoing maintenance, or even the repair of MHS buildings [Muczyński, 2008, p. 27], while the decision-making processes in these matters became much more complicated, often slipping out of the control of local governments. Although the indigent owners effectively reduced the expenditure on maintenance of the purchased dwellings, the savings were ostensible because they were achieved at the expense of abandoning the necessary repairs of common buildings [Muczyński, 2017, pp. 282–283]. The attempt to shift the costs of improving the poor technical condition of these buildings onto the shoulders of indigent owners as a result of dispersed privatization, therefore raises the dangers of complete decapitalization of buildings belonging to HOAs and the emergence of many social problems in the long term. The excessive fragmentation of municipal ownership in many HOAs not only results in common property management problems but can also result in increased costs to maintain municipal shares in common buildings. This is especially true in cases where municipalities remain in HOAs formed by wealthy owners who can impose

very high costs of common property management on municipalities without the possibility of negotiating or planning them in budgets. Additional complications are created by the enormous scale of social and material diversity of the dwelling purchasers, as well as the varied economic capabilities of municipalities.

MATERIALS AND METHODS

The intended analysis of structural effects of dispersed privatization of municipal dwellings has been conducted in the MHS of the city of Olsztyn. This is a voivodeship capital city located in the northeast of Poland, which at the end of 2020 had 171,249 inhabitants and a housing stock of ca. 80 000 dwellings in total, 5% of which were owned by the municipality. To achieve the aim of the study, a multi-stage, top-down research approach combining different research methods was used. The research procedure included the following stages:

- 1. Collection and validation of source information (data) about the subject MHS and its privatization;
- 2. Processing of validated data and their targeted analysis using relevant analytical methods;
- 3. Presentation and discussion of the results obtained.

The first research stage used source materials such as annual reports on the implementation of the long-term municipal housing stock management programs (MHSMPs) of the city of Olsztyn for 2012-2020 and the detailed analytical data about HOAs (with the participation of the Olsztyn municipality) in MS Excel spreadsheet format for the years 2013, 2016 and 2019 obtained from the Municipal Housing Management Unit (MHMU) of the city of Olsztyn. As part of the validation of the municipal dwelling sales data, the annual report data was then compared to the corresponding 2016–2020 data obtained from the Property Disposal Department (PDD) of the City Office of Olsztyn. In order to fill the information gaps and gain a deeper understanding of the research problem, the direct interview method and the source documentation analysis method were used at this research stage.

A total of five open-ended interviews were conducted with managers and staff of municipal organizational units directly involved in the management and privatization processes of MHS in Olsztyn. Interviews were conducted during normal working hours at the seat of the surveyed units, MHMU and PDD.

In the second research stage, an analysis of the effects of dispersed privatization of municipal dwellings in the MHS of the city of Olsztyn from 2012 to 2020 was conducted. To visualize the spatial concentration of municipal dwelling sales in the study city, a dedicated map was developed using freely available QGIS software, version 2.18 [QGIS Development Team, 2015]. OpenStreetMap.org tiles were used as a reference data source to prepare thematic data [Dawidowicz et al., 2019, pp. 432-433]. In turn, to analyze the structural changes in the MHS under the influence of discussed privatization, analytical methods (tools) available in MS Excel spreadsheet were used, including standard and array functions. In the last stage, the research results were presented in the form of relevant tables, maps and charts.

RESULTS AND DISCUSSION

The analyzed MHS was originally transferred to the Olsztyn municipality in the early 1990s through communalization of state property along with statutory obligations to meet the housing needs of the local community. Since then, it has undergone significant quantitative and qualitative changes, the tenure structure of housing and the management organization system have been modified. In addition, there have been fundamental transformations in its environment. Many of the changes in the MHS were driven by dispersed privatization of municipal dwellings implemented consistently over a long period of time. The practical use of this privatization method was confirmed by the quantitative characteristics of the surveyed MHS (Table 1), which shows that in the years under study, on average, two out of every three municipal dwellings in Olsztyn were located in buildings owned by HOAs (Segment S2).

