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Socially-mixed Affordable Housing in Nyhavna

Master's thesis in Urban Ecological Planning
Supervisor: Prof. Dr. Peter Gotsch
Co-supervisor: Cinthia Freire Stecchini
June 2021

Master's thesis

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Norwegian University of
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Abstract

Norway among many other countries, has an affordable housing problem. Most importantly, the issue targets the people whose income is not low enough to be entitled to municipal housing and their income is not high enough to enter the housing market. The main cause contributing to the rising house prices in Norway is a shortage of housing supply. The urban development policies are a facilitator of providing affordable housing for everyone with a focus on socially mixed communities, yet there exist barriers that don't give the municipalities the power to implement their goals and realize the need for affordable housing in Norway.

Nyhavna is a port area of Trondheim that will be transformed from an industrial area into a mixed-use urban center. It has been stated by Trondheim municipality that the ambition is to have a diverse housing offer in this area. In this study, we first reflect on why there need to be affordable houses in prime city locations such as Nyhavna based on the social sustainability theories. Then we assess the effectiveness of the Norwegian urban development policies in implementing affordable housing plots in Nyhavna. Literature review and key informant interviews were the main data gathering methods of the research. The findings address topics such as the focus of the Norwegian housing policy on homeownership, the marginal private rental sector, and the third housing sector, and how they are contributing to housing affordability and social sustainability. In the end, there are suggestion from the key informants on the possible ways to realize affordable housing and social mix in Nyhavna.

Research Question:

> What are the challenges and opportunities of implementing socially mixed affordable housing in Trondheim, Norway?

Foreword

<div dir="rtl">

ز دانایی شنیدم گنج در ویرانه می‌باشد

بنای خانه دل هر قدر ویران شود بهتر

قصاب کاشانی

</div>

In 2018, I was watching a Ted talk by Liz Ogbu that opened my eye to the concept of spatial justice. That was the moment that I knew my career path will be in some way entangled with realizing this concept. The second significant aspiration that fed my interest in housing studies was a documentary about the scale of housing commodification. *Push* taught me more deeply and tangibly about the injustice that happens not so far from us, not in some developing countries but in the countries that are the role models of all-encompassing welfare states. And this injustice is not happening to a secondary urban need but a very fundamental human need that is internationally known to be a human right, the right to adequate shelter.

I would like to thank Prof. Dr. Peter Andreas Gotsch for his time and dedication. His enlightening comments and support both during my last semester and from the beginning of my studies, has been very heartwarming. In addition, Rolee Aranya, Brita Fladvad Nielsen, David Smith, Eszter Marklund-Nagy, Savis Gohari Krangsås, Cinthia Freire Stecchini, and all the other people who contributed to UEP class of 2019-2021, are very much appreciated. And a big thank to all the people who had no responsibility but replied to my emails about this topic nonetheless.

Special thanks to Randi Narvestad and Eli Støa for their responsible dedication, and all the interviewees who assisted the shape making of this thesis.

برای مرضیه، علی و عرفان و مخصوصا عرفان برای حمایت بی‌دریغ . و هانیه دوست دلبندم که امیدوارم او هم یک روز موفق به ارائه‌ی پروپوزال پایان‌نامه‌ی خود پس از گذراندن هفت ترم در مقطع کارشناسی ارشد شود . و حانیه.

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1   Introduction

"Stay home." This is what we have been hearing often since the beginning of the international outbreak of Covid-19 in the fall of 2020. This simple instruction has a presupposition that overlooks the reality of the world we are living in. Stay home as if everyone has a house, wash your hands frequently, as if everyone has access to safe and sanitary water all the time (Sharif and Rajagopal, 2020). Many countries have introduced temporary measures to help those who cannot afford housing during the pandemic. Yet the importance of adequate access to affordable housing is magnified in this period.

In Maslow's hierarchy of 7 needs, the need for shelter is a part of biological and physiological needs, which are considered as the first and fundamental stone of the pyramid (Maslow, 1943). Apart from being a basic human need, the right to an adequate standard of living, including adequate housing, is recognized by international human rights law (OHCHR, 2009). Despite the centrality of this right within the global legal system, well over a billion people are not adequately housed (Ibid). As Harvey (2008) writes, "we live in a world, after all, where the rights of private property and the profit rate trump all other notions of rights one can think of " (Harvey, 2008, p.1). Because when a shelter transitions to become a house, it becomes a commodified asset offered as property and land, which are foundational to both power and wealth (Aalbers and Christophers, 2014). Bengtsson (2001) refers to this duality and explains that housing is an individual market good and a public good both at the same time. Meanwhile, the liberalization of housing and credit has been a contributor to the increased financialization and commodification of housing in Norway (Tranøy et al., 2020). The result is that today around 70% of first-time homebuyers are helped into the market by their parents (Ibid.).

The focus of this study is affordable housing provision and social sustainability. But to minimize the scope, I have chosen a specific area in the city I live in, Trondheim, in Norway, as the case of the study. The area is called "Nyhavna" and it is in the early stages of brownfield development. What makes Nyhavna significant is its location, being on the waterfront and very close to the city center of Trondheim. The municipality of Trondheim has stated that one of the development goals is to provide a diverse housing offer in Nyhavna. Looking at the neighboring area, Nedre Elvehavn,

which underwent a similar development from industrial to mixed-use, the prediction is that the future residents of Nyhavna will be mainly high-income households. In this study, the first goal is to familiarize oneself with the relevant legs of the housing octopus and then I focus on the Norwegian context. The second goal is to investigate whether Nyhavna's municipal goal is feasible from a theoretical and practical standpoint or not. To achieve a social mix, then there should be affordable housing offers in Nyhavna. As the last goal of this research, I explore the challenges and opportunities concerning affordable housing provision in Nyhavna. The methods of data collection are namely literature review, key informant interviews, an experimental method, and a self-completion survey, each of them aimed at gathering a specific set of data.

