

TRANSFORMATION OF THE MULTI-OWNED HOUSING STOCK MANAGEMENT SYSTEM: A CASE STUDY OF UZBEKISTAN

Khurshidjon Kakhramonov^{1✉}, Andrzej Muczyński^{2✉}

¹ ORCID: 0000-0002-3242-2481

² ORCID: 0000-0003-3884-5239

¹ Tashkent State University of Economics

Islam Karimov Street, 49, 100066, Tashkent, **Uzbekistan**

² University of Warmia and Mazury in Olsztyn

Romana Prawocheńskiego Street, 15, 10-720 Olsztyn, **Poland**

ABSTRACT

Motives: The housing management system in Uzbekistan faces significant inefficiencies in service delivery, infrastructure maintenance, and financial sustainability. Many multi-owned residential buildings, particularly those constructed during the Soviet period, require urgent renovations and modernization efforts. However, the fragmented nature of housing governance and the absence of effective regulatory mechanisms hinder the implementation of comprehensive management strategies.

Aim: The research focused on analyzing the transformation of the multi-owned housing stock management system in Uzbekistan, identifying key challenges, drivers, and opportunities for improvement. This research seeks to provide a comprehensive evaluation of the current state of housing governance and explore innovative management strategies that enhance efficiency, sustainability, and stakeholder engagement.

Results: The research identifies key challenges and opportunities in transforming Uzbekistan's multi-owned housing stock management system. The findings reveal persistent governance inefficiencies, financial instability, and limited adoption of digital technologies. Despite recent policy reforms, their impact remains ambiguous, and homeowner engagement in decision-making processes is low. The research highlights the urgent need for enhanced regulatory frameworks, increased financial transparency, digitalization of management processes, and sustainable housing practices. These results provide a foundation for recommendations aimed at improving efficiency, service quality, and long-term sustainability in the housing sector.

Keywords: multi-owned housing stock management, urban development, Uzbekistan, homeowner's associations, management organization

INTRODUCTION

The most important socio-economic task, irrespective of the nature of the national economy and the state structure, is to create conditions aimed at increasing the level of provision of the population with the living space necessary for the development of human potential and further increasing the welfare of the nation within the framework of the implementation of national projects. As a result of the implementation of the planned measures, the economy should become high-tech, labor productivity should increase, and the quality of life should improve. At the same time, the set goals cannot be achieved without a qualitatively new approach to the formation of housing policy. As a result, measures aimed at improving housing policy should first of all be oriented towards the needs and value prerequisites of a particular society. An important and main task facing state authorities and subjects of the housing stock management system is the organization of effective management, maintenance and smooth functioning of the housing stock, as the condition of the housing stock is an indicator of socio-economic development and well-being of the population. The organization of an effective housing stock management system requires the interaction of all system participants, starting from state authorized authorities, resource providers, management organizations and homeowners.

The diverse structure of the housing stock makes the management of this sphere quite a complex task, as each object in the stock is unique and has its own peculiarities in layout, construction and degree of wear and tear. And the presence of multiple owners, multiple interconnections of resource supplying and servicing organizations and the presence of a multi-level system of financial flows complicates the already complex management process (Nurimbetov & Kakhramonov, 2022).

Uzbekistan, like many post-Soviet states, has undergone significant economic and institutional transformations since gaining independence. However, the housing management sector remains largely underdeveloped, with fragmented institutional responsibilities and inefficient financial mechanisms. The transition from a centrally planned economy to a market-based system has led to the privatization of housing stock, resulting in a multi-owned property structure that requires new governance approaches. The presence of multiple property owners, complex financial flows, and the need for coordinated management of shared resources have further complicated the administration of residential buildings.

Recent policy reforms in Uzbekistan aim to modernize the housing management system by introducing decentralized governance models, promoting homeowner associations, and integrating private sector participation. However, the effectiveness of these reforms remains uncertain due to persistent challenges such as low financial transparency, weak institutional capacity, and limited public engagement. Additionally, the slow adoption of digital solutions in housing management further exacerbates inefficiencies, preventing the sector from fully benefiting from modern technological advancements.

The main aim of the article is to analyze the transformation of the multi-owned housing stock management system in Uzbekistan, examining key challenges, policy reforms, and emerging trends. The study seeks to assess the effectiveness of current governance structures, financial mechanisms, and regulatory frameworks, while identifying opportunities for innovation and improvement. By evaluating best practices and international experiences, the research aims to provide evidence-based recommendations to enhance the efficiency, sustainability, and resilience of Uzbekistan's housing management system.

LITERATURE REVIEW

Theoretical foundations of multi-owned housing stock management in the Republic of Uzbekistan

The management of multi-owned housing stock, encompassing condominiums, apartment buildings, and cooperative housing, has emerged as a critical area of study in urban development and housing policy, particularly in transitioning economies. Multi-owned housing refers to properties where individual units are privately owned while common areas are collectively managed, necessitating effective governance and maintenance systems. The transformation of such systems in post-socialist states like Uzbekistan reflects broader socio-economic shifts, including privatization, decentralization, and the integration of market-based mechanisms. This literature review examines key themes relevant to understanding the transformation of multi-owned housing stock management, focusing on housing policy reforms, property management practices, and the post-socialist context, with an eye toward Uzbekistan's unique trajectory.

The term “housing stock” has been integral to housing legislation in numerous countries for decades. However, its precise origin and definition have often been ambiguous. This ambiguity extends to both scientific literature and regulatory frameworks.

Housing policy reforms in post-socialist countries have been extensively documented as a response to the dissolution of centralized systems following the collapse of the Soviet Union. Marcuse highlights how privatization in Eastern Europe and Central Asia shifted housing ownership from state-controlled entities to individual households, often without corresponding institutional frameworks for management (Marcuse, 1996). In Uzbekistan, the rapid privatization of Soviet-era apartment blocks during the 1990s mirrors this trend, creating a patchwork of multi-owned housing stock requiring new governance structures. Clapham et al. argue that such transitions frequently result in a “management vacuum”, where the absence of clear regulations or homeowner

associations (HOAs) leads to neglect of common areas and infrastructure degradation (Clapham et al., 1996).

Studies like those by Tsenkova et al. emphasize that privatization alone does not ensure effective housing management (Tsenkova & Polanska, 2014). They note that in Hungary and other post-socialist states, the lack of financial mechanisms and resident participation hindered the maintenance of multi-owned properties. This resonates with Uzbekistan's context, where state-led housing provision has historically dominated, and the shift to individual ownership demands adaptive strategies. Davletov and Sharahmanova provide insight into Uzbekistan's housing sector, noting ongoing reforms aimed at modernizing housing and communal services, though their focus remains broader than multi-owned stock specifically (Davletov & Sharahmanova, 2020).

The governance of multi-owned housing (MOH) presents critical challenges that are deeply rooted in the dynamics of collective action. As housing privatization and decentralization processes unfold in countries like Uzbekistan, understanding the conditions under which homeowners engage in property governance becomes essential for ensuring long-term sustainability and community well-being. Recent empirical and theoretical advancements from comparative international contexts offer valuable insights into the social, psychological, and institutional factors shaping homeowner participation in MOH management. The role of property management in multi-owned housing is a key both developed and transitioning economies.

Multi-owned housing (MOH) governance inherently entails the joint management of common property and shared responsibilities among homeowners. As emphasized by Yau (2012), the fragmented ownership structure of MOH often leads to the classical collective action problem, where rational individuals are disincentivized from participating due to the non-excludability of collective benefits. This gives rise to both material free-riding (e.g., avoiding contributions to maintenance funds) and political free-riding (e.g., non-participation in decision-making), particularly in high-density

urban settings such as Hong Kong (Yau, 2011a; 2011b). Nevertheless, Yau's empirical findings challenge this deterministic outlook. By applying the Collective Interest Model (CIM), he demonstrates that participation is influenced by: self-efficacy (belief in one's ability to contribute meaningfully), group efficacy (belief in the community's ability to effect change), proxy efficacy (trust in intermediaries such as property managers or homeowner associations) and the perceived value of the collective good (Yau, 2013). This framework explains why some homeowners engage actively in management, despite rational-choice assumptions suggesting otherwise. These findings are particularly relevant in the Uzbek context, where homeowner's associations (HOAs) and management companies are still gaining legitimacy and trust.

