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Mixed-tenure housing production – A framework for combining two types of tenures into one building

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Abstract

This thesis examines mixed-tenure housing projects, with a focus on owner-occupied and part-ownership housing, as a response to the challenges currently posed to the housing market and construction industry. Focus is on exploring mixed-tenure as a strategy for diversifying project portfolios, especially for projects with a large amount of apartments such as high-rise. Additionally, mixed-tenure is studied as a tool for municipalities to promote tenure mix and reduce segregation.

The thesis aims to identify the key legislation and contracts influencing mixed-tenure housing projects, analyse possible limitations by municipal land planning, and explore funding options for such projects. The primary research question addresses legislation and contracts, while subordinate questions investigate land use planning constraints and funding options. The study is specifically focused on privately funded housing projects, excluding subsidized housing, and focuses on the Finnish context. Methodology includes a literature review, interviews and a case study.

The study showed, that mixed-tenure housing projects present both opportunities and challenges for construction companies navigating the current housing market. The inclusion of owner-occupied and part-ownership housing offers a pathway for portfolio diversification, addressing market constraints while catering to diverse customer needs. However, implementing such projects requires careful planning to manage risks, such as unsold units or unredeemed part-ownership apartments, which can result in increased maintenance and resale costs.

Keywords Mixed-tenure housing, Land Use Planning, Legislation, Housing Development, Urban Development.

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Tiivistelmä

Tämän diplomityön tarkoituksena oli tutkia sekaomistusmuotoisia asumishankkeita ratkaisuna tämänhetkisiin asuntomarkkinoiden ja rakennusteollisuuden haasteisiin. Työ keskittyi omistus- ja osaomistusasuntoihin. Tavoitteena oli tarkastella sekamuotoista asumista strategiana monipuolistaa rakennusliikkeen hankesalkkua, erityisesti sellaisten projektien osalta, joissa on suuret asuntomäärät. Lisäksi sekamuotoista asuntotuotantoa tutkitaan keinona edistää eri omistusmuotojen sekoittumista ja vähentää täten segregaatiota.

Diplomityön tavoitteena oli tunnistaa keskeiset lainsäädännöt ja sopimukset, jotka vaikuttavat sekamuotoisiin asumishankkeisiin, analysoida mahdollisia kunnan maankäytön suunnittelun asettamia rajoituksia sekä tutkia rahoitusvaihtoehtoja näille hankkeille. Pääasiallinen tutkimuskysymys käsittelee lainsäädäntöä ja sopimuksia, kun taas alikysymykset tarkastelevat maankäytön suunnitterajoituksia ja rahoitusvaihtoehtoja. Tutkimus keskittyy vapaarahoitteisiin asuntohankkeisiin Suomen kontekstissa, eikä tuettua asumista tutkita. Metodologiana käytetään kirjallisuuskatsausta, haastatteluja ja tapaustutkimusta.

Tutkimus osoitti, että sekamuotoiset asuntohankkeet tarjoavat rakennusyritykselle sekä mahdollisuuksia, että haasteita, kun ne navigoivat nykyisillä asuntomarkkinoilla. Omistus- ja osaomistusasuntojen sisällyttäminen tarjoaisi keinon monipuolistaa hankesalkkuja palvellen moninaisia asiakastarpeita. Tällaisen hankkeen toteuttaminen vaatisi kuitenkin huolellista suunnittelua riskien hallitsemiseksi, sillä myymättömät tai lunastamattomat asunnot voivat johtaa lisääntyneisiin ylläpito- ja hallinnointikustannuksiin.

Avainsanat Sekamuotoinen asuntotuotanto, maankäytön suunnittelu, lainsäädäntö, asuntotuotanto, kaupunkikehitys

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Preface and acknowledgements

This master's thesis represents the culmination of research and dedication toward understanding mixed-tenure housing production. It has been a challenging yet rewarding journey, during which I have gained valuable insights into topics related to housing production. Throughout the process, I have learned new methodologies and engaged in meaningful discussions that have enriched this work.

Completing this thesis would not have been possible without the encouragement and support of many individuals, to whom I am deeply grateful. I would like to thank my thesis supervisor Professor Ari Ekroos and my thesis advisor Markus Nurmi and Tommi Vaisalo for their good advice and guidance. Beyond academia, I am grateful to my friends and loved ones for their unconditional support. To my spouse, thank you for your encouragement, patience, and belief in me, even during moments of doubt. To my daughter, thank you for being my grounding force throughout this process.

Lastly, I extend my heartfelt thanks to everyone who contributed, in ways big or small, to the completion of this thesis. Your generosity, wisdom, and kindness will always be remembered.

Espoo, 24.4.2025
Lotta Kangas

Symbols and abbreviations

Abbreviations

IRR	Internal rate of return

1 Introduction

The topic of this thesis is mixed-tenure housing projects, with a focus on owner-occupied and part-ownership housing. With the current recession on the housing market and construction industry, companies are interested in finding new ways to start development projects. Mixed-tenure housing brings possibilities especially to high-rise construction projects, since it diversifies the project portfolio. Mixed-tenure housing is also of interest to municipalities, since it creates possibilities for tenure mix and is seen as a tool to decrease segregation.

The goal of this thesis is to identify the main legislation and contracts that affect mixed-tenure housing projects, identify whether land use planning done by municipalities sets any limitation for such projects, and identify different possibilities of funding these projects.

The primary research question is "what needs to be considered when planning a mixed-tenure housing project in terms of legislations and contracts?" Subordinate questions are "what limitations, if any, does land use planning place on mixed-tenure housing?" and "what types of funding could be used for a mixed-tenure housing project?".

This thesis focuses on privately funded housing projects and does not consider subsidized housing and its effects on mixed-tenure projects. Legislation, land use planning and funding is investigated only from the Finnish perspective. Methodology includes legal dogmatic, a literature review, interviews and a case study.

The thesis consists of a literature review, forming a framework for mixed-tenure housing project, interviews, and a case study. The literature review consists of identifying legislation and contracts related to mixed-tenure housing production, reviewing what is mixed-tenure and its characteristics in terms of housing production, explaining housing production funding and municipality planning, as well as characteristics of both ownership and part-ownership tenures. The framework created is explained step by step and key documents related to each step of the project are identified. In the case study, a high-rise project is analysed in terms of profitability through cash-flow calculations.

2 Literature review

The literature review consists of identifying legislation and contracts relevant to mixed-tenure housing production, including acts and contracts such as the Land Use and Building Act 132/1999, Housing Transaction Act 843/1994, contracts of sale, land use agreements and joint ownership agreements. The literature review also explores the concept and characteristics of mixed-tenure housing, particularly in terms of housing production, building maintenance and cost allocation among tenure groups.

Additionally, it addresses housing production funding mechanisms through the RS System, as well as the role of municipality planning in zoning and land use. Finally, it investigates characteristics of ownership and part-ownership tenures.

2.1 Legislation and contracts

This chapter examines the legislations and regulations governing land use, building, housing transactions and property formation. Key legislative acts and contractual agreements are analysed within the context of mixed-tenure housing production. The chapter is organized to first address the relevant legislations, followed by various contractual agreements that facilitate mixed-tenure development.

2.1.1 Land Use and Building Act

The Land Use and Building Act aims to organize land use and construction of areas in a way that creates and promotes conditions for good living environments as well as sustainable development. Sustainable development is defined to encompass ecological, economic, social and cultural values. The Land Use and Building Act also aims to secure everyone's opportunity to participate in preparations, the quality and interactivity of planning, adequate versatility of expertise, and open communication on matters being dealt with. (Alueidenkäyttölaki 5.2.1999/132 Luku 1).

From 1.1.2025 onwards the Land Use and Building Act has been divided into two separate legislations, of which one deals with building related activities, and the other land use planning related activities (Ministry of Environment, 2024b). In this thesis, the contents of these separate legislations are not looked further into.

2.1.2 Housing Transactions Act

The Housing Transactions Act applies to the sale of shares of a residential apartment as well as other related shares entitling to the ownership of a

residential apartment in a limited liability housing company. It also gives protection for the buyer's legal and financial position during the construction phase, and includes some other legal relationships related to the production and sale of the apartments or other premises of the housing company. (Asuntokauppalaki 23.9.1994/843 1 luku 1 §). The Housing Transaction Act also applies as is to part-ownership apartments, unless otherwise stated (Asuntokauppalaki 23.9.1994/843 1 luku 2 §).

The Housing Transaction Act sets requirements for the contents of the contract of sale of the new apartment, as well as requirements for guarantees and safekeeping documents. The contents of these will be further explained in chapters 2.1.4 and 2.3.1.