Before moving on to explaining the structure of the study, I would like to acknowledge the limitations. Firstly, this study doesn't claim to be a comprehensive analysis of all the Norwegian housing defects. The research took place over a period of seven months, during which two months were spent formulating the research question. Secondly, urban sustainability is one of the main themes in the theoretical framework. Due to the time limit mentioned above, the scope of research is limited to social sustainability. However, I would like to stress that both the economic and the environmental pillars of sustainability are just as important. The methodology section discusses in greater depth the uncertainties relating to the international outbreak of Covid-19.

The study, excluding the introduction, is divided into six parts: Research background, Theoretical framework, Methodology, Context, Findings, and Discussion and conclusions. In the research background, I highlight why is it important to conduct this study and some fundamental definitions such as affordable housing. When I'm pointing out the importance of the topic, the magnitude of housing unaffordability in Norway and how it generates inequality are also discussed based on the existing literature and statistics. In the theoretical framework, the focus is social sustainability and whether social mix is a crucial part of maintaining social sustainability or not. In addition, some of the theories related to the nature of housing, being both a market asset and a welfare pillar are reviewed concerning the Norwegian context.

The methodology, as is evident from its name, explains how the research was conducted practically. In the context section, the findings are presented based on a literature review and

secondary data. It provides an overview of Norwegian housing policy and the market, as well as the tools Trondheim municipality has at its disposal for providing affordable housing. Also, due to the increase in housing prices over the last decade or so that generates inequalities more rapidly, the causes of this phenomenon are investigated.

In the findings, the primary data are presented, including all the interviews and some of the survey responses to open-ended questions. These data are classified into different themes and present an overview of the opposing and agreeing points of view. At the end of this section, the recommendations on what are the possible solutions for building affordable housing in Nyhavna are presented. The last section is the discussion and conclusion, where I revisit the research question and investigate how the findings are responding to it and the main goals of the research. Additionally, the opportunities for further research are presented.

2   Research Background

The aim of this chapter is two give an overview of the fundamental definitions associated with this study. I start by exploring the definitions of "affordable housing." A term that is used both in the title and the research question and is one of the main axes around which the study revolves, making it important to see what is being referred to. As the chapter continues, the criticality of affordable housing issue is discussed, first briefly framed in the global context, and then extensively concerning Norway and Trondheim. In this part, the importance of conducting this study is revealed in more detail. The subsequent section introduces the causes of housing unaffordability in general. As social sustainability is one of the main theories, prior to starting the theory chapter, I mention the definition of sustainable development and the Sustainable Development Goal 11 that pertains to this research. It is also mentioned how sustainable development is related to the chosen context. Lastly, since urban policies are integral to housing affordability, I discuss what they are and how they are formulated in Norway.

2.1   How is affordable housing defined?

The Second Habitat Conference, held by United Nations in Istanbul, Turkey in 1996, adopted the Habitat Agenda and the Istanbul Declaration, through which governments committed themselves to the goals of adequate shelter for all and sustainable human settlements. The report of this conference defines adequate shelter as follows,

> *"Adequate shelter means more than a roof over one's head. It also means adequate privacy; adequate space; physical accessibility; adequate security; security of tenure; structural stability and durability; adequate lighting, heating and ventilation; adequate basic infrastructure, such as water-supply, sanitation and waste-management facilities; suitable environmental quality and health-related factors; and adequate and accessible location with regard to work and basic facilities: all of which should be available at an affordable cost. Adequacy should be determined together with the people concerned, bearing in mind the prospect for gradual development. Adequacy often varies from*

country to country, since it depends on specific cultural, social, environmental

and economic factors" (UN. Secretariat, 1996, p.26)

There are many points in this definition that can be related to our thesis, which are the security of tenure, accessible location to work and facilities, affordability, and context awareness. These points will be later discussed in relation to the Norwegian context.

Apart from this definition of adequate shelter, the consensus is yet to be built on the definition of affordable housing (Stone, 2006) and the definition varies from country to country. The term, affordable housing, is mainly employed by scholars and policy makers and primarily raised as a policy issue (Galster and Lee, 2021, Quigley and Raphael, 2004). The phrase has also taken on a broad range of different connotations, ranging from household financial implications or access to proper houses (typically through purchase) to a section of the private rental market or social housing, as well as a criterion for subsidized housing (Galster and Lee, 2021).

"But economists are wary, even uncomfortable, with the rhetoric of

'affordability,' which jumbles together in a single term a number of disparate

issues: the distribution of housing prices, the distribution of housing quality,

the distribution of income, the ability of households to borrow, public policies

affecting housing markets, conditions affecting the supply of new or refurbished

housing, and the choices that people make about how much housing to consume

relative to other goods. This mixture of issues raises difficulties in interpreting

even basic facts about housing affordability." (Quigley and Raphael, 2004, p.1)

As it can be interpreted from the issues counted by Quigley and Raphael, housing affordability is a function of many variables including household choices and social and financial capitals, public policies, and most importantly, the demand and supply sides of the market.

To measure affordability, it's common in many countries to use the housing-expenditure-to-income ratio tool. In the United States and Canada, a commonly accepted guideline for housing affordability is a housing cost that does not exceed 30% of a household's gross income (Herbert et al., 2018). The origin of the standard can be traced back to an old aphorism that one should devote "a week's wages to a month's rent," which itself is based on studies of what typical families spent

on housing going back to the late 1800s in the US (Ibid.). It was mainly thought that if housing accounted for more than this share of income, there would not be enough left over to pay for life's other necessities (Ibid.). In Norway, to secure affordable housing, the authorities tried to set an upper limit for housing expenses at 20 percent of an average industry worker's salary (Sandlie and Gulbrandsen, 2017). Another approach to measure affordability is the residual income approach, in which "the residual income of a household is calculated by subtracting the cost of a 'standard basket' of consumer items from the household income. The residual is then assessed to see whether a household can secure adequate housing (Murphy, 2014, p.895)."