Legal and policy frameworks also play a critical role in shaping governance outcomes. Leshinsky and Mouat (2015) argue that current property law and urban governance mechanisms often overlook the "community dimension" of MOH. Their proposed typology identifies three community affects – cosmopolitan, civic-citizen, and neighbourly – each reflecting distinct expectations of participation and inclusion. They contend that governance reforms must integrate these social realities, not merely legal compliance structures, to ensure socially sustainable outcomes.

This perspective aligns with findings from Yau (2011a), who observed that a sense of community significantly boosts participatory behavior. In the Uzbek context, where residential communities are often formed in post-Soviet high-rise housing, promoting civic identity and collective responsibility may be as important as institutional reform.

Muczyński (2023) provides empirical evidence from Poland, where MOH schemes often involve public-private homeowners associations with municipal co-ownership. His findings reveal that municipal ownership tends to negatively impact collective renovation decisions, due to misaligned incentives and decision-making asymmetries. The study underscores how even when legal frameworks mandate collective decision-making, actual outcomes depend on

stakeholder dynamics, coordination mechanisms, and power imbalances. These insights resonate with the Uzbek case, where local governments, former state landlords, and new private owners must navigate evolving governance structures. Understanding the interplay between formal authority and collective agency is therefore critical for designing policies that foster both effective management and democratic participation.

Muczyński (2024) provides an in-depth case study of long-term planning in the social housing sector through the lens of the municipal housing stock management program (MHSMP) in Olsztyn, Poland. His analysis reveals that while such programs are required by law to cover multiple components – stock forecasts, renovation plans, financial frameworks, sales strategies – they often remain overly formalized, fragmented, and disconnected from actual housing needs. He concludes that the lack of coherent, market-oriented strategic planning undermines the municipality's ability to meet social housing goals. He recommends adapting models of strategic business planning from the private sector – emphasizing proactivity, comprehensiveness, and responsiveness – to enhance housing stock management.

Lujanen (2010) complements this institutional analysis with a comparative legal study across 10 European and several non-European countries, highlighting barriers to regular maintenance and repair of common property in owner-occupied apartment buildings. For example, in many countries – especially in post-socialist states – owners associations are either optional or suffer from voluntary membership, making collective action difficult.

Taken together, these studies underscore that effective MOH governance requires more than legal restructuring or privatization. It demands: cultivation of participatory norms and social trust, institutional designs that enhance efficacy perceptions, recognition of community identity and collective interest and alignment between public and private stakeholders. For Uzbekistan, transitioning from state-dominated housing maintenance to resident-driven governance presents both risks and opportunities. Drawing

on international experiences, especially those grounded in contexts with similar post-socialist legacies (e.g., Poland), can provide a roadmap for reform that is both socially inclusive and administratively effective.

In contrast, the literature on post-socialist states often highlights challenges in establishing such systems. Struyk discusses how Russia and Ukraine struggled to transition from state-managed housing to homeowner-driven models, with issues like underfunding and lack of resident cooperation persisting (Struyk, 2000). These findings are pertinent to Uzbekistan, where Soviet-era housing stock – now multi-owned – faces similar maintenance and governance challenges. Ho and Gao further explore the evolution of homeowner associations in China (Ho & Gao, 2013), a context with parallels to Uzbekistan due to its centralized past, noting that successful transformation requires legal frameworks, resident education, and financial support – elements likely critical to Uzbekistan’s case.

In the scientific literature, the conceptualization and classification of housing stock have evolved over time. Litovkin, a prominent figure in the development of housing legislation in the former Soviet Union, proposed that housing stock should be categorized based on ownership rights and intended purpose. He further distinguished between primary and auxiliary housing stock, addressing the needs for both permanent and temporary accommodation (Litovkin, 1980).

Contrastingly, scholars such as Smirnov and Potyukov advocated for a more nuanced classification. They suggested that housing stock should be differentiated not only by ownership and purpose but also by the legal regime of the premises and their specific intended uses (Potyukov & Smirnov, 1981). These foundational perspectives have significantly influenced the formation of housing legislation, providing essential definitions and classifications.

In contemporary studies, the focus has shifted towards the management and operational aspects of housing stock. Mineeva offers a comprehensive definition, viewing housing stock as a collection

of diverse dwellings, each possessing unique characteristics that necessitate individualized management approaches (Mineeva, 2007). Similarly, Seferyan defines the housing stock of a large city as encompassing all residential premises within municipal districts, irrespective of ownership or technical purpose, aimed at fulfilling the populace’s housing needs (Seferyan, 2013).

Kruglik emphasizes the multifaceted nature of the housing sector, highlighting its complexity due to the interplay of economic and social interests, given housing’s fundamental role in human life (Kruglik, 2008). This perspective underscores the housing sector as a nexus where the interests of the public, private enterprises, and governmental bodies converge, influencing various management theories. Bardulin posits that housing management serves as a reflection of a nation’s social development level and quality (Bardulin et al., 2020).

Several Uzbek scholars have made significant contributions to the study of housing stock management and the housing and communal economy. Notably, researchers such as Nurimbetov (Nurimbetov & Kakhramonov, 2022), Khasanov (2018) and Sultanov (2020) have provided valuable insights into this field. Their work encompasses various aspects, including the integration of digital technologies in housing management, analysis of modern trends in housing and communal services, and the development of effective management systems within Uzbekistan’s housing sector. While these scholars have extensively explored organizational mechanisms, characteristics, and management methodologies, the concepts of “efficiency” and “effective management” within housing stock remain pertinent areas for ongoing research.

The reviewed literature underscores that the effective governance and maintenance of multi-owned and social housing stock cannot be achieved through technical solutions or legal reforms alone. Rather, it requires a multidimensional approach that integrates institutional design, enforceable legal mechanisms, strategic planning, and the active engagement of both private and public stakeholders.

Empirical evidence comparisons reveal that deficiencies in governance structures, decision-making frameworks, and financial enforcement are among the most persistent obstacles to sustainable housing management. At the same time, innovative models – such as emerging strategic planning frameworks in Polish municipalities – demonstrate that targeted legal and organizational reforms can significantly improve the long-term resilience of housing systems.

For countries like Uzbekistan, which are navigating the complex transition from centralized state provision to decentralized ownership and management, these findings offer a valuable comparative basis for policy learning and institutional adaptation. Embedding transparency, accountability, and strategic foresight into housing governance will be essential for ensuring both the physical preservation of the housing stock and the social sustainability of urban residential communities.

The current state of the management of multi-owned housing stock in the Republic of Uzbekistan

The housing stock constitutes a fundamental component of the housing sector, representing a complex system encompassing the reproduction, maintenance, and operation of residential buildings. This system integrates elements of the production sector, including construction, repair, reconstruction, and demolition, making its management a multidimensional challenge. The maintenance and repair of the housing stock exhibit distinct characteristics, which can be categorized into three main groups: economic, social, and technical (Kakhramonov, 2021a).

The economic dimension of housing stock management involves pricing mechanisms, tariff

regulation, and financial flows related to housing and communal services. These processes are characterized by a complex financial structure, where cost recovery and investment mechanisms play a crucial role in ensuring the sustainability of housing infrastructure. The efficient allocation of financial resources is critical for maintaining the operational stability of housing services and preventing deterioration of residential buildings (Nurimbetov, 2021).