2.1.3 Act on Joint Management of Rental Buildings

The purpose of the Act on Joint Management of Rental Buildings is to give the residents and owners of a rental building power on decision-making, as well as the possibility to influence matters related to one's own housing, increase living comfort and promote maintenance and care of the rental building (Laki yhteishallinnosta vuokrataloissa 649/1990 1 §).

The legislation states, that all permanent residents over the age of 18 are entitled to vote and eligible for election, while possible business and office premise owners located in the building are only entitled to vote. The owner of the building is not eligible for election nor entitled to vote (Laki yhteishallinnosta vuokrataloissa 649/1990 5 §).

The residents meeting can elect one or more resident committees (Laki yhteishallinnosta vuokrataloissa 649/1990 7 §). The residents' committees' tasks include the following (Laki yhteishallinnosta vuokrataloissa 649/1990 10 §):

1. Participate in preparations, negotiations and give statements on the budget and rent determination proposals
2. Prepare and negotiate on annual repair work that will be included in the budget
3. Participation on preparation, negotiation and statements on long-term repair plans
4. Participation on preparation, negotiation and statements on long-term budget plans
5. Prepare presentations, negotiate and give statements regarding the contents of the maintenance contract, maintenance system and building management
6. Supervise that care, maintenance and repair measures are executed
7. Decide on the contents of the rules and regulations
8. Participate in resolving conflicts related to residents living, and if necessary, act as a mediator in cases of disturbance

9. Decide and supervise rental and usage principles regarding the use of common parking spaces, saunas, laundry rooms and similar facilities
10. Decide on the use of common craft and club rooms and other similar facilities, and organization of bees and other similar events
11. Decide on matters referred to the residents committee for decision, implement a matter assigned to the committee for implementation
12. Prepare presentations, negotiate and give statements on other matters concerning the rental buildings

The residents committee also has the right to name candidates for a limited liability housing companies board (Laki yhteishallinnosta vuokrataloissa 649/1990 12 §).

2.1.4 Contract of sale

When the founder of the limited liability housing company sells a housing share during the construction stage, provisions in the Housing Transaction Act chapter 2 are applied. This applies to both the sale of ownership, and part-ownership apartments. The legislation applies to the situation when housing shares are placed on the market before the municipality building inspection authority has approved all the buildings for use (Asuntokauppalaki 23.9.1994/843, 2 luku 1 §).

As set in the Housing Transaction Act, the contract of sale must be in written format, and include at least the following (Asuntokauppalaki 23.9.1994/843 2 luku 11 a §):

1. Object of trade
2. Seller and buyer
3. The purchase price, and the debt-free price if it differs from the purchase price
4. Identification information of the purchase price payment account
5. Purchase price payment schedule and other payment terms
6. The date of completion and the transfer of control
7. The buyer's right to receive information on safekeeping documents and their custodian and place of storage
8. Information on guarantees placed on the company and shareholders
9. The time when the guarantee is released in accordance with section 18a and 18b without the buyer's consent, and how the buyer can prevent release of guarantee
10. Buyers right to choose and auditor and construction observer in accordance with section 20

11. Seller's obligation to organize an annual inspection and report on the notification of a defect in accordance with Chapter 4, sections 18 and 19

If the apartment purchased is a non-subsidized part-ownership apartment, the contract of sale must include in addition to parts 1-7 and 9 the following (Asuntokauppalaki 23.9.1994/843 2 luku 11 b §):

1. If the buyer has the right to buy additional shares in the part-ownership apartment
2. The price of the additional shares or the basis of price determination for the additional shares and other terms of sale
3. If the seller commits to redeeming shares sold back, and other terms on redemption

2.1.5 Plot division

Plot division plays a role in housing development by defining how land is divided into buildable plots. Requirements on plot division are set in the Land Use and Building chapter 11. The local detailed plan divides an area into one or more plots to arrange for land use. This division can be either binding, or act only as a guideline. If plot division is binding, it is indicated as so in the local detailed plan. A binding plot division is required if the area is centrally located, if the building density so requires, or the explicitness of the land administration system so requires. A block can consist of one or more plots, and a plot division can be done on only some part of the block. (Alueidenkäyttölaki 5.2.1999/132 Luku 11 78 §).

A separate plot division can be done if the local detailed plan requires so, or a change on a binding plot division is necessary. The local detailed plan guides the formation of the separate plot division, and the overall building rights can be allocated to the plots being formed. (Alueidenkäyttölaki 5.2.1999/132 Luku 11 79 §). The plot division done is legally binding, and a building can't be constructed contrary to the binding plot division. A building permit can't be permitted to a building block or parts of it on a plot that requires binding plot division before the plot division is approved, before a plot is entered into the real estate register, or onto a block where a separate plot division is required. (Alueidenkäyttölaki 5.2.1999/132 Luku 11 81 §).

2.1.6 Rental plots

The ownership of the plot can differ between new apartments and affects apartment pricing. The plot can be either fully owned by the limited liability housing company, rental, or an optional rental. In case of a rental plot, the

plot is subject to a renting period, during which shareholders pay rent to the owner of the plot (Finnish Competition and Consumer Authority, 2024c). In case of an optional rental, the owner can choose to pay either their share of rent for the plot or redeem their share of the plot at a specified price. The rental plot can be owned for example by a private fund or company who have made a rental agreement of the plot with the housing company. In some cases, the housing company can own some parts of the plot, while renting some parts. (Finnish Competition and Consumer Authority, 2024d).

The rental agreement between the plot owner and the housing company specifies the details on when and how the shareholders can redeem their share of the plot and how the price of the plot is determined. The rental agreement also specifies what happens when the renting period for the plot ends. Possibilities include continuing the rental agreement, the housing company redeeming plots left unredeemed by the shareholders, or shareholders being required to redeem their share of the plot (Finnish Competition and Consumer Authority, 2024d).

2.1.7 Building easement

An easement is established in situations where one plot or property requires permanent rights to use a building, or a structure located on another plot or property. The easement needs to be agreed upon in written, and establishing, changing or terminating an easement is done by the building supervision authority. The Land Use and Building Act states, that an easement can be established if it promotes necessary construction or use of property, is necessary for the holder of the easement, and does not cause significant harm to the other property subjected to the easement. (Alueidenkäyttölaki 5.2.1999/132 Luku 21 158 §).

If an easement is required by the local detailed plan, it can be established unless circumstances have changed after the plan's approval or if it creates unreasonable harm to the property subjected to the easement. An easement required by the local detailed plan can be formed without a written contract between properties subject to the easement in situations where organizing shelter space, car parking, or waste management facilities is necessary, access to the building or pedestrian traffic is required and can't be arranged in another reasonable manner, and situations where construction of a shared wall between properties is required. (Alueidenkäyttölaki 5.2.1999/132 Luku 21 158 §).

2.1.8 Land use agreement

Land use agreements are contracts between a municipality and a landowner to initiate zoning plans for the landowner's area and outline the rights and responsibilities related to plan implementation. These agreements primarily

address the landowner's contribution to infrastructure costs arising for the municipality due to urban development. However, the content of zoning plans cannot be contractually decided. Binding agreements are only possible after zoning drafts or proposals have been publicly displayed. Typically, agreements factor in benefits to the landowner, such as increased property value due to zoning changes. Often the landowner is required to contribute to costs incurred by the municipality. These costs are based on the estimated benefits the landowner gets from the local detailed plan. (Kuntaliitto, 2004b; Rantonen, 2021).

In the Land Use and Building Act chapter 12a the compensations of costs incurred by local authorities are set (Alueidenkäyttölaki 5.2.1999/132 Luku 12 a 91 b §). This chapter includes sections such as section 91 a Landowners' duty to share in the costs of community building, section 91 b Land use agreements and section 91 c Development compensation.

Land use agreements are negotiated alongside the zoning process, anticipating the outcomes targeted in the zoning draft. These agreements are conditional, becoming enforceable only if the zoning plan is approved. They often include provisions related to construction timelines, housing production quality and quantity, landowner contributions to municipal services (e.g., schools and daycare centres), and distribution of housing types. Agreements cannot bypass zoning legislations; zoning remains independent and governed by legal frameworks. Municipal land use goals and public involvement guide the zoning process. (Kuntaliitto, 2004b).

2.1.9 Agreement to divide the possession between joint owners

An agreement to divide the possession between joint owners sets guidelines on ownership rights in situations where multiple owners are participants in a joint real estate possession. This agreement to divide the possession between joint owners is referred to in the Code of Real Estate 540/1995 chapter 14 section 3 only by stating the following: An agreement between the joint titleholders of a real estate on the possession of the real estate may be registered. (Maakaari 12.4.1995/540).