Many researchers are critics of such definitions and believe that this ratio and purely economic approaches do little help to shape housing policies (Smith, 2005). A study done by Mulliner et al. (2016) calls the traditional ways of defining and measuring affordability, "too limited." As Granovetter (1985) argues, economic institutions such as the housing markets cannot be analyzed or understood without the social structures of which they are a part. This goes back to the theory of embeddedness by Karl Polanyi (1944), that economy should be embedded in social relations. This also has an obvious relation to Marxist thought and the concept of "moral economy" as well (Granovetter, 1985). However, Hodgson (2017) among others questions the meaning of the words social, and economic and what exactly they refer to, especially in Polanyi's work.

Despite limitations and ambiguities, there are many benefits to having a common affordable housing measure, enabling comparison between contexts, etc. (Murphy, 2014). Yet, the fact that there is no internationally accepted measure of housing affordability can be a strong indicator of its context-dependency which might require context-based approaches to be solved as well. This has been emphasized before in the definition of adequate shelter.

2.2   The criticality of the affordable housing issue

Ancell and Thompson-Fawcett in a 2008 study, combine Mazlow's hierarchy of seven needs and Meadows' model of the path to sustainable development to introduce a model that would visualize the pathway towards social sustainability of housing. The model is built on the presupposition that

some housing needs weigh more than others. Housing affordability and quality are the most basic needs, so the primary limiting factor as to whether a household can access adequate housing or not is the capacity of a household to meet the cost of housing. And as shown in the below diagram, affordability is the very basis of socially sustainable housing. (Ancell and Thompson-Fawcett, 2008).
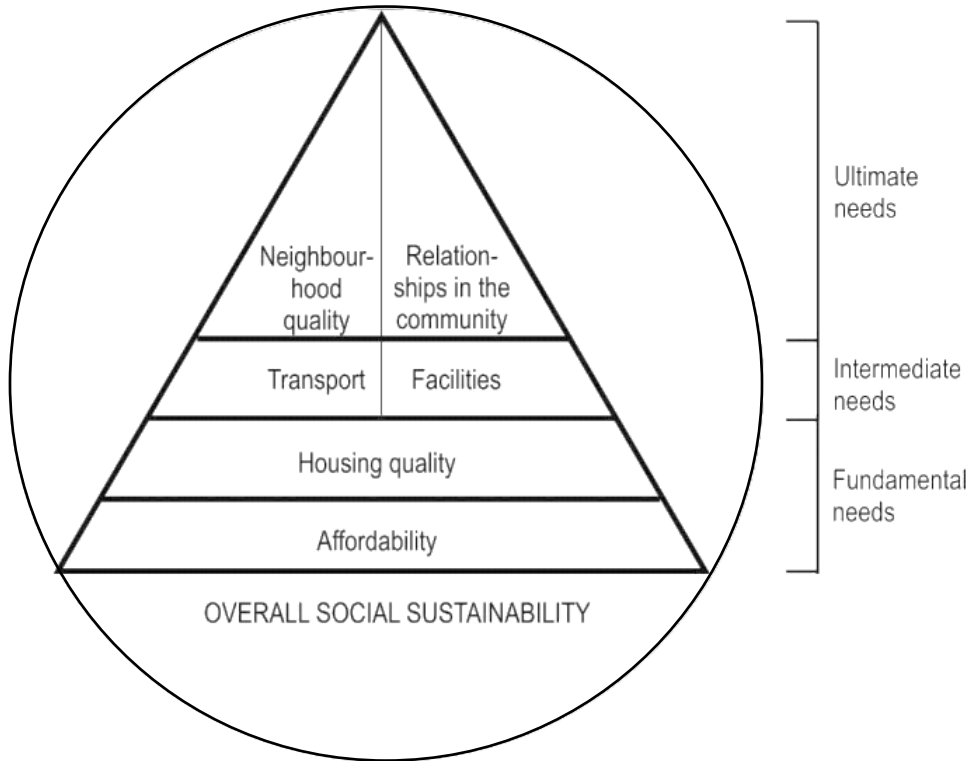
Figure 1 Conceptual evaluation model of the social sustainability of housing (Ancell and Thompson-Fawcett, 2008, p.432)

Transport and facilities are placed as intermediate needs, which makes them secondary to affordability and housing quality, and the neighborhood qualities are counted as the ultimate needs to realize the social sustainability of housing. In this study it was attempted to relate these three levels of hierarchy to each other and provide a spatial explanation of the current situation as well.

From a statistical point of view, the UN World Cities Report (2020) marks housing affordability as a global challenge that affects virtually all households. The following data outlines the magnitude of this challenge:

Globally, prospective homeowners are forced to invest more than five times their annual income to afford a regular house's price (Ibid.). Average households spend about one-quarter of their income on housing, while poor and near-poor households typically spend half of their income on housing (Quigley and Raphael, 2004). These large proportions indicate that minor percentage fluctuations in housing prices and rents would have a significant effect on the other expenditures and the well-being of households (Ibid.). Extreme levels of unaffordability can also mean that the possible housing option for low-income households are inadequate housing and slums (United Nations Human Settlements Programme, 2020). At present, 1.6 billion people, or 20% of the world's population live in inadequate housing, one billion of whom live in slums and informal settlements (Ibid.). Studies shed light on the relationship between housing unaffordability and social problems (Galster and Lee, 2021). It has been demonstrated that households burdened with high housing costs in the private rental market and not receiving help from the public sector, were more likely to experience overcrowding and financial hardship, and their children were more likely to be pushed back a year in school, have lower job outcomes in their 20s, and be jailed (Ibid.).

As of 2012, the average amount of housing costs was 31% of household expenditure in Norway (Statistics Norway, 2013). Other statistics show that 21% of the population in Norway, aged 16 years old or older, belong to a household with a high share of housing costs (Statistics Norway, 2020c) and 6% of the same population, report the total housing costs to be very burdensome (Statistics Norway, 2019). Around 150000 people are considered disadvantaged in the housing market in Norway (Gram et al., 2011).