The social aspect of housing management is particularly evident in multi-owned residential buildings, where residents represent diverse socio-economic groups. Variations in income levels, social status, and cultural backgrounds contribute to the complexity of the housing management process. These challenges are particularly pronounced in large urban areas, where demographic diversity leads to differing expectations regarding service quality, maintenance priorities, and governance structures.

The technical dimension of housing stock management encompasses the physical condition, infrastructure resilience, and modernization requirements of residential buildings. The degree of wear and tear, technological obsolescence, and energy efficiency standards significantly influence the need for periodic repairs, renovations, and upgrades. Implementing modern building technologies, predictive maintenance approaches, and sustainability-oriented renovations is crucial for ensuring the long-term viability of housing stock.

When conceptualizing the housing stock as a system, it is intrinsically linked to multiple sectors, including investment and construction activities, housing development, construction production, and housing and communal services (Nurimbetov & Kakhramonov, 2024). Therefore, the sustainable development of the housing stock necessitates the



Fig. 1. Relationship of the housing stock with different spheres
Source: own elaboration based on Author.

simultaneous and integrated advancement of these interconnected sectors, as illustrated in Fig. 1.

Considering the alignment of interests among all stakeholders in the housing construction sector, this domain can be characterized as a complex, interconnected system incorporating mechanisms for the recombination of housing stock, thereby facilitating the provision of housing services. The construction and subsequent operation of residential buildings encompass a series of production processes that require a continuous supply of construction materials, as well as preparatory work on construction sites, underscoring the necessity for the concurrent development of the construction production sector (Kakhramonov, 2021b).

In accordance with the legislation of the Republic of Uzbekistan, the housing fund is defined as a collection of residential premises that comply with established sanitary, fire safety, and technical standards. As stipulated in Article 9 of the Housing Code of the Republic of Uzbekistan, these premises are designated for the permanent residence of citizens, as well as for regulated use as specialized housing facilities, including dormitories, maneuver housing, boarding houses for persons with disabilities, veterans, and elderly individuals. Additionally, Article 10 of the Housing Code classifies residential premises into several categories, including residential buildings, apartments in multi-owned buildings, living rooms, and other designated residential spaces.

In the Republic of Uzbekistan, the housing stock is classified based on ownership into two primary

categories: public and private. The structural composition of the housing stock is illustrated in Fig. 2. The public housing stock encompasses municipal, departmental, and communal housing, each of which exhibits distinct characteristics.

The municipal housing stock is managed by state authorities and is funded through taxation, compulsory contributions, and other payments allocated to the local budget. The departmental housing stock falls under the full economic and operational management of state-owned enterprises, institutions, and organizations. Meanwhile, the communal housing stock is financed either through allocations from the local budget or through the reallocation of resources from other housing sectors, including private, municipal, and departmental housing. This segment of the housing stock primarily serves socially vulnerable and low-income groups, providing rental-based accommodation to individuals who are not eligible for housing privatization.

The structural composition of Uzbekistan's private housing stock can be categorized into two primary groups: housing owned by individual citizens and housing owned by economic associations. The first category includes individually owned detached houses, constructed residential properties, and apartments within housing cooperatives, all of which have been acquired by private individuals in accordance with the legal provisions established by national legislation. The second category comprises residential properties acquired by cooperatives, public associations, and

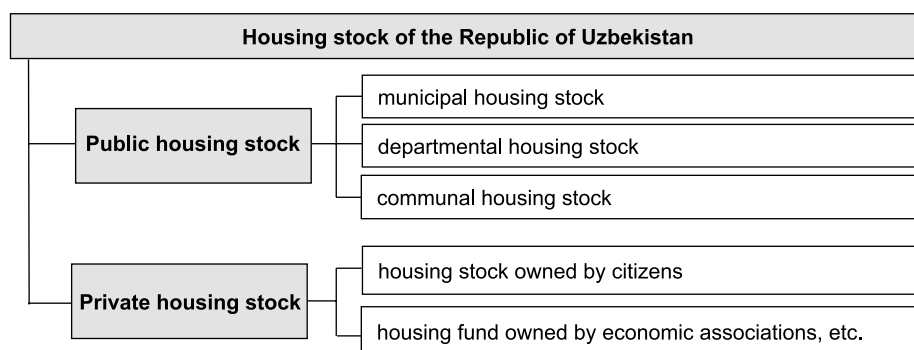


Fig. 2. Types of housing stock in the Republic of Uzbekistan

Source: own elaboration based on Author.

foundations through auctions or other legally sanctioned mechanisms.

A critical issue in housing management is financial instability. Maintenance and repair of multi-owned buildings require sustainable funding, yet many homeowners face financial constraints, resulting in underfunded maintenance programs.

MATERIALS AND METHODS

In this research, we employed a mixed-methods approach to comprehensively analyze the current state and transformation of the multi-owned housing stock management system in Uzbekistan. This approach integrates both quantitative data analysis and qualitative assessments to provide a holistic understanding of the subject matter.

Statistical data on the composition and ownership structure of Uzbekistan's housing stock from 2012 to 2023 were analyzed using descriptive statistics to identify trends and patterns. Data sources included national statistics from the Agency for Statistics of the Republic of Uzbekistan and financial reports from housing stock management organizations. This analysis aimed to provide a comprehensive understanding of the housing sector's evolution over the specified period.

By integrating these diverse methodologies, the research provides a comprehensive analysis of the multi-owned housing stock management system in Uzbekistan.

An analysis of the housing construction sector in the Republic of Uzbekistan reveals a significant expansion in recent years, marked by increased activity in both the construction industry and the development of social infrastructure. In 2023, the nation completed construction works valued at approximately 149.9 trillion UZS, reflecting a growth rate of 6.4% compared to the previous year (Fig. 3).

The capital city, Tashkent, stands out with the highest concentration of construction enterprises, accounting for 21.4% of the nation's total as of January 2024. Moreover, Tashkent-based large-scale developers contributed to 27.8% of the country's total construction output in 2023. Notably, small-scale construction organizations have also experienced growth. In 2023, small enterprises and micro-firms were responsible for 55.2% of the total construction work volume, indicating a 2.3% increase from the previous year.

These developments underscore the dynamic and evolving nature of Uzbekistan's construction sector, highlighting the significant contributions of both large and small-scale organizations to the nation's infrastructural growth.

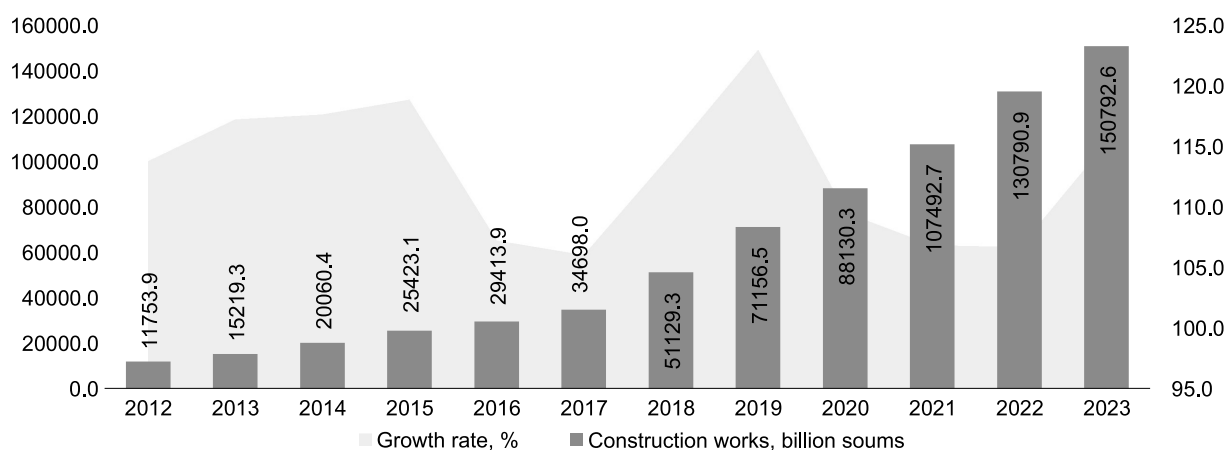


Fig. 3. Dynamics of construction works in the Republic of Uzbekistan
Source: compiled by the author on the basis of statistical data.