Table 1. Quantitative characteristics of the municipal housing stock (MHS) of the city of Olsztyn in 2012–2020

Year	Segment S1			Segment S2			MHS [in total]		
	Buildings number	Dwellings number	Floor area [m ²]	Buildings number	Dwellings number	Floor area [m ²]	Buildings number	Dwellings number	Floor area [m ²]
2012	158	1 626	60 696	679	3 859	176 488	837	5 485	237 464
2013	156	1 584	60 675	667	3 421	154 418	823	5 005	215 093
2014	146	1 538	58 464	674	3 293	148 658	820	4 831	207 122
2015	137	1 493	58 187	664	3 213	144 404	801	4 706	202 591
2016	133	1 459	56 167	662	3 124	139 958	795	4 593	196 125
2017	124	1 420	54 423	657	2 982	134 061	781	4 402	188 484
2018	115	1 384	52 620	652	2 848	126 691	767	4 232	179 311
2019	113	1 397	51 393	645	2 726	121 293	758	4 123	172 686
2020	113	1 409	51 462	638	2 608	115 552	751	4 017	167 014

Source: own preparation based on data obtained from the Municipal Housing Management Unit (MHMU) of the city of Olsztyn (2021).

Table 1 shows that the MHS of the city of Olsztyn at the end of 2020 consisted of 751 buildings with 4,017 municipal dwellings and a total floor area of 167,014 m², including in the segment solely owned by the municipality (Segment S1) there were 113 buildings (15.0%) with 1,409 dwellings (35.1%) and a total floor area of 51,462 m² (30.8%), whereas in the segment of HOAs (Segment S2), the municipality owned shares in 638 common buildings (85.0%) disposing of 2,608 dwellings (64.9%) with a total floor area of 115,552 m² (69.8%). The S2 Segment was by far dominated by large HOAs (97.4%) which owned buildings with more than three units, among which the largest number of buildings were those with 11 to 20 units (33.9%) and the smallest were those with more than 50 units (5.0%). The present size and structure of the MHS is an outcome of a clear and sustained declining trend of this stock between 2012 and 2020, both in terms of the total number of buildings (a drop of 10.3%) and dwellings (a drop of 26.8%), and in terms of total floor area (a drop of 29.7%). It should be noted that due to the negligible scale of investment and disinvestment in the surveyed MHS during the period in question, the revealed trend constituted, in principle, an exclusive effect of the implemented privatization (sale) of municipal dwellings. Decomposition of the discussed trend into its components shows, on the one hand, that the decline in the number of buildings

between 2012 and 2020 was several times higher in the S1 Segment (28.5%) than in the S2 Segment (6.0%). On the other hand, it was found that the decline in the number of dwellings in the S1 Segment (13.3%) during the period was much lower than in the S2 Segment (32.5%). This exposes the mechanism of dispersed privatization of the MHS in Olsztyn, which was uncontrollably extended to more municipal buildings, transferring them to the S2 Segment, while at the same time, the chaotic sales of a relatively large number of municipal dwellings in many HOA buildings was conducted, without taking well-coordinated efforts to complete the sale of municipal dwellings in greater groups of common buildings and effectively exit the municipality from HOAs.

An analysis of the effects of the discussed privatization in the surveyed MHS required gathering information about its size during the period 2012–2020. The quantitative characteristics of both planned and actual volumes of sales of municipal dwellings in Olsztyn are presented in Table 2.

The data in Table 2 indicate that during the period in question, the actual volumes of sales of municipal dwellings from the MHS of the city of Olsztyn varied from 101 to 474 units per year, while the total floor area of the units sold varied from 5,435 m² to 24,007 m² per year. It should be emphasized that the revenues received by the municipality from

Table 2. Quantitative characteristics of privatization (sales) of municipal dwellings from the MHS of the city of Olsztyn in 2012–2020