In comparison with other OECD countries, Norway has one of the highest households' housing cost burdens (Ibid.). This burden is measured by the traditional housing cost as mortgage and rent to disposable income ratio. But Sila (2020) also takes into consideration that the high prices are also a reflector of the higher housing quality in Norway. In comparison to other OECD countries, the number of rooms per inhabitant is higher and there is less overcrowding.
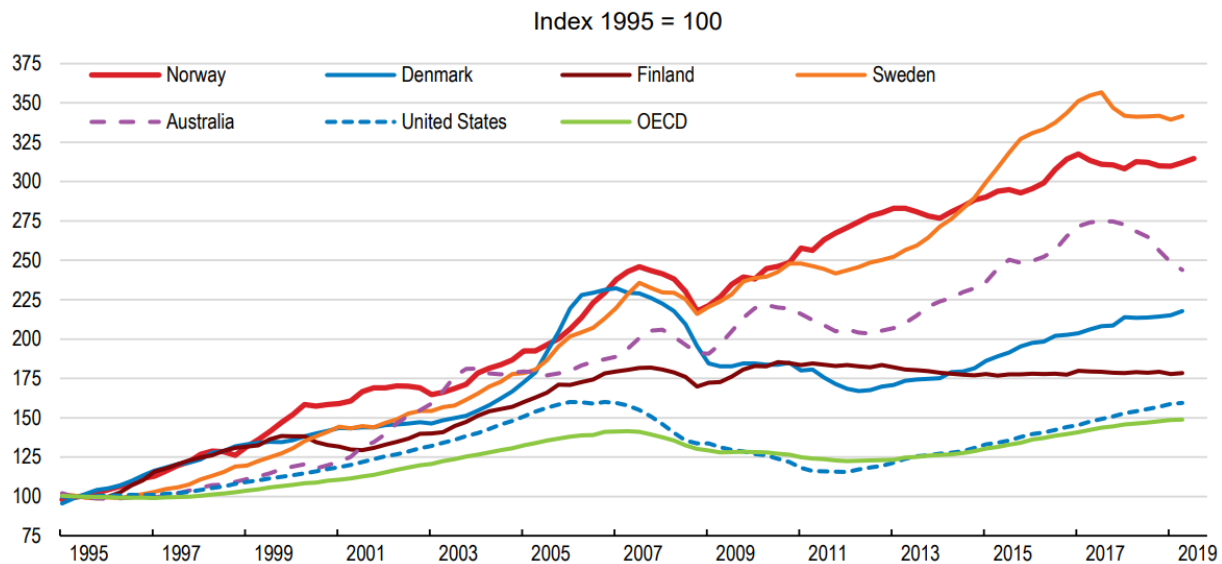
Figure 2 The real house prices in various OECD countries over two decades (Sila, 2020, p.6)

As of 2020, the average monthly rent for a two-room dwelling in the whole of Norway is 9 320 Kroners and in Trondheim municipality, this rate is 9 560 Kroners (Statistics Norway, 2020b). The average monthly salary is 48 750 Kroners and the average monthly salary of the lower quartile is 36 250 (Statistics Norway, 2020a). There's an index in the Norwegian context named the Nurse Index *Sykepleierindeksen* in Norwegian). This index determines what share of the available houses in a city are affordable for a person living on a common nurse income to debt-finance (Eiendom Norge, 2020). In its latest report, the Real State Norway (2020) draws the following graph of this index. Based on it, in 2008, the houses became immensely unaffordable which might be caused by the Global Financial Crisis, but for Trondheim, the affordability jumped back to 30 percent. With another decrease in 2013 and 2017, the 30 percent affordability has been maintained since, meaning that if a Nurse in Trondheim takes loans from a bank, then she/he/they can choose between 30 percent on the available housing stock. Between the six contexts in the graph, Trondheim is the third affordable city. However, affordability in each city is affected by different factors from the other. For example, in Stavanger, the house prices are a function of oil prices (Sila, 2020) or in Tromsø, the problem of affordability is associated with limited available land.
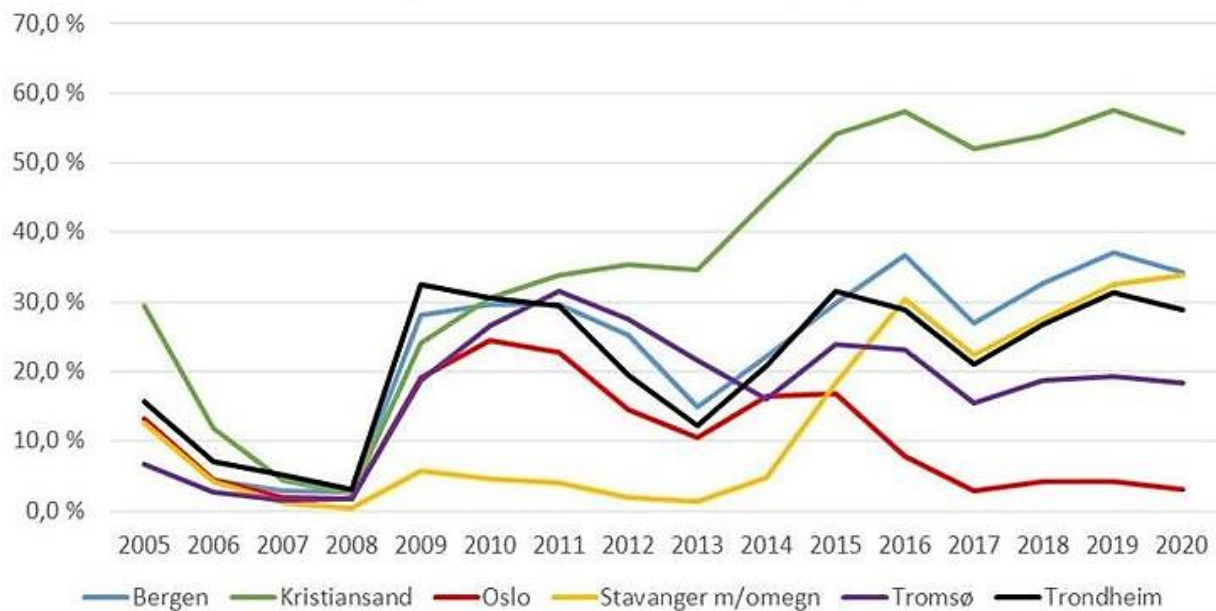
Figure 3 The nurse index of six different Norwegian cities, 2005-2020 (Eiendom Norge, 2020)