The construction market in Uzbekistan is characterized by significant segmentation and structural heterogeneity, shaped by the country's economic, geographical, and social development factors. The accelerated pace of residential construction has played a pivotal role in driving post-pandemic recovery, with commercial and industrial construction also returning to pre-pandemic levels. Recent trends indicate that the real estate market is emerging as a highly attractive investment sector, drawing increased interest from both domestic and international investors. Additionally, the growth in the production of building materials and the rising volume of newly commissioned residential and commercial spaces signal that Uzbekistan is experiencing a construction “boom”, further reinforcing the sector's contribution to national economic development.

In addition to construction activity indicators, it is crucial to examine the dynamics of the housing stock. As of 2023, the total housing stock in the Republic of Uzbekistan reached 692.5 million square meters. Between 2012 and 2023, the housing stock exhibited a growth rate of 147.4%, reflecting an average annual expansion of approximately 12 million square meters (Fig. 4). This consistent growth underscores the sustained development of residential infrastructure, driven by increasing urbanization and state-supported housing initiatives.

Housing commissioning indicators also exhibit a positive growth trajectory in this sector. In 2012, the total commissioned residential area amounted

to 10,162.2 thousand square meters, while by 2022, this figure had increased by 1.4 times, reaching 14,057.9 thousand square meters (Fig. 5).

The optimization of housing stock and housing construction in accordance with market dynamics is rarely prioritized in practice. As a result, the construction sector tends to focus on premium, elite, and business-class housing, often leading to an imbalance in housing availability across different socio-economic groups. This disparity contributes to the inefficient allocation of housing stock, resulting in an oversupply of certain types of residential units and a shortage of others, thereby exacerbating issues of affordability and accessibility in the housing market.

An analysis of the dynamic trends in the commissioning of residential buildings in Uzbekistan, along with the identification of growth rates at both the state and non-state levels, indicates that housing construction by individual developers is progressing at a significantly higher rate. However, it is important to note that the rental housing sector remains underdeveloped, particularly in urban areas. This limited expansion of the rental market restricts housing options for different income groups and reduces population mobility, potentially hindering labor market flexibility and economic dynamism.

An analysis of investment sources in housing construction reveals that private funds constitute the predominant share, accounting for 99% of total investments, while budgetary allocations contribute only 1%. A closer examination of the composition

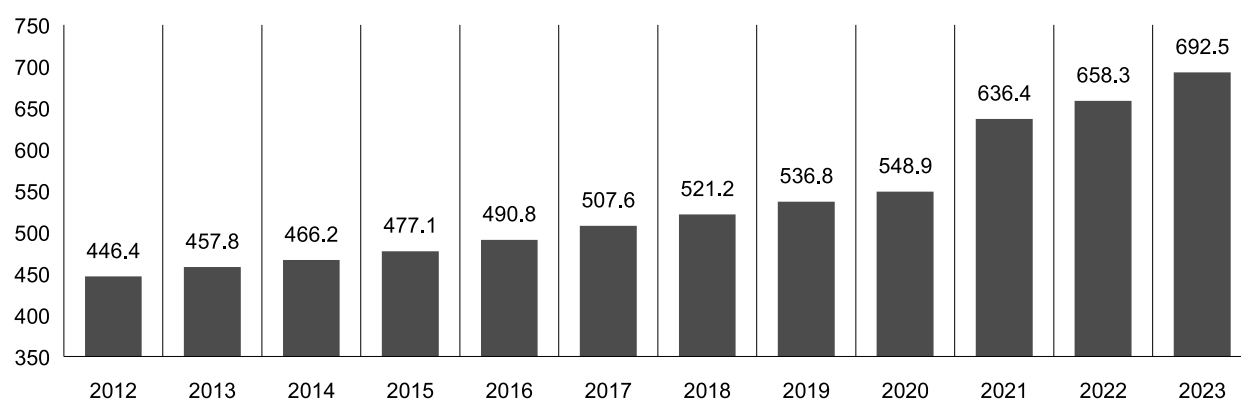


Fig. 4. Dynamics of housing stock development in Uzbekistan (million square meters)

Source: compiled by the author on the basis of statistical data.

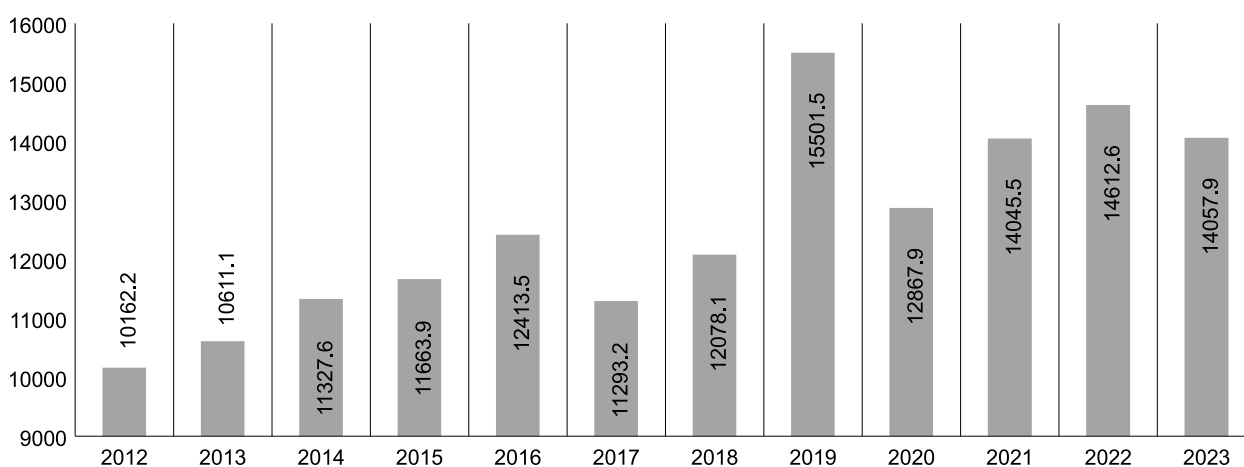


Fig. 5. Dynamics of growth of housing commissioning in Uzbekistan (thousand square meters)

Source: compiled by the author on the basis of statistical data.

of private financing indicates that household funds represent the largest share at 81.6%, followed by bank loans, which account for 11.5%. Additionally, private sector investments contribute 5.8% to the total financing structure. These figures underscore the significant reliance on private financial resources in Uzbekistan's housing sector, highlighting the limited role of state funding in residential construction.

The current phase of housing construction in the Republic of Uzbekistan is characterized by a significant expansion in residential building projects and the emergence of innovative financial mechanisms aimed at enhancing citizens' access to housing in both the primary and secondary markets. A detailed analysis of sectoral growth rates indicates that the construction industry has been among the fastest-growing sectors of the Uzbek economy over the past three years, solidifying its status as a key driver of national development.

Since gaining independence, the government of Uzbekistan has undertaken a gradual reform process in the housing and communal services sector. For an extended period, this sector was characterized by low profitability, with financing primarily based on a residual principle. It is essential to recognize that, both historically and in the present, the housing and communal services sector remains a resource-intensive and socially significant component of the national

economy, playing a crucial role in ensuring socio-economic stability and sustainable urban development.