In practice, the arrangement to divide possession between joint owners is a free form contract, which contents, although binding, are often left to be agreed upon between the parties. It is recommended that a map showing the agreed upon area is attached to the agreement. (Nurmi, 2004). In an example template provided by Kuntaliitto, an agreement included sections on for example ownership rights, specified shares between parties, common areas and right of way, implementation of the construction project, and management and access rights. (Kuntaliitto, 2004a).

2.1.10 Joint arrangements between properties

If the implementation of the local detailed plan requires joint arrangements between multiple properties, a municipal authority can on the initiation of one property owner determine the common use of the block area, parts of it, or space related to the property. A decision on joint arrangement needs to include an arrangement plan, in which the use of the area or space, its repair and maintenance, as well as distribution of costs arising from arrangements are agreed upon. (Alueidenkäyttölaki 5.2.1999/132 Luku 21 164 §).

2.2 Mixed-tenure housing

In recent years, countries have started to address issues related to segregation in land-use planning and housing policies, such as lack of mix among tenure types (Alves, 2019). There has also been a shift to use of place-based policies, which connect both social mix and tenure mix into planning. Social mix policies are assumed to create social cohesion and inclusion through the mix of household, age group or ethnicity (population structure), but also mix of housing tenures, types and prices (housing structure). The assumption is, that mixing housing and tenure will create social mixing, and thus better social interaction, networks and job opportunities. (Kaasjager, 2021).

The term mixed-tenure housing is used, when different social groups are gathered in either the same neighbourhoods, or more specifically the same buildings (Higgins & Moore, 2016). In mixed-tenure housing, the term tenure blindness refers to lack of external indicators on different tenure types through building design and layout (Nouwelant & Randolph, 2016).

2.2.1 Designs of mixed-tenure housing

In the paper by Higgins and Moore, the mixing of tenures is categorized into two designs: salt and pepper, and silo. The salt and pepper design creates a building, in which different tenures are mixed within the same building in a seemingly scattered manner (Higgins & Moore, 2016). In the Silo design, the tenures are separated into individual buildings either in close vicinity or sharing a common wall. In the paper by Nouwelant & Randolph, the design of floor-by-floor is also brought up. This refers to a design, in which tenures are included into the same building, but in a floor-by-floor manner (Nouwelant & Randolph, 2016).

While terms used for different designs vary across literature, in this thesis the terms used for design are presented and illustrated in the figure below. In this thesis, the case study is presented on a tenure-mix of unit-by-unit design.

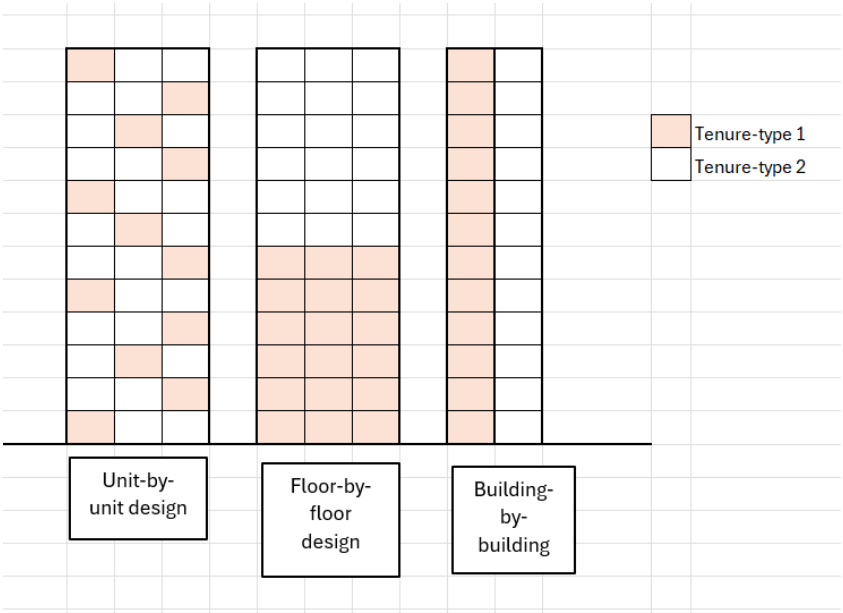

Figure 1: Different designs in mixed-tenure housing.

In this thesis, unit-by-unit design refers to the design, in which different tenures are scattered between floors, while in floor-by-floor design the different tenure-types are located on separate floors. In building-by-building design, the tenures are in separate buildings all together but can share a common wall.

While unit-by-unit design is argued to ensure tenure blindness among residents, they are also seen as more inefficient for housing and service providers and can be seen to increase financial risk or costs for housing providers. In building-by-building design Nouwelant & Randolph argue that tenure blindness can be achieved, but only if the private and public amenities are equally provisioned, consistency if kept with construction and architectural design, and that tenures are not separated into two separate buildings, but rather joined by a wall (Nouwelant & Randolph, 2016).

2.2.2 Building maintenance and costs in mixed-tenure housing

A key factor to consider in mixed-tenure housing is the building maintenance and cost division between different tenures. The main difference between the different designs presented in the previous chapter is in property management, facilitating for services and amenities (Higgins & Moore, 2016). In mixing tenures, considering management structures of apartment buildings is vital. Building and tenure management, and equal provision of amenities between tenures need to be considered, while also ensuring that construction standards and architectural quality is met (Nouwelant & Randolph, 2016).

Inclusion in mixed-tenure property development is received with differing attitudes among different stakeholders (Higgins & Moore, 2016; Nouwelant & Randolph, 2016). In the study conducted by Higgins & Moore, the property managers were eager to adopt the unit-by-unit concept, while property developers and financiers were more reserved. This was seen to be due to disclosure and pricing issues. The property developers interviewed brought up issues on unit-by-unit design maintenance costs. With unit-by-unit design, the thought is that everyone pays the same body corporate fees, while in the building-by-building design the maintenance and cost controlling of the building is seen as easier. In the study by Nouwelant & Randolph, the unit-by-unit design was seen as having disadvantages for tenant management, service providers and property managers. The inefficiencies can translate into differences in the quality of service and tenant management. Nouwelant & Randolph find that one solution to this could be for the whole building to be maintained by a single entity. (Nouwelant & Randolph, 2016).

Stakeholders tended to prefer the building-by-building design for building maintenance and cost controlling. (Higgins & Moore, 2016). In the paper by Nouwelant and Randolph, the floor-by-floor design disadvantages were identified as differential building management for different parts of the building. They also argue that there is risk of different architectural choices, such as entrances being separated for different tenure types, or communal spaces being separate or having different levels of quality (Nouwelant & Randolph, 2016).

2.3 Housing development and funding

Real estate development in Finland consists of multiple steps, of which often the first one is acquiring a suitable building plot, and then drafting building plans either based on the local detailed plan, or by proposing changes to the local detailed plan (Toivonen, 2018; Valtonen, Falkenbach, & Viitanen, 2017). After plans are completed, the developer forms a limited liability housing company (Toivonen, 2018). After construction is completed, the limited liability housing company is required to organize a general meeting, referred to as a Administration Handover Meeting. In this meeting, the limited liability housing company is handed over from the developer to the apartment byers, the shareholders (Kiviluoma, 2021).

After formation of the limited liability housing company, the development project needs to acquire funding. Funding of the project can be through owners' equity or external equity. Owner's equity consists of the owners share capital and funds, while external equity is often loans taken in the name of the limited liability housing company (Toivonen, 2018). These loans can be granted by for example banks. In loans granted by banks, there is often requirement for repayment and constant interests, as well as an acceptable deposit (Ramsted, 2017).

2.3.1 RS System

The Housing Transaction Act requires for all private development projects to have sufficient RS contracts regardless of funding. The RS system was developed in the 1970s to provide safety for both the buyers but also the loaners in situations where the real estate development property is brought into market before its completion. The requirements by the RS system are regulated by the Housing Transaction Act (Toivonen, 2018). The two main requirements focused on this thesis are Safekeeping documents and Security for fulfilment of contracts.

Security of fulfilment of contracts is places in the Housing Transaction Act chapter 2.17. The security consists of three types of guarantees: guarantee for the construction phase, post-construction-phase guarantee, and insolvency guarantee (Toivonen, 2018). The amount of the guarantee is set in the Housing Transaction Act to be at least five percent of the building costs, and at least ten percent of the total amount of sold shares when the construction phase begins (Asuntokauppalaki 2 luku 17 §). The guarantees are place so, that each guarantee follows another when the previous expires. The guarantee of construction is places when the construction phase begins, and it ends within three months after the building is approved for commissioning. The releasing of the construction phase guarantee is approved by the buyers and replaced by the post-construction-phase guarantee (Finnish Competition and Consumers Authority, 2024a) Safekeeping documents are required to be completed by the developer and need to be delivered either to a bank safe, or to the regional administration office (Toivonen, 2018).