This index alone might not be a good indicator of housing affordability because it takes into consideration all the houses available on the housing market which are supposed to serve people from all ages and household types, for example for a single nurse it would be enough to reside in a one-room apartment, so it's more eye-opening if the index shows the available housing stock taking into consideration the housing needs of a nurse. Interestingly, Trondheim municipality has realized this deficiency and has introduced another table that takes into consideration the apartments just between 40-60 square meters.

Household(One person households)	Income (in Norwegian Kroner per year)	Number of years (approx.) with savings to achieve the 15% down payment	Maximum price of housing (in Norwegian Kroners)	Share of the housing turnover the household can buy
Teacher	568 080	3.5	3 106 353	86.7%

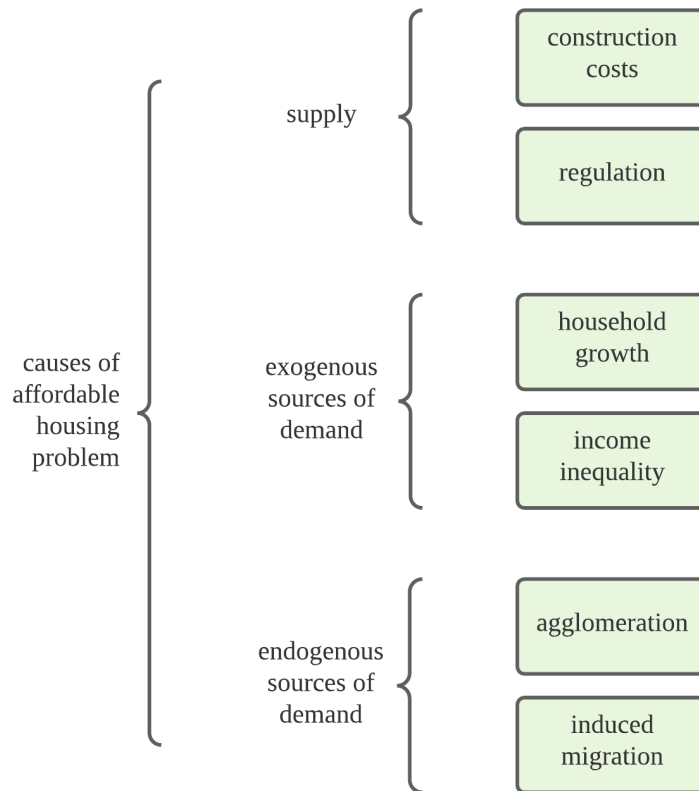|				
Nurse	549 960	3.5	2 999 765	81.2%
Preschool teacher	485 748	4.5	2 622 047	53%
Bus drivers	442 740	5	2 341 505	24.5%
Cleaner	395 772	6	2 005 716	7.2%
Waiter/ress	353 616	10	1 695 411	1.2%
With income over the limit for municipal rental housing	237 301	Not possible	830 073	0%

Figure 4 What proportion of housing turnover with a surface of 40-60 m2 a single person within various occupational groups could buy in 2019 (Trondheim Kommune, 2020b)

2.3 What are the causes of housing unaffordability?

Urban Planning is a generator of both affordable housing and housing unaffordability (Murphy, 2014). And paradoxically the more vibrant a city is, the more demand-induced unaffordability is produced (Galster and Lee, 2021). Demographia, producer of international annual affordable housing surveys, asserts that limited land availability and restrictive lending practices have been the main source of housing affordability pressures (Murphy, 2014). Galster and Lee in a recent study acknowledge that housing affordability is both a function of the metropolitan housing market and the labor market. Because housing expenses and income are considered as the two major determinants of housing affordability (2021) They name the six following alternatives as the main causes of housing unaffordability based on various studies in different contexts, however, these can generate unaffordability separately or together:

16

causes of affordable housing problem

- supply
  - construction costs
  - regulation
- exogenous sources of demand
  - household growth
  - income inequality
- endogenous sources of demand
  - agglomeration
  - induced migration

Covid-19 and the economic shrink that followed it, the worst to date after the Great Depression, are also another restraint to the funds that would initially go to affordable housing programs (United Nations Human Settlements Programme, 2020). It is expected that revenue to local authorities will decline by 15–25 percent in 2021 and will likely lead to reduced municipal service delivery (Ibid.). Meanwhile, these recent events have changed our dependence on the office spaces. This might decrease their importance in the future and their impact on housing prices as the costs of access to employments will be deducted to some extent from the overall price.

2.4 Sustainable development, housing affordability, and inclusive cities

Interestingly, the "mother of the sustainable development" is the former Norwegian prime minister, Gro Harlem Brundtland, who in 1987 gave the first and famous description of the sustainable development concept in the Brundtland Commission report, Our Common Future:

"Humanity has the ability to make development sustainable to ensure that it meets the needs of the present without compromising the ability of future generations to meet their own needs. The concept of sustainable development does imply limits - not absolute limits but limitations imposed by the present state of technology and social organization on environmental resources and by the ability of the biosphere to absorb the effects of human activities. But technology and social organization can be both managed and improved to make way for a new era of economic growth. The Commission believes that widespread poverty is no longer inevitable. Poverty is not only an evil in itself, but sustainable development requires meeting the basic needs of all and extending to all the opportunity to fulfil their aspirations for a better life. A world in which poverty is endemic will always be prone to ecological and other catastrophes" (Brundtland, 1987, p.16).