The housing management system is conceptualized as a structured framework comprising controlling subsystems and interrelated elements, including goals, objectives, functions, methods, and management principles, all of which exert influence over the controlled subsystem. The system's subsystems encompass regulatory bodies (such as ministries, departments, and inspectorates) and management entities, including management companies, homeowner's associations, and direct management structures.

In accordance with Article 8 of the Law "On the Management of Multi-Owned Houses" in Uzbekistan, three legally sanctioned models for the management of multi-owned buildings are recognized: (1) direct management by property owners, (2) management by a legal entity (a management company or individual manager), and (3) management through a homeowner's association. These approaches provide flexibility in governance structures, allowing adaptation to the regulatory, financial, and operational conditions of the housing sector.

It is noteworthy that professional management companies and management service organizations exhibit a high degree of organizational similarity, resulting in limited differentiation within the sector.

Both entities function as legal entities and are established as commercial organizations (hereinafter referred to as management companies).

The growth trajectory of management companies in 2021 demonstrated a substantial increase, with the number of residential buildings under their management reaching 7,138. In contrast, homeowner's associations exhibited comparatively lower growth dynamics, managing 7,149 residential buildings during the same period. The convergence in the number of properties managed by management companies and HOAs highlights an evolving trend in the governance structure of multi-owned housing stock, necessitating further analysis of their operational efficiency and long-term sustainability.

In 2022, the growth rate of management companies demonstrated a significant increase, with the number of properties under their management reaching 10,077. In contrast, homeowner's associations (HOAs) exhibited relatively slow growth, managing only 355 properties, a substantially lower figure than that of management companies.

As of 2023, the Republic of Uzbekistan has a total of 39,691 apartment buildings, encompassing over 1.3 million residential units. Among these, 36,109 buildings (91%) are managed by management companies, while 1,242 buildings (3.1%) are overseen by homeowner's associations and 792 buildings (2%) are under direct management by owners. Additionally, 783 apartment buildings (2%) are currently managed by other organizations, while 765 buildings (1.9%) remain in the process of selecting an appropriate management model.

These statistics underscore the dominance of management companies in Uzbekistan's housing sector, highlighting the relatively limited role of homeowner's associations and the emerging need for diversified management approaches to enhance governance efficiency and service quality.

RESULTS AND DISCUSSION

The management of multi-owned housing stock is a complex task that requires an integrated approach to construction, modernization, repair and management. However, the lack of effective market mechanisms for the expanded reproduction of housing and communal facilities in the Republic of Uzbekistan creates additional economic costs. These include violations of normative terms, schedules and volumes of repairs, as well as an increase in the level of operating costs. The effective management of multi-owned housing stock necessitates the establishment of a flexible and adaptive system capable of responding to dynamic economic and regulatory conditions. This system should provide a sustainable economic framework to facilitate modernization and enhance the efficiency of housing management. Furthermore, its structural components should contribute to the development of the regional housing market, thereby improving the quality and efficiency of housing and communal services while fostering a more competitive and resilient housing sector.

Effective governance of multi-owned housing (MOH) is contingent upon well-designed institutional frameworks that address the inherent complexities of shared property ownership. Two notable theoretical perspectives contribute significantly to the understanding of governance in MOH: the property rights governance approach and governance typology models.

Yiu, Wong, and Yau (2006) reframe property management through the lens of institutional economics, proposing that it functions primarily as a governance mechanism over property rights. Rather than merely delivering operational services (e.g., cleaning, maintenance), property management is conceptualized as a means of reducing transaction costs related to two core challenges: exclusion of outsiders and internal conflict resolution among co-owners. These two dimensions are central to the efficient operation of communal private property systems.

Their analytical framework differentiates between three institutional property arrangements:

- Open access (no exclusion; high potential for overuse),
- Communal private property (shared ownership; high internal governance needs),
- Solely owned private property (exclusive ownership; clear exclusion).

The authors argue that communal private property, which characterizes most MOH systems, inherently incurs transaction costs due to ambiguous delineation of rights and the collective nature of decision-making. Property managers, in this context, act as institutional agents that minimize these costs by enforcing exclusion (e.g., access control, security) and mediating internal disputes (e.g., enforcement of bylaws, organizing votes). Their framework also integrates examples from different countries (e.g., strata title in Australia, DMCs in Hong Kong) to illustrate the variability and context-dependence of property governance systems.

Building on the institutional view, Johnston and Too (2015) present a comprehensive governance typology for MOH in Australia. Their study identifies specific categories of governance issues and their potential outcomes through a combination of legislative review and Delphi surveys with industry experts. The authors distinguish governance from management: governance involves the structures, rules, accountability, and decision-making processes that ensure a property scheme is sustainably and transparently administered; whereas management pertains to the execution of those decisions. The typology classifies governance issues into key domains such as: committee effectiveness and turnover, financial planning and levy collection, engagement of professional managers and transparency and stakeholder accountability. Each issue is mapped to observable negative outcomes, such as financial instability, decreased property value, mismanagement, and conflict. For example, poor committee participation or dominance by vested interests often leads to a concentration of power, while underestimating maintenance funds is linked to infrastructure decay and owner dissatisfaction.

This model is instrumental in providing a diagnostic tool for assessing the governance health of MOH schemes. It also emphasizes that mere legal compliance does not guarantee good governance; effective governance requires strategic planning, transparent procedures, and inclusive decision-making principles that are increasingly applicable to the evolving MOH governance landscape in Uzbekistan.

Taken together, these works highlight the need to rethink housing stock management in terms of institutional sustainability and strategic adaptability. This is especially important for countries such as Uzbekistan, which are moving from centralized housing provision to diversified ownership and management regimes.

Each form of multi-owned housing management possesses a distinct set of advantages and limitations. To assess the characteristics and operational effectiveness of various management models within the multi-owned housing stock management system, a comprehensive analysis was conducted on all currently implemented management methods in the Republic of Uzbekistan. This evaluation aims to identify strengths, weaknesses, and potential areas for optimization to enhance the efficiency and sustainability of housing governance (Table 1).

An analysis of the activities of management organizations in the Republic of Uzbekistan, irrespective of the management model employed, reveals key challenges associated with the administration of the multi-owned housing stock.

With regard to homeowner's associations (HOAs), significant inefficiencies persist in the execution of building maintenance and repair work. In many cases, repair activities are either inadequately performed or entirely neglected, compromising the structural integrity and habitability of residential buildings. A particularly pressing issue is the mismanagement of financial resources, specifically the misallocation of funds collected from property owners and the imposition of non-transparent and unjustified service tariffs. Furthermore, a notable concern is the conflict of interest in service provision, where both the customer and the contractor roles