The safekeeping documents consist of the following:

- Limited liability housing company founding documents
- Trade register of the company
- Statements of payment on the company's shared capital
- The company's financial plan and debts
- Collateral documents
- Clarification of ownership and possession of the plot
- Certificate of easements subjected to the real property
- Building permit
- Construction drawings and description of construction methods
- Building contracts

2.4 Municipality planning

In Finland, planning is done with a hierarchical system of multiple legally binding zoning plans. These plans govern and guide development. The

planning system consists of three levels of legally binding plans, which are regional plan, local master plan and local detailed plan. While the regional plan is created and approved by the regional councils, the local master and detailed plan are in turn created and approved by municipalities. In some cases, the local detailed plan can be drafter in co-operation with municipalities and private property developers (Valtonen, Falkenbach, & Viitanen, 2017).

Land use planning is based on the Land Use and Building Act. National land use guidelines direct regional and municipal planning and plans. The regional and municipal plans give a more specific and concrete form to the national guidelines. (Ministry of the Environment, 2024a). The land use planning system consists of the following:

- National land use guidelines
- Land use plans
- Regional schemes and programmes
- Regional and municipal strategies
- Municipalities' land policy and building ordinance
- Land Use and Building Act

The National land use guidelines are set by the government of Finland and prepared by the Ministry of the Environment. The regional plans are done by the regional councils in accordance with the Land Use and Building Act, and they display the region's land use and community structure plans. The timespan of the regional plan is long, displaying development of the coming decades. It provides instructions for municipal land use planning, and its contents are specified in the Land Use and Building Act 28 § (Alueidenkäyttölaki 5.2.1999/132 Luku 4 28 §). The Land Use and Building Act specifies what needs to be considered during the planning, including requirements such as ecological and environmental sustainability, nurturing natural values and cultural heritage, but also economically sustainable planning decisions (Alueidenkäyttölaki 5.2.1999/132 Luku 4 28 §). Municipal land use planning consists of the following instruments:

- Land use strategies and programmes within the municipality
- Local master and detailed plans
- Land policy
- Building ordinance

While the regional plan defines land use in the region, the local master plan lays down objectives of the municipality land use. In the master plan, areas are outlined by general type of development, such as recreational, residential or employment areas. The municipality is responsible for creating the local master plan, and the municipal council approves the drafted plan.

The requirements for the contents of the local master plan are defined in the Land Use and Building Act 39 §. The local master plan directs the local detailed plan (Alueidenkäyttölaki 5.2.1999/132 Luku 5 39 §).

The local detailed plan is the most detailed of all land use plans. It directs land use and building and defines the future use of the area it covers on a detailed level, such as the location, size and purpose of buildings. The local detailed plan is prepared by the municipality, and contents of the local detailed plan are set in the Land Use and Building Act 54 §. (Alueidenkäyttölaki 5.2.1999/132 luku 7 54 §).

In addition to the plans, the municipality also prepares land policy programmes that outline the principles and goals of land use, acquisition and implementation. The municipality also utilizes the building ordinance for controlling construction. (Ministry of the Environment, 2024a). Land-use policy programmes are explained in more detail in chapter 2.4.1.

Planning processes in practice are not strictly regulated. The municipality is in minimum required to notify interested parties on initiation of planning, prepare a participation and assessment scheme for the planning process, and present the proposed plan publicly before its approval. After plans are approved either by the municipality or regional council, the approval can be appealed. The right to appeal is based on the Local Government Act (2015), but since March 2007 the Land Use and Building Act has allowed only interested parties to appeal against approval of amendments to local detailed plans with small impact (Valtonen, Falkenbach, & Viitanen, 2017).

The Land Use and Building Act currently allows for interested parties to participate in plan preparations. This includes also private landowner-developers, and since developers also contribute to public infrastructure provisions through private-legislation land use agreements, the private landowner is in most cases more involved in plan creation than other interested parties (Valtonen, Falkenbach, & Viitanen, 2017).

Local detailed plans are used as the basis for building permits. A building permit is required for all significant building projects and can't be granted if 132a local detailed plan allowing for the proposed development doesn't exist. Yet, even if a local detailed plan exists, municipalities have from April 2016 onwards had the right to decide on all deviations on legally binding local detailed plans. Such deviations can be for example changes on type and volume of building rights on a specific building plot. Municipalities also have the right to deviate from the more general plans (regional and master plan) in the detailed plan, if they provide justification that is seen as reasonable (Valtonen, Falkenbach, & Viitanen, 2017).

2.4.1 Land-use policy programmes

Land-use policy programmes are done by municipalities to further define municipality's land-use objectives and principles. They ensure coherent and

effective utilisation of land-use policy objectives, such as ensuring well-structured and purposeful community structures, promoting availability of reasonably priced plots of land or implementing equality principles.

Land-use policy programs are reviewed and revised when municipalities strategy, housing policy, economic policy or general zoning so requires. When, and how the land-use policy programs are revised and reviewed is left to municipalities. There is no legislation or other obligation that requires for a municipality to have a land-use policy program or sets requirements for its contents. Land-use policy programs define operational policies related to land use for plot applicants, landowners, construction companies and other parties related to land-use. Often in municipalities the land-use policy programs housing and economic policies are included. (Kuntaliitto, 2025).

2.5 Ownership and part-ownership tenures

In this chapter, the characteristics of owner-occupied housing are investigated based on the purchase of a new apartment in a limited liability housing company, that is not subject to any subsidies. Similarly, the characteristics of part-ownership housing are based on an apartment not subject to any subsidies.

2.5.1 Owner-occupied apartments

When purchasing an owner-occupied apartment, the buyer is purchasing a specified amount of shared of the limited liability housing company. These shares give the buyer ownership to the apartment purchased, while also giving them the right to participate and vote in stakeholder meetings of the housing company. The applicable legislation towards owner-occupied housing is the Limited Liability Housing Companies Act. The sale of the apartment is done according to the Housing Transactions Act.

When purchasing a new apartment, the apartment might be subjected to a housing company loan. This means, that the limited liability housing company has taken into its name a loan, that is shared with the buyers (stakeholders) in accordance with shares purchased and size of the apartments. The owners pay a charge for financial costs to cover both the loan and interest rate. If one shareholder is incapable of paying their share of the loan, the other shareholders might end up responsible for this share (Finnish Competition and Consumer Authority, 2024b). If there is a housing company loan, the price of the apartment consists of both the selling price of the apartment and the specified share of the housing company loan (Finnish Competition and Consumer Authority, 2024c).

2.5.2 Part-ownership apartments

Part-ownership tenure refers to a form of ownership, in which the buyer first redeems the apartment on a percentage of the apartments price. The percentage can be for example between 10-15 % of the apartment's market price. The buyer first lives on a rental contract, and after the rental period ends can redeem the apartment fully by paying the rest of the purchase price (Finnish Competition and Consumer Authority, 2024e; Ministry of the Environment, 2024c). At the end on the rental period, the purchasing price on a part-ownership apartment is based on the original price and not affected by possible changes in apartment prices that have happened during the period on renting. After redeeming the apartment, the part-ownership apartment becomes a traditional ownership apartment in a limited liability housing company. This means, that the owner fully owns shares of the apartment, pays management charges and can use their power in shareholders' meeting (Ministry of the Environment, 2024c).

The buyer of the part-ownership apartment can give up their apartment any time during the rental period and have no obligation to redeem the apartment at the end of the renting period. Finding a new tenant for the apartment is the responsibility of the housing company owner, in the case of a new build the developer. If the developer fails to find a new tenant, the developer redeems the apartment to themselves. (Ministry of the Environment, 2024c).

Part-ownership dwellings are subject to different legislations depending on the type of ownership. During the rental period, the applicable legislation is the Act on Joint Management of Rental Buildings. After redeeming the apartment, the applicable legislation is the Limited Liability Housing Companies Act. The sale of the apartment is done according to the Housing Transactions Act. (Finnish Competition and Consumer Authority, 2024e).

3 Research material and methods

This chapter outlines the step-by-step framework developed for mixed-tenure housing production, identifying key documents relevant to each step of the framework. The advantages and disadvantages of mixed-tenure housing production are gathered in the context of the framework.

Following the creation of the framework, interviews were conducted. Interviews were focused on the HMA municipalities planning authorities and, in the interviews, focus was on issues related to land use planning. The aim of the interviews was to gather feedback on the hypothesized mixed-tenure housing project, as well as identify additional points that need to be considered.