	Pl	anned volumes		Actual (realized) volumes			
Year	Dwellings number	Floor area [m ²]	Sales revenues [PLN]	Dwellings number	Floor area [m ²]	Sales revenues [PLN]	
2012	160	8 000	4 000 000	283	14 929	8 762 384	
2013	160	8 000	4 000 000	474	24 007	13 823 373	
2014	160	8 000	4 000 000	170	8 777	5 546 158	
2015	160	8 000	4 000 000	131	6 936	5 086 404	
2016	160	8 000	4 000 000	118	5 584	4 943 709	
2017	140	7 500	4 000 000	119	5 596	4 757 234	
2018	140	7 500	4 000 000	166	8 380	6 835 312	
2019	140	7 500	4 000 000	101	5 435	5 699 053	
2020	140	7 500	4 000 000	112	5 524	5 347 085	

Source: own preparation based on data obtained from the Municipal Housing Management Unit (MHMU) and the Property Disposal Department (PDD) of the City Office of Olsztyn (2021).

housing privatization, particularly high in 2013, were not allocated in the municipal housing sphere, in particular, they were not used to enlarge the shrinking MHS despite the persistent shortage of municipal dwellings for rent by households eligible for obtaining such housing assistance from the municipality. The total shortage of municipal housing (full-standard and social dwellings) in Olsztyn was 871 units in 2012 and 849 units in 2020, which represented 15.9% and 21,1%, respectively, of the entire MHS in those years. Municipal dwellings were sold without a public tender to willing tenants with rental agreements of indefinite duration, provided that the buildings in which they were located were not formally excluded from privatization. Such sales were made at discounted prices compared to the market value of the dwellings. Since 2014, the rates of such discounts for sales with a single payment ranged from 65% to 80%, while for instalment sales they ranged from 20% to 50%, depending on the period of construction of the buildings. Previously, discount rates were even more favorable, as for single-pay sales all eligible buyers received an 80% discount (or even 90% for heritages), while for instalment sales from 50% to 70%, depending on the building age. It should be added that initiating dispersed privatization of municipal housing by tenants seriously hinders the forecasting of this process, as

evidenced by the significant differences between planned and actual volumes revealed in Table 2.

As a synthesis of the preliminary research stage, the dynamics of changes in the number of dwellings in the MHS was compared with the dynamics of changes in the number of privatized (sold) dwellings from this stock. The comparison was made in relative terms by taking as a reference base (100%) the relevant data on numbers of dwellings from 2012 (Chart 1).

Chart 1 illustrates the mentioned sustained declining trend in the number of dwellings in the stock under the influence of privatization in the years 2012-2020, with the decline being more than twice greater in the S2 Segment (32.4%) than in the S1 Segment (13.3%), which translated into a relative decline in the number of dwellings in the entire MHS at the level of 26.8% (by 1,468 units in absolute terms). The dynamics of dwelling sales also showed an overall declining trend, but in relative measures they were more varied and significantly higher, as annual numbers of privatized dwellings varied in relation to the reference level (from 167.5% in 2013 to 35.7% in 2019). There were two periods of a marked increase in the number of municipal dwellings sold (the first in 2013, when 474 units were sold, and the second in 2008, when 166 units were sold). Increased sales in 2013 were due to the tenants' reaction to the rent