Table 1. Characteristics of different forms of housing management in Uzbekistan

1	Direct (independent) management by homeowners	<p><i>advantages</i></p> <ul style="list-style-type: none"> – independent payment for communal resources by owners (everyone is directly responsible for their debts to resource supplying organizations); – all powers to manage the house remain in the hands of each owner (there will be no sole seizure of power); – absence of expenses for payment for services on common property management; – the supplier of communal resources is at the same time a contractor. <p><i>disadvantages</i></p> <ul style="list-style-type: none"> – difficulty in finding a person who agrees to take responsibility for concluding contracts on behalf of all owners; – lack of professional management of the common property; – control over the quality of work and services by all or a few owners may lead to conflict.
2	Homeowner's associations	<p><i>advantages</i></p> <ul style="list-style-type: none"> – financial funds (contributions) of the owners are collected in the HOA settlement account and are spent only for the needs of the house (HOA is a non-profit organization and this money cannot be distributed anywhere as profit); – you can independently hire organizations or employees to maintain, repair and service the common property (sometimes it is possible to attract citizens living in the house on a contractual basis); – in case of unsatisfactory work of the board (chairman) they can be re-elected or a professional manager can be hired; – The HOA can open a special account for capital repairs and decide on its own what and when to repair the house and what materials to use. <p><i>disadvantages</i></p> <ul style="list-style-type: none"> – the possibility of problems with the accumulation of contributions for housing and communal services (not all residents pay for communal services in a timely manner, which disrupts the financial stability of the HOA); – a partnership may be favorable in a large apartment building (in a smaller number of flats it may be too expensive); – any person can become the chairman of the HOA.
3	Professional management companies	<p><i>advantages</i></p> <ul style="list-style-type: none"> – the apartment building is managed by professional staff; – management fees are low even for small buildings; – all management companies are subject to licensing (it is possible to influence the quality of their work by appealing to the housing inspectorate that they violate the licensing requirement); – owners do not need to spend time and effort on maintenance and repair of their houses. <p><i>disadvantages</i></p> <ul style="list-style-type: none"> – it is more difficult for the owners to trace what their money is spent on; – the management company may go bankrupt or insolvent, and all the residents accumulated money will go with it; – it is difficult for the owners to agree on the terms and conditions of the contract, which would protect their rights to a greater extent; – failure to fulfil contractual decisions is possible.

Source: own elaboration based on Author.

are assumed by the same entities or individuals. This practice leads to a lack of accountability and diminished service quality, ultimately undermining the effectiveness of housing management and eroding trust among homeowners.

At present, a competitive market for the provision of management services in the multi-owned housing sector has yet to emerge. This is primarily due to the limited investment attractiveness of the sector. The establishment of a fully functional and efficient

management framework by professional housing management organizations requires initial capital investment, which is essential for the development of material and technical infrastructure. However, the lack of financial incentives and uncertain return on investment serve as significant barriers to private sector engagement, thereby impeding the modernization and efficiency improvements within the housing management system.

To enhance competition in the housing management market, it is essential to develop a comprehensive regulatory framework, including the establishment of methodological standards for calculating homeowner contributions. Additionally, increasing the investment attractiveness of the housing management sector and ensuring transparency in the operations of management organizations are critical objectives. These goals can be effectively achieved through the digitalization of the industry and the integration of modern digital technologies, which, in turn, will facilitate the development of a smart city ecosystem that enhances service efficiency and governance in the housing sector.

The identified challenges serve as a foundation for establishing criteria that facilitate the selection of an optimal management model for multi-owned buildings (Table 2).

The criteria outlined in the table for selecting the most suitable housing management method allow for the identification of the least costly approach, namely direct (independent) management by homeowners. This method minimizes administrative and technical expenses, as it does not require a formal management structure. However, its effectiveness is primarily limited to small apartment buildings, where homeowners assume full responsibility for the maintenance and upkeep of shared property. The feasibility of this model depends on active resident participation and the availability of sufficient financial and organizational resources to ensure the proper management of communal assets.

Among the existing management models, the most effective approach is the engagement of a professional management organization. This model ensures specialized administration, efficient resource allocation, and systematic maintenance of multi-owned housing stock. By leveraging professional expertise and modern management practices, such organizations enhance the quality of housing services, optimize operational costs, and improve long-term sustainability in residential property management.

Enhancing the efficiency of apartment building management requires the development of a comprehensive strategic framework grounded in a sys-

Table 2. Choosing the best way to manage a multi-owned house

Management forms / Criteria	Direct (independent) management	Homeowner's association	Professional management companies
Conclusion of a contract for apartment building management	not required	not necessarily, since the functions of managing the house are assumed at the general meeting of owners	with each owner separately
Management companies charge	No	Yes	Yes
Protection of the rights and interests of homeowners	protect their rights and interests independently or through representatives	if it is stipulated in the HOA charter, the managing body represents the interests of the owners	apply directly to the management company to protect their rights and interests
Potential to reduce costs for maintenance and servicing of the apartment building	there are no expenses for house management	some services are provided in-house	possibility to choose the MC by price category, which satisfies the interests of the owners

Source: own elaboration based on Author.

tematic assessment of opportunities and risks. This strategy should leverage collaborative engagement with resource-supplying companies to optimize service provision and ensure the sustainable operation of residential infrastructure. Additionally, strengthening homeowner's representation at the municipal level is essential for advocating their interests and fostering a more transparent and accountable management system. The integration of these interrelated measures will contribute to the overall improvement of housing management efficiency, ensuring long-term sustainability and enhanced service quality.

In the Republic of Uzbekistan, the two predominant forms of multi-owned housing management are management companies and homeowner's associations. A distinctive characteristic of management companies is their competition with HOAs, which are established directly by homeowners. However, in Tashkent City, this competitive dynamic remains underdeveloped, as management companies face

operational constraints related to the limited number of buildings under their administration, primarily determined by their resource capacity and financial base.

A SWOT analysis of management companies, considering potential competition from homeowner's associations, provides an assessment of their strengths and weaknesses within a dynamic market environment (Table 3).

Management companies are primarily established to ensure efficient real estate management, deliver high-quality housing and communal services, and generate profitability. However, the expansion of HOAs as an alternative management model may pose competitive challenges, potentially limiting the number of residential properties under the administration of management companies.

The results of the analysis indicate that the presence of multiple strengths enables management companies to leverage their internal resources for

Table 3. SWOT analysis of professional management companies of multi-owned housing stock

Strength	Weaknesses
<ul style="list-style-type: none"> – protecting the interests of homeowners by ensuring fulfillment of obligations and establishing transparent relations with them through the provision of guarantees; – the possibility to influence within the framework of the law on homeowners who do not fulfill their obligations to pay for the services of the management company; – the possibility of attracting more professional managers, which contributes to increased efficiency; – the possibility of attracting financial resources (loans, subsidies, grants, etc.). 	<ul style="list-style-type: none"> – lack of opportunity for homeowners to control costs of apartment building maintenance may lead to negative consequences in relations between the management company and its clients. – insufficient attention of the management company to improving resource efficiency of the apartment building; – lack of a clear strategy for the development of the management organization; – new forms of servicing apartment buildings are not well developed; – the labor remuneration system is built without taking into account the complex qualification of workers.
Opportunities	Threats
<ul style="list-style-type: none"> – possibility to build relationships with resource suppliers from the position of equal commercial structures; – the ability to protect the interests of homeowners (clients of the company) at various levels (city, regional); – the possibility of receiving subsidies and benefits allows to count on attracting non-refundable financing for the realization of rendered services; – the possibility of creating various digital tools to improve the management of apartment buildings. 	<ul style="list-style-type: none"> – lack of payments from the owners complicates the financial situation of the organization, which contributes to the deterioration of the quality of services provided; – lack of benefits and subsidies leads to increased accounts payable and receivable (bankruptcy); – growth of tariffs for housing and communal services; – decrease in the number of clients is due to the deterioration of the demographic situation; – decrease in the number of clients is due to insufficient elaboration of the strategy for implementation of innovative technologies.

Source: own elaboration based on Author.

more effective strategic development. This, in turn, facilitates financial planning, contributing to increased revenue streams and the overall enhancement of the company's financial position in the long term. Additionally, fostering stronger engagement with customers is crucial for maintaining a balance between corporate interests and homeowner expectations. Strengthening this relationship can lead to higher levels of customer satisfaction and loyalty, ultimately improving the company's reputation and revenue growth. Beyond merely retaining existing clients, a customer-centric approach can position management companies for sustained competitiveness and long-term market expansion.

A SWOT analysis of homeowner's associations was similarly conducted to identify strategic directions for the development of this housing management model (Table 4). The findings provide a comprehensive assessment of the strengths, weaknesses, opportunities, and threats faced by HOAs, enabling the formulation of effective strategies to enhance their operational efficiency and competitiveness within the housing sector.