From the 17 sustainable development goals introduced by United Nations (2016), goal number 11 being "Sustainable Cities and Communities" is the most relevant (UN Habitat, 2018). Securing affordable housing can consequently help eradicate poverty, as mentioned earlier the housing expenses are for most families worldwide the single biggest household expense, by eradicating poverty, the hunger issue will most likely resolve. Housing condition is also proved by many pieces of research to be directly linked to general health and well-being (Mitchell et al., 2007). Based on the UN's description of an adequate shelter then access to clean water and sanitation should be assured through the housing as well. Unaffordability drives households to live in areas with poor levels of local services and facilities and fewer employment opportunities (Leishman and Rowley, 2012). As people in low-income have less access to better jobs then this leads to a systematic cycle of poverty, so the housing and especially its location can directly affect goals number 8 and 10.

Figure 5 Sustainable Development Goal 11 and how it relates to other SDGs (UN Habitat, 2018, p.10)

SDG 11 consists of 10 targets and 15 indicators, target 11.1 directly aims at housing affordability. The description is that by 2030, access for all to adequate, safe, and affordable housing and basic services should be ensured and the slums upgraded. SDG 11.3 mentions inclusive urbanization but it's more directed towards inclusiveness of urban processes and citizen participation rather than a social mix (UN Habitat, 2018). However, while explaining the linkage between SDG 10 and 11, SDG 10 being reduced inequalities, cities are considered as best positioned to address prevailing inequalities through better opportunities for employment, fixing affordable housing challenges, providing better spaces for inclusion, accessible transport, etc. (UN Habitat, 2018).

The Geneva UN Charter on Sustainable Housing supports member States in ensuring access to adequate housing for all. As of 2019, Trondheim city became a Geneva UN Charter Centre of Excellence on SDG City Transition joining other Charter Centres Tirana (Albania), Vienna (Austria), Tallinn (Estonia), and Glasgow (UK) making it the fifth Centre to be created by UNECE. The Centres support the Charter's implementation through training, studies, awareness-raising, and projects to improve the quality of life in cities (IISD, 2019). This means that Trondheim is now on its way to become an example for other cities on how to implement SDGs.

Released after SDGs, The New Urban Agenda positioning cities at the center of development debates (Barnett and Parnell, 2016), anticipates cities that fulfill their social function, including the social and ecological function of land, intending to progressively achieve the absolute realization of the right to adequate housing as a necessity of an adequate standard of living. What makes this report important is that it's "a fluid alliance of interests and organizations (Barnett and Parnell, 2016, p.89)" meaning that it's not a primarily nonpolitical and neutral document but the one that many stakeholders approve of. However, one might connect the focus on individual growth and economic competition in this document to the neoliberal thinking of individual entrepreneurship.

Caprotti et al. (2017) point to the challenge that the new urban agenda is associating cities and their performance to a set of measurement and measurable data, yet when affiliated with people's lives, it's harder to define these measurements. We have already talked about the same issue with the definition of affordable housing as well.

I believe that the new urban agenda is vaguely worded, which is understandable because it is a world-encompassing document, and as the urban contexts differ greatly from each other, it is only natural to have very general aims. Meanwhile, the new urban agenda does not seem as new as it should be. The world is moving towards the maximum utilization of resources which is the hot debate of the circular economy these days. Even though, the circular economy is now mostly related to product design, there are existing initiatives, even in Trondheim municipality to apply this new concept to urban planning and design as well. An application that calls for rethinking the existing urban policies and innovation.

An interesting point of the circular economy is the concept of turning products into services meaning everyone can have access to services, but it doesn't necessarily mean ownership. Maybe the reason why circular economy is not often related to housing is that it's not a very evident example of technology. For example, in the case of using mobile phones, we use each phone 3-4 years and then change it as the new technology has many more beneficial options in comparison to the old, but in the case of housing, we might live in the same house over the whole course of our lives. But circular economy is not only about recycling and reuse, rather it's a change of the way we look at the processes, and we can't unsee the housing sector, as in many countries housing sector is the defining attribute of the economy (Aalbers and Christophers, 2014).

The Norwegian minister of climate and environment, Sveinung Rotevatn, in the 4th Norwegian Circular Economy Conference 2020, has also pointed out the potential of the construction and real estate industry for implementing a circular economy. However, what seems from the speech is that the focus is mainly on recycling and hasn't encompassed urban thinking yet.

2.5   How are housing policies formed?

The Global Encyclopedia of Public Administration, Public Policy, and Governance defines urban policy as follows:

> *"Urban policy refers to the cluster of policies that are aimed at influencing the development of urban areas and urban lives. It could be fragmented and diverse in practice due to the fragility of social needs and political institution"*
> *(Wang, 2018).*

In a study with New Zealand as its context, it is stated that housing policies are formed in broad historical and political trajectories and are placed within weak path dependencies that are subject to change (Murphy, 2014). Meanwhile, as the neo-liberal governance expressions become more dominant, the policy formation processes become more technical and non-ideological. The local governments might also lose their control over spatial and environmental policies (Caprotti et al., 2017)