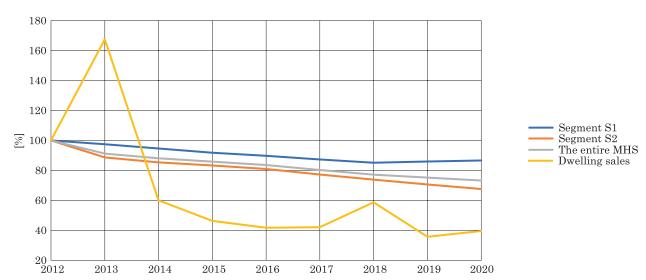


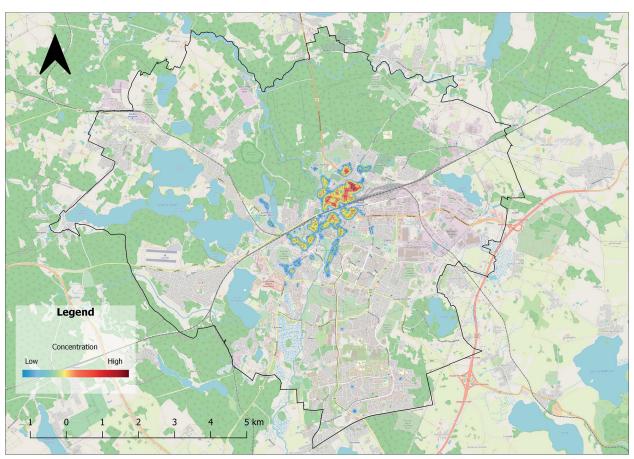
Chart 1. The dynamics of changes in the number of dwellings in the Segments S1/S2 and in the entire MHS of the city of Olsztyn and the dynamics in the number of privatized (sold) dwellings from this stock in 2013–2020 (reference base: 2012)
Source: own preparation.

rises introduced with the 2012 rent policy reform in the MHS and to the planned implementation of less favorable sales prices (discount rates) for privatized dwellings, which came into force in 2014. In turn, the much smaller increase in dwelling sales in 2018 was related to the extension of the list of buildings in the S1 Segment excluded from privatization.

In order to analyze the spatial effects of dispersed privatization of municipal dwellings in the MHS of the city of Olsztyn, a dedicated map of spatial concentration of sales of these dwellings in 2016–2020 was prepared. This map is presented in the generalized form below (Map 1).

Historical conditions and the small scale of post-World War II public housing investment have resulted in most MHS buildings in Olsztyn being located in the city center or in adjacent zones along major streets and the railroad. The spatial structure of the MHS is dominated by the oldest buildings, whose overall technical and functional condition is deficient, and this is visible in the city landscape. The highest concentration of municipal dwelling sales in 2016–2020 occurred in the Zatorze, Wojska Polskiego and Podleśna neighborhoods, especially including the following streets: Jagiellońska, Wojska Polskiego, Żeromskiego, Sienkiewicza,

Zamenhofa, Niedziałkowskiego, Poprzeczna, Reymonta, Limanowskiego and Kasprowicza (about 23.8% of all transactions). This area is one of the oldest in the city, located close to the center and well communicated with it, with buildings of historical value mainly created at the turn of the 19th and 20th centuries. A moderate concentration of such sales was recorded in the Śródmieście, Pojezierze, Kościuszki and Kętrzyńskiego neighborhoods, particularly on Kościuszki, Dworcowa, Katowicka, Mazurska and Warmińska streets (13.6% transactions). This area is marked by great diversity in terms of age and type of buildings, because there are both historic buildings and those built using large-panel technology from the late twentieth century. These estates are located in the city center and constitute its representative part. Many municipal dwellings sold in this area were located in the main streets of the city or near the old town square. The area is dominated by HOA buildings with single municipal dwellings. A much smaller, but still noticeable concentration of the analyzed sales took place in the housing estates of Grunwaldzkie and Podgrodzie, on Grunwaldzka and Warszawska streets (3.8% of transactions). This area is characterized by very high location and communication values. The remaining sales took place in smaller clusters



Map 1. A dedicated map of spatial concentration of municipal dwelling sales in the MHS of the city of Olsztyn in 2016–2020 *Source*: own preparation based on data obtained from the Property Disposal Department (PDD) of the City Office of Olsztyn (2021). Basemap: OpenStreetMap.org tiles,© OpenStreetMap contributors, licensed under CC BY-SA 2.0.

either on other streets in the listed neighborhoods or in other estates more peripheral to the city center. The structure of sold dwellings was dominated by 2-3 room units with an average floor area of $50-53 \text{ m}^2$. These sales did not include municipal dwellings located in 108 buildings formally excluded from privatization due to the municipality's statutory housing tasks, as well as due to other circumstances associated with these buildings (relative novelty, historic character, lack of independence of the premises, location in an area of planned transportation investments, etc.). It should be pointed out that the sale of municipal dwellings in buildings being in better technical condition, well located and connected with the city center and situated in mature neighborhoods in terms of technical and social infrastructure has noticeably

worsened the spatial structure of the MHS of the city of Olsztyn.