The chapter concludes with a case study involving a hypothetical high-rise apartment building consisting of 264 apartments. In the case study, the building is divided into ownership and part-ownership apartments and the financial viability of such a project is assessed through simulated cash-flow calculations.

3.1 A framework for mixed-tenure housing projects

Based on the literature review, a framework for mixed-tenure housing project was created. The framework for developing mixed-tenure housing projects begins with detailed planning, including decisions on tenure types, site research, and market analysis to assess feasibility and pricing. Preliminary agreements for land sales and financing models are established, with projects then divided into two separate limited liability housing companies to streamline management. Design plans are developed, architectural decisions finalized, and building permits obtained. This phase also includes setting criteria for marketing materials and ensuring legal agreements are in place to support project execution.

As the project progresses, pre-marketing is initiated, RS financing secured, and financial calculations updated to reflect tenure-specific considerations. Construction contracts are signed, sales documents prepared, and meetings are held to ensure regulatory and operational compliance. Following the construction phase, apartments are handed over to buyers. For part-ownership units, management continues through the rental period, after which residents redeem the apartments.

The full framework is presented in appendix 1. In the next chapters, the framework is explained step by step.

Table 1: First step of the framework

Owner-occupied apartments	Part-ownership apartments
Development of initial project plan	
Preliminary target group selection	
Site research	
Market research	
Determination of selling prices	

In the beginning phase, the initial project plan is developed. Already in this phase, a decision on the tenure types included in the specific project is done. If the project is developed in a mixed-tenure type of way, an initial calculation on the portions and distribution of tenure types is done. This decision also influences the preliminary target group selection.

Site research includes discussion with municipalities, and possible private plot owners. Market research is conducted to get an initial idea of the possibilities of such a project and selling prices for both tenure types are determined.

Table 2: Second step of the framework

Owner-occupied apartments	Part-ownership apartments
Preparation of the preliminary agreement for the land sale	
Deciding on the financing model, securing financing and options for financing	
Updating the project plan	
Updating the market research	
Establishing the limited liability housing company	Establishing the limited liability housing company

In the second step, preparations of the preliminary agreement for the land sales are done. At this point, negotiation with the municipality on a Land use agreement is done. Decisions on financing models, securing the financing and options for financing are explored, with the main question to determine being whether the housing projects are funded separately, or through one financing option. The project plan and market research are updated, and possible changes made based on the feedback received.

After this, the projects are separated into two when the limited liability housing companies are established. The limited liability housing companies are created separately, since this makes management of the two separate tenure types easier. While both tenure types are established as limited liability housing companies, management of part-ownership apartments continues for the set renting period after construction is completed. Separating the projects into two different companies makes handling of the projects easier.

Table 3: Third step of the framework

Owner-occupied apartments	Part-ownership apartments
Purchase of land	
Shareholders' meeting	Shareholders' meeting

In the third step, the land is purchased. In this step, the decision on plot division between the projects is done as well as deciding on whether the plot is owned, rented or optionally rented. In this step the shareholders' meeting for both limited liability housing companies are also held.

Table 4: Fourth step of the framework

Owner-occupied apartments	Part-ownership apartments
Updating the project plan	
Approval of the design plans	

In the fourth step, project plans are updated, and design plans are approved. An initial schedule for the project is created, and criteria for design plans are set. In this part, the design of how the different tenure types are divided within the building is set, since this influences the architectural choices of the project. The choice on design also affects to what extent an agreement to divide possession between joint owners, or a joint arrangement between properties is required, and the details of the agreements made.

Table 5: Fifth step of the framework

Owner-occupied apartments	Part-ownership apartments
Applying for a building permit	

In the fifth step, an application for the building permit is done. Before applying for a building permit, possible plot division, easements, agreements to divide possession between joint owners, and joint arrangements between properties must be done. Also, a document of minutes from the shareholders' meeting is required. These documents are attached to the building permit application.

Table 6: Sixth step of the framework

Owner-occupied apartments	Part-ownership apartments
Final check on building plans	
Preparation for the pre-marketing phase	

In the sixth step final checks on buildings plans are done, while also preparing for the pre-marketing phase. Before pre-marketing is started, brochures for the apartments are done, as well as price lists for apartments. The price lists also include calculations on maintenance, financial cost, and rental plot

fees. With two different tenure types, the brochures differ in content, since the part-ownership documents must include mentions of possible rental increases, and possible index increases to the apartments purchase price.

Table 7: Seventh step of the framework

Owner-occupied apartments	Part-ownership apartments
Initiation of pre-marketing	
Securing RS financing	Securing RS financing

In the seventh step, pre-marketing is initiated, and RS financing is secured. The financing decision is made based on offers received and can differ between the two housing companies. This influences the financial calculations for the housing companies, and financial calculations done must be updated accordingly.

Table 8: Eight step of the framework

Owner-occupied apartments	Part-ownership apartments
Decision on start of construction project	
Setting construction period loans and deposits	Setting construction period loans and deposits
Opening of accounts	Opening of accounts

If the pre-marketing is successful, a decision on the start of the construction project is made. In this step construction period loans and deposits are set, and accounts for the housing companies are opened.

Table 9: Ninth step of the framework

Owner-occupied apartments	Part-ownership apartments
Preparation of sales documents	Preparation of sales documents
Building permit	Building permit
Preparation of RS documents	Preparation of RS documents
Determination of charge for financial costs	Determination of charge for financial costs
Determination of maintenance fees	Determination of maintenance fees
Determination of rental plot fees	Determination of rental plot fees
Shareholders' meeting	Shareholders' meeting
Checking of articles of association	Checking of articles of association
Preparing the sales folder	Preparing the sales folder

In the ninth step, preparations for sales documents are done. The sales documents are drafted separately, since contents differ between the two tenure types, as explained in chapter 2.1.5. Legally binding building permits are acquired, and preparation of RS documents is done. The preparation of RS documents means that safekeeping documents are prepared for both projects.

The contents of the safekeeping documents were explained in chapter 2.3.1. Charge of financial costs, maintenance fees and rental plot fees are determined, and a shareholders' meeting is held. The articles of association are checked and preparations for sales are done.

Table 10: Tenth step of the framework

Owner-occupied apartments	Part-ownership apartments
Drafting the construction contract	Drafting the construction contract
Setting the collateral for the building phase	Setting the collateral for the building phase
Shareholders' meeting	Shareholders' meeting

In the tenth step of the framework, a contract on the construction is done. The contract includes details on the construction methods used, the building permit, and the final design plans for the projects. The collaterals for the building phase are set, and a shareholders' meeting is held.

Table 11: Eleventh step of the framework

Owner-occupied apartments	Part-ownership apartments
Sales start meeting	Sales start meeting
Drafting the RS agreement	Drafting the RS agreement
Shareholders' meeting	Shareholders' meeting
Board meeting	Board meeting
Preparation of safekeeping documents	Preparation of safekeeping documents

In the eleventh step, a sales start meeting is held. The RS agreement is drafted and signed, and a shareholders' meeting, as well as a board meeting is held. Safekeeping documents are prepared.

Table 12: Twelfth step of the framework

Owner-occupied apartments	Part-ownership apartments
CONSTRUCTION PHASE	

The twelfth step is the construction phase. In this thesis, the details of the construction phase are not investigated or explained further.

Table 13: Final step of the framework

Owner-occupied apartments	Part-ownership apartments
Handover of apartments	Handover of apartments
	Management of apartments during rental period
	Residents redeem the apartments

In the final step of the framework, the apartments are handed over to the buyers. In part-ownership apartments this initiates the rental period, during which management of apartments from the construction companies side is required. After the rental period ends, the residents redeem the apartments. The details of the after-construction period are not investigated in this thesis, but profit calculations for the part-ownership apartments include the rental period.

3.2 Interviews

The interviews were done to gather further information on mixed-tenure housing projects, especially weather such projects would be interesting from the municipality perspective, and whether any limitations towards such projects are set in land use planning. Interviews were semi-structured, and the municipalities of Espoo and Vantaa were interviewed.

Themes discussed in the interviews were various housing models currently in use, including mixed ownership, partial ownership, rental units, and state-subsidized housing. Thoughts on governance challenges posed by these models, including tenant selection, perceptions of neighbourhoods, and the role of political guidance and land-use agreements were gathered, as well as duration of lease agreements, the transition from rental to ownership, and the influence of nearby housing types on resident choices.

Also discussed during the interviews were themes on social and market dynamics surrounding housing. The impact of public and media perceptions on developing areas, the role of private developers, and the risks associated with privately funded rental units, as well as public perception of municipal rental apartments and investor ownership is discussed.