In the case of Norway, there is no national urban policy and the governance of urban areas is highly decentralized. Each city and district have their reports and guidance documents which are addressing the urban deprivation in that area. Despite this decentralization, we can still adapt the policy typologies proposed by Holland (2015) which names the components of a national urban policy as people versus place, economic versus social, and publicly-led vs. privately-led. Remediating brownfields is what will happen in Nyhavna, placed in private, neo-progressive social, and place-based policy typology.
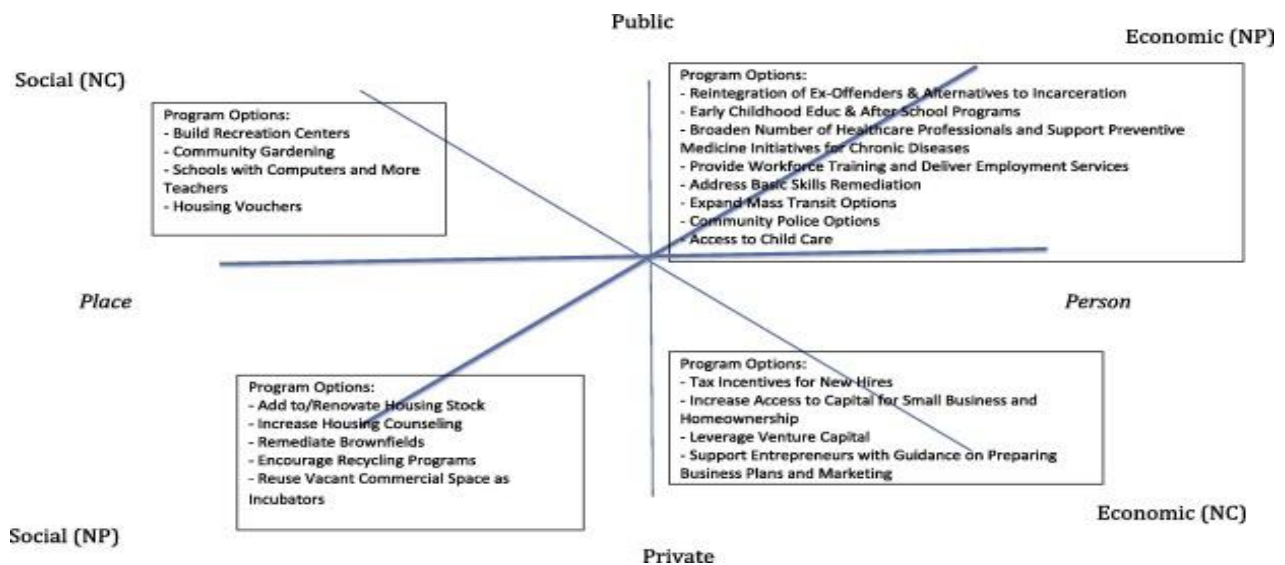

Figure 6 The map of national urban policy continua – neo-classical (NC) & neo-progressive (NP) models integrated into program design (Holland, 2015, , p.128)

3 Theoretical Framework

I begin this chapter by investigating the nature of housing in relation to affordability, encouraging the readers to consider questions such as: is housing a market commodity? If it is a market commodity then how can it be also a welfare pillar?

Continuing, I examine the theories that pertain to our case study. As mentioned, Trondheim municipality has made it a policy goal to create a social mix in Nyhavna, so we examine sustainability theories that might have contributed to setting the goals and their interest in creating a social mix. The aim here is to understand the theoretical standpoint of the existing literature.

3.1 Housing as a commodity and a welfare state pillar

Housing is famously called "the wobbly pillar under the welfare state" by the Norwegian political scientist Ulf Torgersen (1987). He asserts that both these terms, housing, and welfare state, are difficult and vague. Moreover, he adds:

> *"I believe that housing always will occupy a special and awkward position in welfare thinking due to the special nature of the commodity in question. I also believe that this problem does not necessarily have determinate consequences; rather it is a predicament which gives the policy-makers a certain menu of troubles, from which they may choose, and from which they have to choose."*
>
> *(Torgersen, 1987, p.116)*

Commodification settles the value of something to its market (exchange) value absolutely and in doing so the normative and social values are excluded (Tranøy, 2008). Tranøy et al. (2020) call the current series of events in the Norwegian housing market, recommodification. It's because, before the Second World War, housing was perceived in its market value, but after the war, the housing shortage made it a need and a right so to some extent housing was decommodified through land allocation on the supply side and price and credit controls on the demand side. However, the state intervention was to an extent that didn't eliminate the housing market (Ibid).
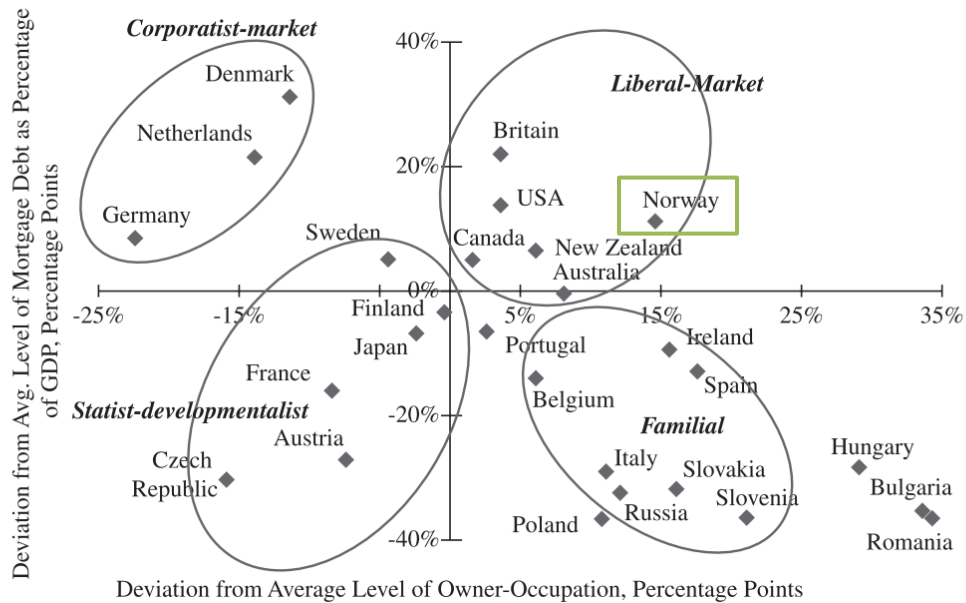
Figure 7 Relative deviation from average OECD levels of mortgage debt to GDP and owner-occupation prevailing 1992-2002 (Schwartz and Seabrooke, 2008, p.244). Norway is highlighted.