In the next steps, the effects of dispersed privatization of municipal dwellings on the ownership structure of the MHS in Olsztyn were analyzed. The General Dispersion Index (GDI) was proposed to synthetically assess the overall degree of municipal ownership structure dispersion in the MHS due to privatization. The GDI Index in a given MHS is determined by the following formula:

$$GDI = \frac{S2}{S1 + S2} \tag{1}$$

where: S1 and S2 are variables that characterize the S1 and S2 Segments, respectively, in a given MHS;

The proposed index ranges from 0 (when the MHS consists of only the S1 segment, i.e. there is no dispersion of municipal ownership in HOAs) to 1 (when there are no buildings in the MHS that are exclusively owned by the municipality and all municipal dwellings are in buildings owned by HOAs). The GDI index was determined for the MHS in Olsztyn in three variants (specific types), in which the following parameters have been taken as variables describing the S1 and S2 Segments: (1) number of buildings (GDI-BN index), (2) number of dwellings (GDI-DN index), and (3) total floor area (GDI-FA index). The obtained values of these three specific types of GDI in the MHS of the city of Olsztyn in 2012–2020 are presented in Chart 2. This chart shows that the values of the GDI-BN index based on the number of buildings in both MHS segments tended to increase, indicating that the dynamics of inclusion of municipal buildings to privatization (i.e. their flow from the S1 to the S2 Segment) was higher than the dynamics of the total removal of a municipality's shares in common buildings (i.e. the exit of the municipality from HOAs). In contrast, the values of the GDI-DN and GDI-FA indices based on the number of dwellings or floor area, respectively, showed a declining tendency.

This implies that in the process of dispersed privatization, municipal dwellings in the existing HOA buildings were sold off to a greater extent than those in municipal buildings, moving them to the S2 Segment after the first sale. These two opposing trends caused

by dispersed privatization thus exerted significant effects on the overall quantitative ownership structure of the MHS during the study period.

In the following, the changes in the qualitative ownership structure of the MHS in Olsztyn due to the dispersed privatization of municipal dwellings were examined by analyzing the percentage of the oldest age groups of buildings in this stock during 2012–2020. The results are presented in Chart 3. The results indicate that the process of dispersed privatization of municipal housing, reducing the MHS by 86 buildings (10.3%) between 2012 and 2020, did not improve the disadvantageous age (qualitative) structure of buildings in this stock. This is supported by the fact that the total percentage of buildings in the three oldest age groups (shown in Chart 3) was 92.2% in 2012 and 91.1% in 2020.

A noticeable decline in the percentage (about 1%) in this period occurred only in the group of buildings built between 1919 and 1944, while the shares of the other two oldest groups of buildings in the MHS were remarkably stable. A positive effect of the privatization conducted can be seen from the fact that the percentage of the mentioned oldest age groups of buildings in the S1 Segment is about 10% lower than in the S2 Segment. Therefore, accelerating the municipality's exit from HOAs using selective privatization can perceivably improve the qualitative ownership structure of buildings in the MHS.

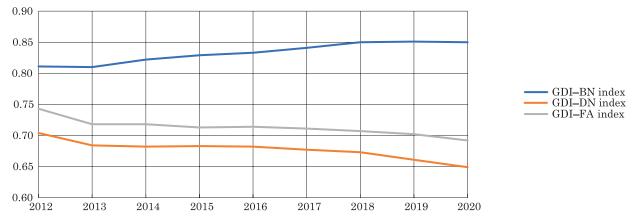


Chart 2. Values of General Dispersion Indices (GDI) of municipal ownership in the MHS of the city of Olsztyn in 2012–2020 *Source*: own preparation.

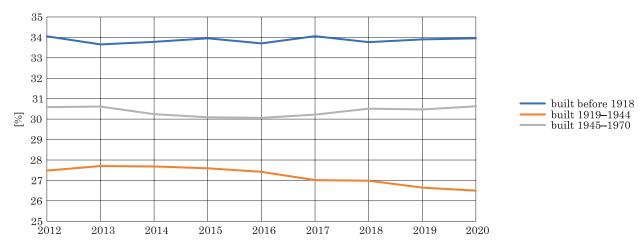


Chart 3. Percentage of the oldest age groups of buildings in the MHS of the city of Olsztyn in 2012–2020 *Source*: own preparation.