In both interviews, the interviewees brought up the fact that the concept of mixed-tenure currently exists, since the same building may have both owner-occupied apartments and investor-owned rental units. However, in both interviews, large-scale investor ownership was not seen as a desirable direction due to challenges in governance, as well as perceptions among residents.

Both interviewees brought up interest in part-ownership housing development. Part-ownership apartments were seen as interesting towards consumers, but details on lease duration and other terms such as possible index increase in housing prices were seen to affect consumer interest. Opinions on lease duration varied, with one interviewee seeing a short lease time as more attractive towards potential buyers and an excessively long ownership periods possibly deterring potential buyers due to the extended commitment and waiting time, while the other interviewee thought a five-year rental period was relatively short but could be appealing to a young demographic. Possible index increases on both rents and apartment prices were seen as a possible dissuade towards residents due to price uncertainty.

Land-use policies, including plot allocation agreements, affect the amount of tenure types in areas. Between the two municipalities the ratios differed a little, but in both municipalities the amount of subsidized housing was set to 20%. In both municipalities negotiations on tenure types are welcomed, but both municipalities also highlighted the fact that targets are set for a reason and adhered to. An important tool for ensuring the adequate amount of tenure type is land-use agreements.

Both municipalities show interest in part-ownership housing and could possibly support such projects through favourable plot allocations. Subletting should be prohibited for part-ownership units, ensuring they transition to owner-occupied properties. Crucial considerations include the treatment of unsold properties at the end of lease terms. A combined rent and purchase model could also be considered part of the ownership portfolio in land-use agreements, particularly if units are guaranteed to sell within a specified timeframe. A critical factor is setting a reasonable time limit for purchase rights to avoid overly lengthy rental periods.

Housing type preferences in neighbouring properties influence residents' decisions. For instance, municipal rental apartments may face prejudice despite tenant selection based on specific criteria, unlike private investors leasing apartments. Overall, part-ownership apartments, particularly where the resident is the owner-occupant, was seen as unlikely to provoke negative perceptions, as such residents could be seen as "reliable" neighbours by those who have bought a traditional owner-occupied apartment. In contrast, investor ownership portfolios are often recognized by neighbours. In addition, both interviewees brought up that concerns about developing areas are often exaggerated in the media, while services tend to be adequate. Regarding neighbourhood reputations, external perceptions often influence these areas' image, while residents typically express satisfaction with their living environments.

3.3 Case study

The case study was conducted on a 24-story high-rise building, with a total of 264 apartments. In the building, floors 2-22 had apartments, with each floor consisting of 12 apartments that varied from studios to three-bedroom apartments. The floor plans were identical in all floors, apart from floors 8 and 16. This was due to technical requirements.

Possibilities on tenure mix can vary, and for this thesis six different design possibilities were hypothesized. The difference between the design possibilities came from the mix of different tenure types within building and floors, as explained in chapter 2.2.1. The six different possibilities on design are shown in appendix 2. While the cash flow calculation does not consider all

the different design possibilities, the pros and cons regarding each design are considered in chapter 4.

In the case study, the ratio of ownership and part-ownership apartments was 50%-50%, so each tenure had in total 132 apartments and apartments were divided in a unit-by-unit design. While an apartment higher up with a better view is often thought to hold more amenities, and thus priced higher than an apartment on a lower floor with a less nice view, for simplicity, the changes in apartment pricing were not considered when creating the cash flow calculation and an average rent was used when calculating rental income.

In total, three different cash flow calculations were made. The three different calculations all included the following assumptions: the total amount of apartments was 264, with the split between tenure types being 50%-50%. The building didn't include a parking garage nor consider possible parking space rents, and the construction time was assumed to be 1,5 years. No external loans were used in the project.

3.3.1 First cash flow calculation

For the first cash flow calculation, the following additional assumptions were made: the holding period for the part-ownership apartments was set at five years. For part-ownership apartments the rent increased each year by three percent, and after the holding period the price of the apartment was re-evaluated and includes a price increase of four percent. The percentage with which the apartment byer redeems the part-ownership apartment at initial purchase was set at 10%.

In the first cash flow model, the initial project investment is paid in year 0. After this, the construction phase begins. With construction assumed to last until the end of year 2, the sale of apartments happens in the beginning of year 3. During year 3, positive cash flows are both net rents and redemption prices coming from the 132 part-ownership apartments, as well as the selling of the 132 ownership apartments. Negative cash flows are maintenance fees, tenant management related fees, brokerage fees and possible renovation costs.

After year 3, the rental period for the part-ownership apartments begins. During this phase, the rents are increased annually by three percent. What needs to be remembered is, that after the rental periods, the increased rents are reimbursed in the purchase price. For the tenant, the increase in rents lowers the reimbursement price. For the company, the increase in rents provides additional cash flow during the renting period.

While in government subsidized part-ownership housing there has been no possibility of index increase for the price of the apartment after the rental period, in privately funded housing production such pre-requisite does not exist. Thus, when the rental period ends in year 4, the price of the apartment

is subjected to an index increase. In the initial contract of sale, the possibility of and index increase can be written, and a minimum-maximum increase can be set. In this case study the index was set at four percent. At the end of year 4, the part-ownership apartments are purchased fully by the customers. In the purchase price, the index increase is accounted for, as is paid rents and the initial redemption price.

3.3.2 Second cash flow calculation

For the second cash flow calculation, the following additional assumptions were made: the holding period for the part-ownership apartments was set at five years. For part-ownership apartments the rent increased each year by three percent, and after the holding period the price of the apartment was re-evaluated and includes a price increase of four percent. The percentage with which the apartment byer redeems the part-ownership apartment at initial purchase was set at 10%.

The difference from the first cash flow model was that in the second cash flow model, apartments are sold during the construction phase. Like the first cash flow model, the initial project investment is paid in year 0. After this, the construction phase begins. During the construction phase, apartments are sold both from part-ownership and ownership tenure types. Positive cash flows are calculated so that each year one fourth of owner-occupied apartments are sold, and part-ownership apartments redeemed.

After year 3, the rental period for the part-ownership apartments begins. Negative cash flows are maintenance fees, tenant management related fees, brokerage fees and possible renovation costs. Positive cash flows are rents, which as in the first cash flow model are increased annually by three percent. Such as the first case study, after the rental periods, the increased rents are reimbursed in the purchase price. And as in the first case study, at the end of the rental period there is an index increase.

3.3.3 Third cash flow calculation

In the third cash flow calculation the idea of part-ownership apartments was discarded, and the part-ownership apartments were changed to be rental apartments. The assumption was that 132 apartments would be sold as owner-occupied apartments, and 132 apartments would be rented for a five-year period. After the five-year rental period, the tenants would be given the choice of either buying the apartment or moving out. If the tenant does not want to buy the apartment, the construction company will redeem it and be able to sell it as a normal, owner-occupied apartment.

In the third cash flow model, the 132 owner-occupied apartments are sold similarly to the second cash flow model during the construction period. Positive cash flows come from the apartments being sold, while negative cash

flows remain the same to the first and second cash flow calculation. After the construction period the rental tenants start paying rent for their apartments. Rents are increased every year by 3% but unlike the part-ownership apartments the rents are not reimbursed after the rental period ends. After the five-year rental period, the apartment prices are subject to an index increase and sold as owner-occupied apartments.

4 Results

When planning a mixed-tenure housing project the process, as explained in chapter 3.1., is like planning any housing project. While legislations set either guidelines or rules that need to be followed, the contracts done before development are at most importance.

The Land Use and Building Act sets guidelines for development, and while it needs to be considered when doing any development, does not set specific rules regarding mixed-tenure housing. The Housing Transactions Act applies to both owner-occupied and mixed-tenure apartments. While it sets requirements for the contents of the contract of sale and guarantees and safekeeping documents, it applying to both tenure-types makes the process more straightforward.

The contents of the contract of sale are set in the Housing Transactions Act. When the founder of the limited liability housing company sells a housing share during the construction stage, the contract of sale must be in written form and include at least the minimum requirements set in the Housing Transactions Act. When planning this type of mixed-tenure housing project, it is important to note that part-ownership apartments contract of sale requires some additions compared to owner-occupied apartments. The additions are specified in chapter 2.1.5.

The Act on Joint Management of Rental Buildings is in force during the rental period of part-ownership apartments. The act gives the residents and owners of a rental building power on decision-making, as well as the possibility to influence matters related to one's own housing, increase living comfort and promote maintenance and care of the rental building. The act also sets limits for power, stating that all permanent residents over the age of 18 are entitled to vote and eligible for election, while possible business and office premise owners located in the building are only entitled to vote. The owner of the building is not eligible for election nor entitled to vote. When the part-ownership apartments are redeemed, the Act on Joint Management of Rental Buildings ceases to apply, since now all apartments are a part of the limited liability housing company, and the Housing Transactions Act applies form there.