To mitigate existing threats, it is essential to invest in enhancing the qualifications and professional competencies of the company's employees. Strengthening human capital development will directly contribute to the improvement of service quality in apartment building management, ensuring greater operational efficiency and customer satisfaction. Furthermore, at any stage of an enterprise's life cycle, the adoption of an effective behavioral strategy is crucial for ensuring sustainable growth and adaptability. Strategic decision-making plays a pivotal role in both the short-term perspective (up to one year) and the long-term trajectory, influencing the company's resilience and competitive positioning within the housing management sector.

As previously discussed, a homeowner's association is a self-governing form of housing management, wherein residents collectively assume the responsibilities typically carried out by a professional management company. Unlike management companies, HOAs operate as non-profit organizations, prioritizing collective decision-making and cost-effective service provision.

Table 4. SWOT analysis of homeowner's associations of multi-owned housing stock

Strength	Weaknesses
<ul style="list-style-type: none"> – availability of detailed information on the state of the apartment buildings property fund and are more interested in eliminating emerging threats; – having an interest in increasing resource efficiency of the apartment building in order to minimize costs; – financial funds (contributions) of the owners are collected on the HOA settlement account and are spent only on the needs of the building and cannot be distributed anywhere as profit; – important decisions are made promptly and jointly at the meeting. 	<ul style="list-style-type: none"> – passivity of owners, which leads to the assignment of responsibility for the condition of the apartment building to the chairman of the HOA board and leads to a situation of possible conflicts; – a large number of offenses by HOA chairmen creates an unfavorable attitude to this form of management; – the HOA can be advantageous in the conditions of a large apartment building; – any person can become an HOA chairman without having proper professional education.
Opportunities	Threats
<ul style="list-style-type: none"> – the possibility to receive additional income for common purposes, for example, to rent out empty basement or attic space, to place advertisements on the facade of the building; – tenants choose their own utility providers for their own benefit; – reduction of owner's expenses; – improvement of the house and the adjacent territory. 	<ul style="list-style-type: none"> – the possibility of problems with the accumulation of contributions for housing and communal services; – the partnership is made up of ordinary tenants, often incompetent in housing matters; – disagreements between tenants make management ineffective; – the services of contractors hired on a one-time basis by the HOA are more expensive than in the case of a management company; – imperfect legislative regulation.

Source: own elaboration based on Author.

One of the key advantages of an HOA is its ability to address critical housing-related issues through general meetings of property owners. Unlike in commercially-driven management models, financial decisions in an HOA are subject to direct approval by residents, allowing homeowners to prioritize essential expenditures over luxury enhancements. For example, if the majority of residents oppose unnecessary aesthetic improvements, such as marble entrance lobbies, the decision will not be implemented. However, in many older residential buildings, the socio-economic composition of tenants is highly diverse, encompassing both high-income property owners and lower-income residents (e.g., business executives, educators, and service workers). Consequently, decision-making within HOAs is influenced by the preferences of the majority, which can sometimes lead to budget constraints for essential maintenance and infrastructure upgrades.

In recent years, Uzbekistan has prioritized the expansion of professional management companies, leading to the gradual liquidation or restructuring of many former HOAs into management companies. This shift reflects a broader policy trend toward centralized and professionally managed housing services, aimed at enhancing service quality, financial transparency, and operational efficiency in the housing management sector.

CONCLUSIONS

The management of multi-owned housing stock in the Republic of Uzbekistan remains a critical sector that requires systematic reforms to enhance efficiency, transparency, and service quality. The study has identified key challenges, including institutional inefficiencies, financial instability, lack of competition in the management services market, and insufficient digitalization. These factors contribute to the ineffective governance of housing stock, leading to increased maintenance costs, service inconsistencies, and limited homeowner engagement.

A comparative analysis of management models reveals that while direct homeowner management

is the least costly option, it is only viable for small residential buildings. In contrast, professional management organizations demonstrate higher efficiency and sustainability, provided that adequate regulatory frameworks and investment incentives are in place. The low level of development in the rental housing sector also presents a barrier to population mobility and market diversification.

To further enhance the management system of multi-owned housing stock and ensure the delivery of high-quality services by management organizations, the author proposes the following strategic measures:

1. Ensuring information transparency in the management of housing stock is a crucial factor in enhancing accountability and efficiency within the sector. Access to relevant data enables both citizens and government authorities to assess the performance of management organizations and make informed decisions regarding housing governance. The availability of publicly accessible regulatory legal acts and subordinate documents related to housing management plays a key role in fostering legal literacy among homeowners. By providing comprehensive information on housing rights and obligations, such transparency not only empowers property owners but also strengthens public trust in housing management institutions. Additionally, it ensures clarity in tariff policies, preventing unjustified cost escalations and promoting fair pricing mechanisms within the sector.

2. The establishment of a rating system for multi-owned housing management organizations and homeowner's associations (HOAs) serves as a mechanism for enhancing accountability, transparency, and service quality within the housing sector. This system would facilitate the objective evaluation of management performance, thereby fostering competition and improving governance standards. The introduction of a structured and standardized rating system would enhance public confidence in housing management entities, encourage best practices, and promote higher levels of service efficiency within the housing sector.

3. The effective maintenance, modernization, and resettlement strategies for multi-owned housing

stock play a crucial role in ensuring housing safety, structural integrity, and long-term sustainability. A well-functioning capital repair system is essential for preventing deterioration, extending the lifespan of buildings, and improving living conditions for residents. The integration of these interrelated measures would enhance urban housing resilience, improve housing infrastructure sustainability, and ensure compliance with national safety standards.

4. The modernization of housing and communal infrastructure is essential for ensuring the long-term sustainability, efficiency, and resilience of urban development. Given the increasing demands on engineering and utility systems, a strategic approach is required to enhance the reliability and quality of essential services.

The successful implementation of these interrelated measures will contribute to the formation of a sustainable, transparent, and investment-friendly housing sector, ultimately enhancing the quality of life for residents and fostering long-term economic growth.

While the present research offers a comprehensive institutional and typological analysis of multi-owned housing management models in Uzbekistan, this study has its limitations. The research is primarily based on the analysis of secondary data, including legal documents, government reports, and existing literature. Although these sources provide valuable insights into the structure and regulatory environment of housing governance, they do not capture the lived experiences, perceptions, or behavioral motivations of homeowners, managers, and municipal authorities. The context-specificity of Uzbekistan's housing sector, shaped by its post-socialist legacy and evolving legal frameworks, may limit the broader applicability of some findings. Nevertheless, the inclusion of international theoretical frameworks aims to increase the comparative relevance of the study and support potential adaptation in similar transitional economies.

The findings indicate that while the legal foundation for multi-owned housing governance has been largely established in Uzbekistan, implementation

remains uneven due to structural and behavioral constraints. Efforts to strengthen the organizational capacity of HOAs, improve transparency in service provision, and introduce supportive financial instruments—such as reserve funds and accessible renovation loans—are essential for ensuring the long-term viability of the housing stock. The study also underscores the need for context-specific governance models that integrate international best practices with local legal traditions and socio-economic realities. Future reforms should promote not only legal compliance but also community participation, managerial accountability, and strategic planning. In general, the transformation of housing management in Uzbekistan is ongoing and multifaceted. Building a sustainable and effective governance system for the multi-apartment housing stock requires a holistic approach that combines institutional reform, legal innovation, and civic engagement.

Author contributions: The author/authors has/have approved the final version of the article. The authors have contributed to this work as follows: A.M. and K.K. developed the concept and designed the study, K.K. collected the data, analyzed and interpreted the data, A.M. and K.K. drafted the article, A.M. revised the article critically for important intellectual content.