In the last step, the effects of dispersed privatization of municipal dwellings reflected in changes in the structure of municipal shares in common properties owned by HOAs with the participation of the city of Olsztyn in the S2 Segment of the surveyed MHS were examined. These changes, as structural effects of housing privatization, are shown in Chart 4.

This chart shows that, over time, HOAs in which the municipality had smaller shares held an increasing percentage. This means that dispersed privatization of municipal dwellings has led to an increasing fragmentation of municipal ownership in HOAs, which, as already mentioned, was a disadvantageous phenomenon for the municipality because it has resulted in numerous complications in governance and management of the MHS. It should be pointed out that the phenomenon of excessive fragmentation of municipal ownership in HOAs is relatively persistent with a tendency to grow, as evidenced by the increasing percentage of HOAs with a small number of municipal dwellings over time (Chart 5).

This tendency is also illustrated by an analysis of this phenomenon in absolute terms, as, for example, the number of HOAs in which the municipality owned

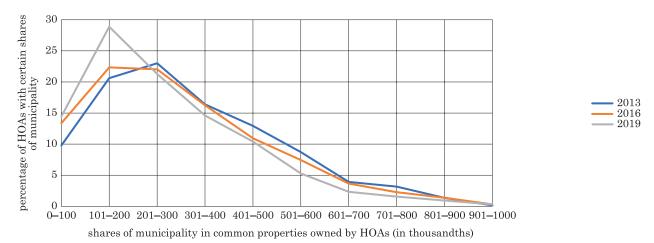


Chart 4. The structure of municipal shares in common properties owned by HOAs with the participation of the city of Olsztyn in the S2 Segment of the MHS in 2013, 2016 and 2019Source: own preparation.

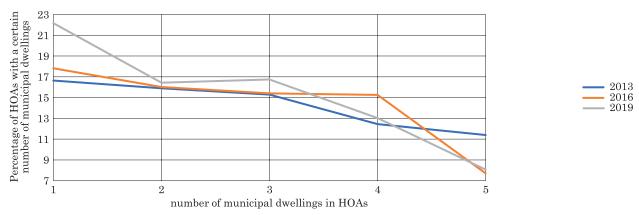


Chart 5. Percentage of HOAs with the participation of the city of Olsztyn with a small number of municipal dwellings in the S2 Segment of the MHS in 2013, 2016 and 2019

Source: own preparation.

only one unit increased from 102 in 2013 to 141 in 2019. In contrast, the number of HOAs in which the municipality owned two units remained at 106 in both 2013 and 2019. In conclusion, it can be stated that the reduction or elimination of excessive fragmentation of municipal property in the surveyed MHS requires implementing selective privatization procedures associated with active rent and renovation policies, as well as with a policy of intentional tenant relocation within the stock, which is facilitated by the amended legal regulations.

CONCLUSIONS

Privatization of public (council) housing is a global phenomenon, associated with the evolution of housing systems as a result of changes in the understanding and perception of housing in relation to the responsibility of public authorities to citizens. It has significantly affected the tenure structure in many housing markets, creating millions of new homeowners in both the Western and the Central and Eastern European countries. Poland, like the Czech Republic, adopted the concept of long-term (slow) privatization of public housing, and the main role in this process was assigned to municipalities, which took over from the State Treasury both the tasks and resources in the area of public housing, creating, on their basis, the municipal housing stock (MHS).

In Poland, the primary privatization form of municipal dwellings located in MHS has been their sale to sitting tenants. As reported in the literature, the privatization processes of municipal dwellings, which in most municipalities have been conducted using the dispersed privatization method, did not have a well-defined and socially debated purpose and has proceeded in an uncontrolled manner, inconsistent with the laws of economics and determined by shortterm revenues or budget savings. Therefore, despite the rational premises for conducting them, these processes proved to be more difficult to implement in practice, bringing numerous risks and not entirely desirable effects. Moreover, the scale of accomplished privatization in many municipalities, with marginal investments in new communal construction despite obtaining significant revenues from the sale of dwellings, now raises a real threat that they will lose their ability to fulfil their most urgent own tasks in the housing field with the help of rapidly shrinking MHS.