The most important contract to consider is the Agreement to divide possession between joint owners. In practice, the agreement is a free form contract, and its contents are often agreed upon between the parties involved. Still, while free form, the contents are binding. In the case hypothesized in this thesis, the agreement would involve points on use and maintenance of air-raid shelter, the use and maintenance of common areas within the building such as saunas, and the use and maintenance of common areas outside the building such as playgrounds. In the hypothetical case of this thesis, the building also includes a separate, outside structure for bicycle storage. The use and maintenance of this, and similar, structures are also agreed upon in

the agreement. All points must include a notion on the division of cost regarding maintenance.

In the hypothetical case study of this thesis, the tenure mix happens within one building. This is where the design on tenure-mix must be considered. When the technology built into the project serves both tenure types, the maintenance costs are also allocated by this principle. Notions in the contract are made on maintenance of the physical structures of the property such as roofs, windows and walls, and building service technologies such as HVAC.

While in the case study and the cash-flow analysis done the differences on rents and maintenance costs within the building are not considered, the costs of maintenance on for example window cleaning or façade works increases the higher up the job is done. If tenure types are mixed within all floors at an equal amount, the costs can also be distributed somewhat equally between the two limited liability housing companies. Since both companies occupy both floors, the maintenance costs are also similar. If the tenure-mix is implemented for example in a way that the first limited liability housing company occupies floors 1-12 and the second limited liability housing company occupies floors 13-24, the maintenance responsibility would thus be divided between these floors, and costs for the second limited liability housing company might be higher since the apartments are located higher up. In this design, both limited liability housing companies might be responsible for maintenance of their specified floors also within the building. These details need to be specified quite clearly within the contract made.

Compared to the first cash flow calculation, the second and third cash flow calculation provides a higher IRR. With the timing of cash flow happening throughout the projects in the second and third calculation, the company is provided with steady, positive cash flows and the time-value of money is profited from.

The third cash flow calculation was done to provide a way to compare IRR between part-ownership and rental projects. The IRR for the second and third project did not differ significantly. Both projects provide steady cash flows during the construction period, while also providing cash flows during the rental period. Thus, it can be concluded that other tenure-mix types could also be worth studying in the future since part-ownership apartments do not bring a significant advantage compared to rental. Still, the cash-flow calculations also show that part-ownership apartments are worth considering since the IRR of such a mixed-tenure project is relatively good.

In all the cash flow calculations occupancy rate was set at 70% for part-ownership, as well as rental apartments. Occupancy rate affects the IRR, since the rental income would bring in positive cash flow. If apartments are empty, there is no rental income and only maintenance costs. Risk management through sensitivity analysis regarding occupancy rate provides a way of analysing the effect of changes on occupancy rate has on the IRR.

The index increase on apartment prices and the end of the rental period provides a way to capture potential increase in value on apartment prices happening after the construction period. By tying apartment prices to an index (e.g., consumer price index or property value index), the company can profit from market trends and capture regional appreciation in certain areas. A company's properties remain competitively valued compared to others in the market and they can capture upward value of properties over time.

Based on legislation studies and interviews conducted, land use planning does not set strict limitations towards mixed-tenure housing. Land-use agreements and tenure type targets provide a framework in which developers can operate, but municipalities also seemed open to negotiation regarding both part-ownership and mixed-tenure housing projects. The details of such project influence what tenure type such projects are viewed as in tenure type allocation. Part-ownership housing is gaining interest in municipalities, with it providing another option for accommodation. Public interest and perception of mixed-tenure housing influence their success.

Short ownership periods and rent-to-buy options may appeal to residents, while longer durations could deter interest. Flexible leasing terms, diverse management strategies, and effective marketing might enhance neighbourhood appeal, although rent uncertainties and financing models remain concerns.

Real estate projects funding can be done through owners' equity (share capital and funds) or external equity (loans, often from banks). Loans typically require repayment with interest and collateral. In a mixed-tenure housing project studied in this thesis, the limited liability housing companies are formed separately, and are both subject to the Housing Transaction Act, and through this the RS system.

Funding through institutional investors for part-ownership projects would change the nature of the project, and it could be comparable to a rental project sold fully to an external investor, who would then provide funding for their share of the project. This would then transfer the ownership of the part-ownership apartment limited liability housing company to the investor.

5 Summary/Conclusions

The aim of this thesis was to analyse the possibility of a mixed-tenure housing project from the perspective of a construction company. The two tenure-types chosen were owner-occupied and part-ownership projects.

While mixed-tenure housing development can bring a possibility for diversification for a housing development company, there is much to consider about when planning such a project. While a housing development company prefers owner-occupied apartments due to their short administration time and good profit margin, the possibility of starting an owner-occupied apartment project of over 200 apartments is quite small, at least in the current market situation. Bringing part-ownership apartments into the portfolio of a housing company diversifies and improves the supply a company can offer. On the other hand, a company that does not have experience on renting can set themselves up for risks if the launching of a new business venture is not carefully planned. Finding an outside business partner for rental maintenance can be one solution.

One could argue, why not create a tenure-mix of owner-occupied and rental apartments. While the current market situation is one to encourage projects sold for institutional investors, selling a large project is still not an easy task. Similarly, a private person looking to buy a long-term apartment might stray away from projects that include a large institutional investor. Part-ownership apartments might be seen as more reliable and less institutionalised, since the buyer of such an apartment will at the end of the rental period redeem their apartment for themselves. The part-ownership apartment buyer can be seen as more likely to be committed to their apartment than an institutional investor.

Market interest in part-ownership apartments is hard to predict. While part-ownership apartments offer a private buyer the possibility to "test out" an area and apartment, it is still a commitment. The part-ownership apartment might bring freedom in the sense that a buyer can reserve an apartment, live in it while paying rent, and leave the apartment as easily as any rental property. If the buyer likes their apartment, they can redeem it and possibly also profit from increase of value when later selling the apartment. Part-ownership can thus be seen to attract customers to developing areas, where amenities are yet to be built but in the future the area might have been subjected to increased interest and thus increased prices.

For a housing developer, part-ownership apartments bring a possibility to lure new customers into the market through this "testing" period. Marketing through the idea that one can "test out" apartments can be interesting for those not wanting to fully commit to one area or apartment, living a similar lifestyle to renting an apartment. Additionally, the part-ownership apartment can be seen as safer in the eyes of other apartments buyers in the sense

that the apartment is owned by a private buyer and not subject to institutional investors.

Risks on mixed-tenure housing development include neither tenure-type not being sold. With both tenure-types relying on private customers, the apartments being sold depends on the housing market and customer interest. In the worst-case scenario, both apartment types are left unsold, and the housing developer is left with an array of apartments to maintain. Part-ownership apartments also include the risk of apartments not being redeemed and them returning to the management of the housing development company. This would mean more costs on re-selling the apartments and increase in maintenance costs.

Customer interest and attitudes towards a mixed-tenure housing project studied in this thesis is hard to predict. While initially people might be sceptical of mixing different tenures either within buildings or even within neighbourhoods, previous studies have shown that in the long run the mixing affects residents quite little. It can also be argued, that in a building with over 200 apartments the tenure type of your neighbours makes little difference. Still, the possible prejudices and customer attitudes towards such projects should be looked more into possibly through market research to determine the plausibility of such a project.