Funding: This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Supplementary information: The authors would like to express their gratitude to the Ministry of Construction and Housing and Communal Services of the Republic of Uzbekistan for providing statistical data and for the support in preparing this article.

Note: The results of this study have been previously presented in a different form, such as a poster/abstract at a conference.

REFERENCES

- Bardulin, E. N., Stolbova, O. G., & Kartseva, A. K. (2020). Управление жилищным фондом на территории муниципального образования [Management

- of the housing fund on the territory of the municipal formation]. *Экономика и управление народным хозяйством [Economics and Management of National Economy]*, 12(14), 119–125. <https://elibrary.ru/nakuqq>
- Clapham, D., Hegedüs, J., Kintrea, K., & Tosics, I. (1996). *Housing Privatization in Eastern Europe*. Greenwood Press.
- Davletov, I. K., & Sharahmanova, S. B. (2020). Experience in Reforming Housing and Communal Services: Uzbekistan and European Countries. *International Journal of Progressive Sciences and Technologies*, 20(1), 47–52. <http://dx.doi.org/10.52155/ijpsat.v0.0.2047>
- Ho, D. C., & Gao, W. (2013). Collective action in apartment building management in Hong Kong. *Habitat International*, 38, 10–17. <http://dx.doi.org/10.1016/j.habitatint.2012.09.001>
- Johnston, N., & Too, E. (2015). Multi-owned properties in Australia: a governance typology of issues and outcomes. *International Journal of Housing Markets and Analysis*, 8(4), 451–470. <https://doi.org/10.1108/IJHMA-02-2015-0005>
- Kakhramonov, K. S. (2021a). Comprehensive assessment and methods of increasing the efficiency of housing and communal services management in the Republic of Uzbekistan. *ISJ Theoretical & Applied Science*, 03(95), 173–176. <https://dx.doi.org/10.15863/TAS.2021.03.95.31>
- Kakhramonov, K. S. (2021b). The main directions of improving the housing stock management system in the Republic of Uzbekistan. *ISJ Theoretical & Applied Science*, 09(101), 421–425. <https://dx.doi.org/10.15863/TAS.2021.09.101.44>
- Khasanov, T. A. (2018). Tendencies of housing sphere development and feature of housing fund management in Uzbekistan. *ISJ Theoretical & Applied Science*, 06(62), 181–187. <https://dx.doi.org/10.15863/TAS.2018.06.62.33>
- Kruglik, S. I. (2008). Проблемы теории и практики управления жилищной сферой мегаполисов [Problems of theory and practice of management of housing sphere of Russian megacities]. *Проблемы современной экономики [Problems of Modern Economy]*, (1), 43–48. <https://elibrary.ru/mvltlyr>
- Leshinsky, R., & Mouat, C. M. (2015). Towards better recognising ‘community’ in multi-owned property law and living. *International Journal of Housing Markets and Analysis*, 8(4), 484–501. <https://doi.org/10.1108/IJHMA-07-2015-0031>
- Litovkin, V. N. (1980). Жилищный фонд в СССР (понятие, состав, виды) [The housing fund in the USSR (concept, composition, types)]. *Юрист-Правоведъ [Lawyer-Jurist]*, 4(29), 85–89. <https://elibrary.ru/mwnfkr>
- Lujanen, M. (2010). Legal Challenges in Ensuring Regular Maintenance and Repairs of Common Parts in Multi-Owned Residential Buildings. *Housing Studies*, 25(4), 515–530. [https://doi.org/10.1061/\(ASCE\)1943-4162\(2010\)2:1\(5\)](https://doi.org/10.1061/(ASCE)1943-4162(2010)2:1(5))
- Marcuse, P. (1996). Privatization and Its Discontents: Property Rights in Land and Housing in Eastern Europe. In G. Andrusz, M. Harloe, & I. Szelenyi (Eds.), *Cities After Socialism* (pp. 119–191). Blackwell. <https://doi.org/10.1002/9780470712733.ch5>
- Mineeva, I. V. (2007). Внедрение пообъектного управления в жилищную сферу [Implementation of object-by-object management in the housing sector]. *Вестник Самарской государственной экономической академии [Bulletin of the Samara State Academy of Economics]*, 2(28), 81–83. <https://elibrary.ru/icfccp>
- Muczyński, A. (2023). Collective renovation decisions in multi-owned housing management: the case of public-private homeowners associations in Poland. *J Hous and the Built Environ*, 38, 2105–2127. <https://doi.org/10.1007/s10901-023-10025-1>
- Muczyński, A. (2024). Social housing management: a long-term planning perspective on the example of a Polish municipality. *Acta Scientiarum Polonorum Administratio Locorum*, 23(4), 389–402. <https://doi.org/10.31648/aspal.10114>
- Nurimbetov, R. I. (2021). Introduction of digital technologies in the sphere of housing stock management in the Republic of Uzbekistan. *ISJ Theoretical & Applied Science*, 05(97), 386–390. <https://dx.doi.org/10.15863/TAS.2021.05.97.63>
- Nurimbetov, R. I., & Kakhramonov, K. S. (2022). Перспективы развития системы управления многоквартирным жилищным фондом в Республике Узбекистан [Prospects for the development of the multi-apartment housing stock management system in the Republic of Uzbekistan]. *Жилищные исследования [Russian Journal of Housing Research]*, 9(3), 309–326. <https://doi.org/10.18334/zhs.9.3.115232>
- Nurimbetov, R. I., & Kakhramonov, K. S. (2024). Improving the efficiency of housing stock management in the context of digitalization. In International Conference on Next Generation Wired/Wireless Networking

- (pp. 213–222). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-60997-8_19
- Potyukov, A. G., & Smirnov V. T. (1981). Основы советского жилищного законодательства [Fundamentals of Soviet housing legislation]. *Юрист-Правоведъ [Lawyer-Jurist]*, 4(29), 85–89. <https://elibrary.ru/mwnfkr>
- Seferyan, L. A. (2013). Модель формирования системы управления жилищно-коммунальным хозяйством [A model for the formation of a housing and communal services management system]. *Интернет-журнал Наукосведение [Online Journal of Science Studies]*, 3(16), 134–137. <https://elibrary.ru/qzxznr>
- Struyk, R. J. (2000). *Homeownership and Housing Finance Policy in the Former Soviet Bloc*. Urban Institute Press.
- Sultanov, A. (2020). Prospective foreign experience outcome implementations of housing fund management in Uzbekistan. *ISJ Theoretical & Applied Science*, 04(84), 201–207. <https://dx.doi.org/10.15863/TAS.2020.04.84.36>
- Tsenkova, S., & Polanska, D. V. (2014). Between state and market: housing policy and housing transformation in post-socialist cities. *GeoJournal*, 79, 401–405. <https://doi.org/10.1007/s10708-014-9538-x>
- Yau, Y. (2011a). Homeowners' participation in management of multi-storey residential buildings: The Hong Kong's case. *Property Management*, 29(4), 345–356. <https://doi.org/10.1108/02637471111154791>
- Yau, Y. (2011b). Collectivism and activism in housing management in Hong Kong. *Habitat International*, 35(4), 327–334. <https://doi.org/10.1016/j.habitatint.2010.11.006>
- Yau, Y. (2012). Perceived efficacies and collectivism in multi-owned housing management. *Habitat International*, 43, 133–141. <https://doi.org/10.1016/j.habitatint.2014.02.009>
- Yau, Y. (2013). Willingness to participate in collective action: The case of multi-owned housing management. *Journal of Urban Affairs*, 35(2), 153–171. <https://doi.org/10.1111/j.1467-9906.2012.00621.x>
- Yiu, C. Y., Wong, S. K., & Yau, Y. (2006). Property management as property rights governance: Exclusion and internal conflict resolution. *Property Management*, 24(2), 87–97. <https://doi.org/10.1108/02637470610657989>