Despite these problems, it is generally acknowledged that the privatization process of municipal dwellings cannot be stopped; they can only be rationally shaped in accordance with local conditions. From this perspective, an analysis of the effects of the dispersed privatization of municipal dwellings on the spatial and ownership structure of the MHS of the city of Olsztyn in 2012–2020 has been conducted in this paper. The results of this case study indicate the following empirical conclusions:

- 1. Due to the insignificant scale of investment and disinvestment in the studied MHS, the revealed trend of its shrinkage can be treated as an exclusive effect of privatization (sale) of municipal dwellings. Positive changes include a noticeable increase in the municipality's housing investment in 2019–2020, which stemmed the decline in the number of dwellings in municipal buildings.
- 2. The dynamics in the number of privatized municipal dwellings in Olsztyn demonstrated a high sensitivity to rent increases in the MHS and introducing less favorable sales prices (discount rates) for eligible purchasers of housing units. These dynamics indicated much less sensitivity to the later extension of the list of municipal buildings excluded from privatization.
- 3. Uneven allocation of the MHS in the urban space hinders sustainable city development (promotes ghettoization, social exclusion and segregation of low-income tenants). The dispersed privatization has noticeably worsened the MHS spatial structure (by losing in the MHS the best locations) and significantly complicated the revitalization of city areas dominated by public-private HOAs.
- 4. Dispersed privatization processes of municipal housing had unfavorable effects on the quantitative ownership structure of the MHS, leading to increased mixing of municipal and private property in a larger number of buildings. This occurred due to the faster rate at which municipal buildings were included in privatization than the rate at which the municipality exited HOAs.
- 5. The extensive sell-off of municipal dwellings, despite a significant reduction in the size of the MHS, has not improved the unfavorable qualitative (age) structure of buildings in this stock. This shows that at a more advanced stage of dispersed privatization it was extremely difficult for the municipality to dispose of shares (dwellings) in the oldest buildings with technical and functional deficiencies.
- 6. The dispersed privatization has led to increasingly fragmented municipal ownership in HOAs. The persistent occurrence of so many common buildings with single municipal dwellings in the MHS indicates that the poorly controlled privatization process has bogged down in HOAs.

7. Positive actions of the municipality in terms of privatization include the reduction of discounts on dwelling sale prices and the exclusion of a large part of the MHS from privatization. However, improving MHS management efficiency as an effect of housing privatization remains a controversial issue, as most HOA buildings are still managed by municipal entities.

Due to the fact that sales processes of municipal housing in Olsztyn showed many similarities in relation to other cities with a similar population or size of municipal housing stock, the obtained results in this case study may be treated as a contribution to broader reflections on the impact of dispersed privatization of municipal dwellings on structural changes in MHS of many Polish cities. The results and proposals in the paper could also be of interest to other countries facing the challenge of slow privatization of public housing.

In view of the need to reduce or eliminate the indicated undesirable structural effects of dispersed privatization, it is necessary to streamline the sale procedures of municipal dwellings by subordinating them to a local housing policy based on a strategic approach, including the determination of the size of the MHS necessary for municipalities to perform their public tasks in the housing area and not to be sold, as well as to introduce relevant limitations to this process with regard to both the subjects and the objects of privatization. For many years, the preferred solution in the literature has been the selective privatization method consisting of the sale of all municipal dwellings in thoroughly selected buildings. Although this method is more difficult to implement, it brings greater benefits in terms of proper MHS governance and management. The identification of social, managerial and governmental barriers of the selective privatization of municipal dwellings as well as the development of procedures, principles and ways of its effective implementation are therefore recommended directions for further research.

Author Contributions: Andrzej Muczyński: conceptualization, methodology, validation, investigation, resources, writing – original draft preparation, supervision; Sebastian Goraj: text editing.

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