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List of appendices

Appendix 1: Framework for mixed-tenure housing projects

Framework	
Owner-occupied apartments	**Part-ownership apartments**
Development of initial project plan	
Preliminary target group selection	
Site research	
Market research	
Determination of selling prices	
⇩	
Preparation of the preliminary agreement for the land sale	
Deciding on the financing model, securing financing and options for financing	
Updating the project plan	
Updating the market recearch	
Establishing the limited liability housing company	Establishing the limited liability housing company
⇩	
Purchase of land	
Shareholders' meeting	Shareholders' meeting
⇩	
Updating the project plan	
Approval of the design plans	
⇩	
Applying for a building permit	Applying for a building permit
⇩	
Final check on building plans	
Preparation for the pre-marketing phase	
⇩	
Initiation of pre-marketing	
Securing RS financing	Securing RS financing

Decision on start of construction project	
Setting construction period loans and deposits	Setting construction period loand and deposits
Opening of accounts	Opening of accounts

Preparation of sales documents	Preparation of sales documents
Building permit	Building permit
Preparation of RS documents	Preparation of RS documents
Determination of charge for financial costs	Determination of charge for financial costs
Determination of maintenance fees	Determination of maintenance fees
Determination of rental plot fees	Determination of rental plot fees
Shareholders' meeting	Shareholders' meeting
Checking of articles of association	Checking of articles of association
Preparing the sales folder	Preparing the sales folder

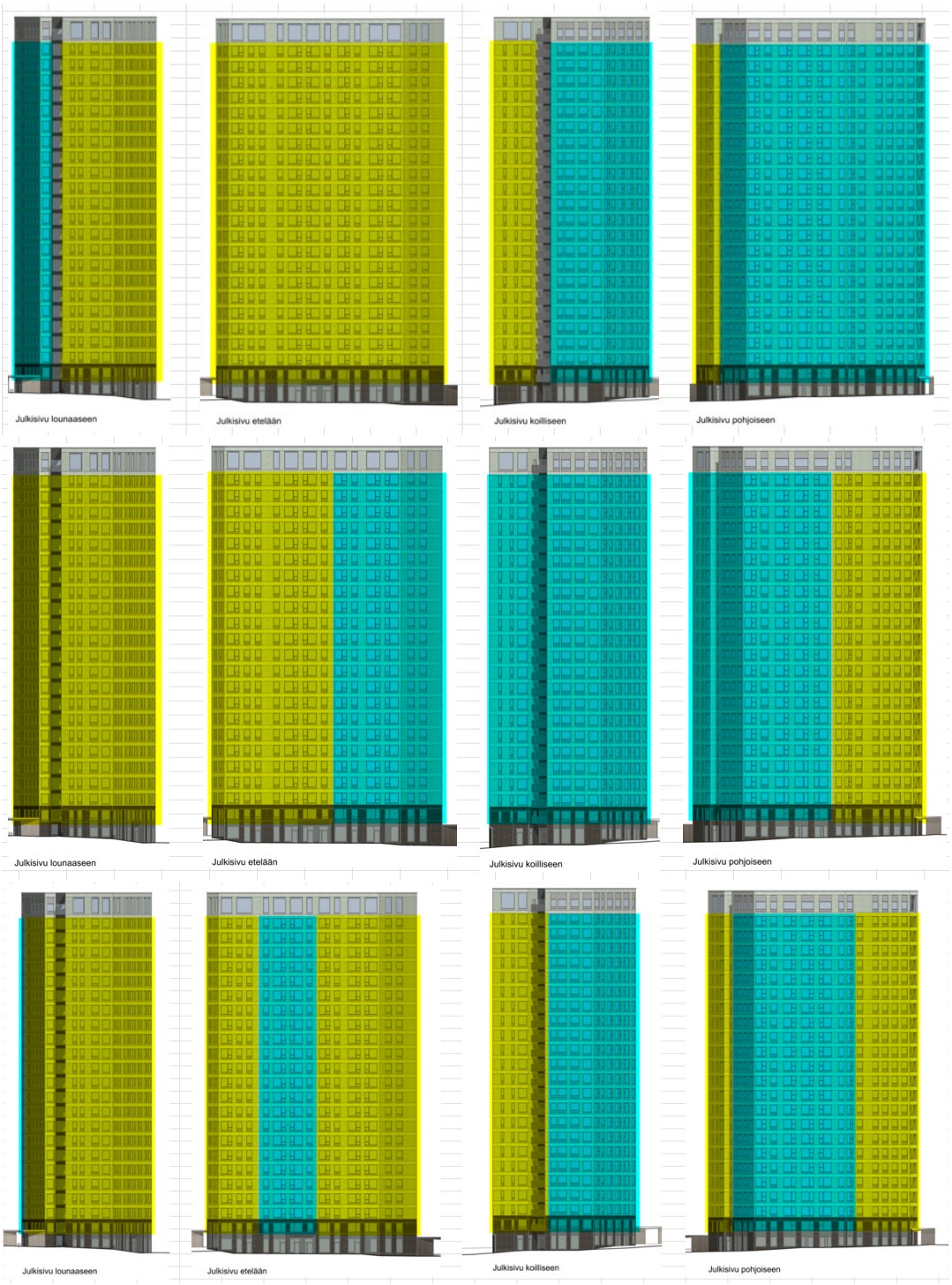
Drafting the construction contract	Drafting the construction contract
Setting the collateral for the building phase	Setting the collateral for the building phase
Shareholders' meeting	Shareholders' meeting

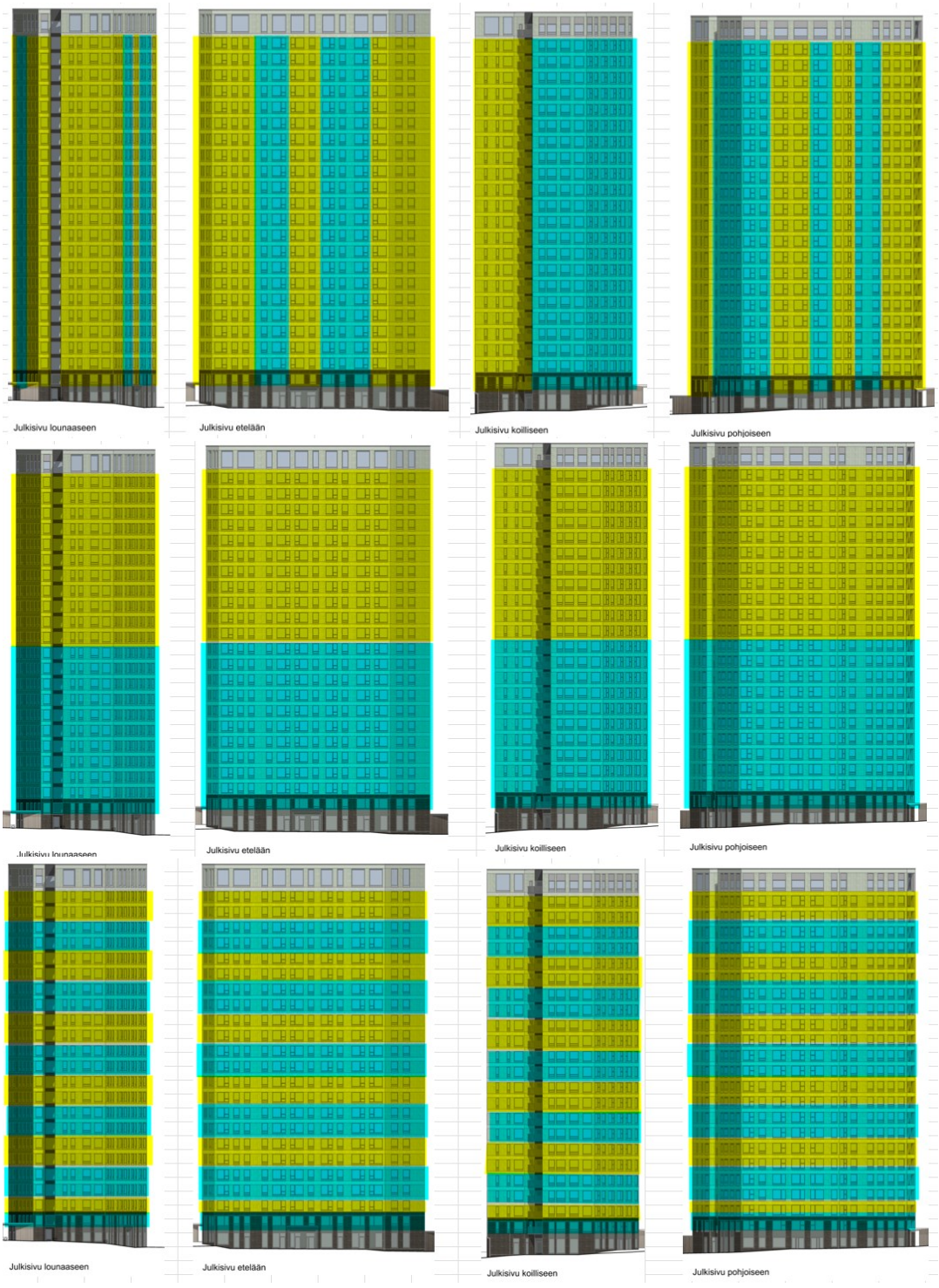
Sales start meeting	Sales start meeting
Drafting the RS agreement	Drafting the RS agreement
Shareholders' meeting	Shareholders' meeting
Board meeting	Board meeting
Preparation of safekeeping documents	Preparation of safekeeping documents

CONSTRUCTION PHASE

Handover of apartments	Handover of apartments
	Management of apartments during rental period
	Residents redeem the apartments

Appendix 2: Six different designs of mixed-tenure housing

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