Figure (7), in the horizontal axis, shows the owner-occupation rate or more exactly it shows the deviation from the average level. In countries with large numbers of owner-occupancy, housing is more commodified in comparison to countries with higher rates of social rentals, where it's more likely that housing is seen as a social right (Schwartz and Seabrooke, 2008). However, in a country where the home-ownership rates are high, but housing is less commodified, it is a sign of familial approach, meaning that the housing is a transgenerational asset (Ibid.). The vertical axis shows the percentage of mortgage debt as a percentage of Gross Domestic Product which can be a potential measure of the financial structure and its stratification potential (Ibid.). As highlighted Norway falls in the liberal market, which based on figure (8) denotes a high commodification of housing.

		Owner-occupation Rate (reflects size of social rental sector and thus commodification; partial disconnect from global capital markets as a consequence)	
		Low	High
Mortgages as a % of GDP (reflects securitization as a cause and stratification as a consequence; but also a stronger connection to global financial markets)	High	**Corporatist Market** Housing (but not houses) as social right, but strong stratification of the market: Owner-occupiers vs renters; plus defamilialization; plus public organizations control rented housing. Low property tax revenues. Problems of inter-generational equity as housing market outsiders are priced out of accommodation.	**Liberal Market** Highly commodified: Houses as assets; strong stratification of the market: Owner-occupiers vs renters. Market based self-help. High property tax revenues. Problems of inter-generational equity as housing market outsiders are priced out of accommodation. Many of these economies were also 'Frontier' societies.
	Low	**Statist-developmentalist** Housing (not houses) as social right, but financial repression reduces market segmentation / stratification (?); plus private organizations control rented housing. Low property tax revenues.	**Familial** Non-commodified but not de-commodified: Houses as a familial social good, but not as a social right. Stratification from access to formal sector employment. Non-market self-help. Low property tax revenues.

Figure 8 A political understanding of the labels used in figure 7 (Schwartz and Seabrooke, 2008, p.246)

There is an argument in housing literature that denotes the notion that housing being a large asset is usually relative to income which might reduce owner-occupier's support of welfare-related taxes (Tranøy et al., 2020, Aalbers and Christophers, 2014). However this negative relation is not proven in practice, it has even been reported contrariwise in most countries today (Tranøy et al., 2020). Tranøy et al. (Ibid.) argues that the Scandinavian welfare state has created a steady supply of creditworthy borrowers, which are the result of three mechanisms; first is the income equality, second is the high replacement rates and extensive social insurance which means that risks such as unemployment, health problems or retirement will not affect their capability to repay mortgages as

25

much as other countries and finally, high female labor force participation creates two-income families which are more creditworthy borrowers.

The generation of these creditworthy borrowers that is a result of the Scandinavian welfare state, has had an enlarging effect on liberal housing markets (Ibid.). This process and result are contradictory as the stratification and familial help have led to unequal housing outcomes (Ibid.).

There are two types of speculation and risk-taking in a housing market with rising prices, offensive and defensive speculation (Ibid.). One is, for example, a first-time buyer who, scared of the increased house prices and the delay to enter the housing market, accepts a higher house price and debt level than she's comfortable with (Ibid.). The latter is not buying a primary dwelling but is investing in the housing market so to gain through the short-term flipping or longer-term buy-to-let investment (Ibid.). The first kind of speculator, the offensive is bearing a higher risk compared to the other and if there is ever a market crisis or correction to reduce the housing prices then the offensive speculator again loses more (Ibid.).

Galster and Lee (2021), based on the existing literature, justify the intervention of the public sector in the housing market. This intervention can happen when there is a failure of the private housing markets in offering affordable housing to cost-burdened households. That's when contextual and cost-effective policy measures can improve the fairness of the housing market outcomes (Ibid.). In a broader sense than housing, Kemeny (1995) explains the ill effects of the free market and the need to protect the people through the public sector:

> *"A serious consequence of creating a profit-driven market is that social problems become more acute. It is then often politically expedient and sometimes socially necessary to construct public sector safety nets to take care of those who become the casualties of the workings of the profit market. So alongside the profit market there develops a state nonprofit sector that acts as a safety net for the profit sector. Instead of allowing non-profit forms to compete directly with profit forms, nonprofit forms are hived off from the market and organised as a residualised state sector." (Kemeny, 1995, p.9)*

3.2 Social Sustainability

The founding ideology of town planning practice was the realization of a more socially equitable and stable society, but this was lost in the physical dimension of planning (Yiftachel and Hedgcock, 1993). In theory, it has been realized by the urban scholars that

"there is an urgent need to offset the tendency to subordinate cities to the needs of business and the economy - which are important in their own right - by devising an ethical approach that takes into account the needs of the individual, based on a better balance between men and women, and cities and nature, in which the quality of the environment is primordial and which allows for town-dwellers to make city life a shared experience" (Stren and Polèse, 2000, p.VII).

The contradictory yet complementary nature of sustainable development pillars, namely economic, social, and environmental, have been observed by the urban planning scholars and the literature. For example, Campbell (1996) draws a triangular diagram of this conflict (figure 9) . One conflict applicable to our thesis is the one between social justice and overall economic growth called the "property conflict" in his work. The city aiming at overall economic growth is in competition with other cities for markets and new industries, the city in eyes of the social equity is a place of strife over resources, services, and opportunities between different social groups. It's a place defined by access and exclusion (Ibid.). The conflict between economic and societal goals arises because of the duality of the meaning of property in a capitalist democratic society, which is seen both as a private resource and public good (Ibid.). This issue is due to the contesting claims over the property and its assigned land use (Ibid).

Godschalk (2004) argues that Campbell's model is not sufficient to realize sustainable development, and he adds the livability to the triangle and turns it into a prism. However, Godschalk does not offer a coherent definition of livability but I would relate it to the maintenance pillar of sustainability defined later in this document by Vallance et al (2011).
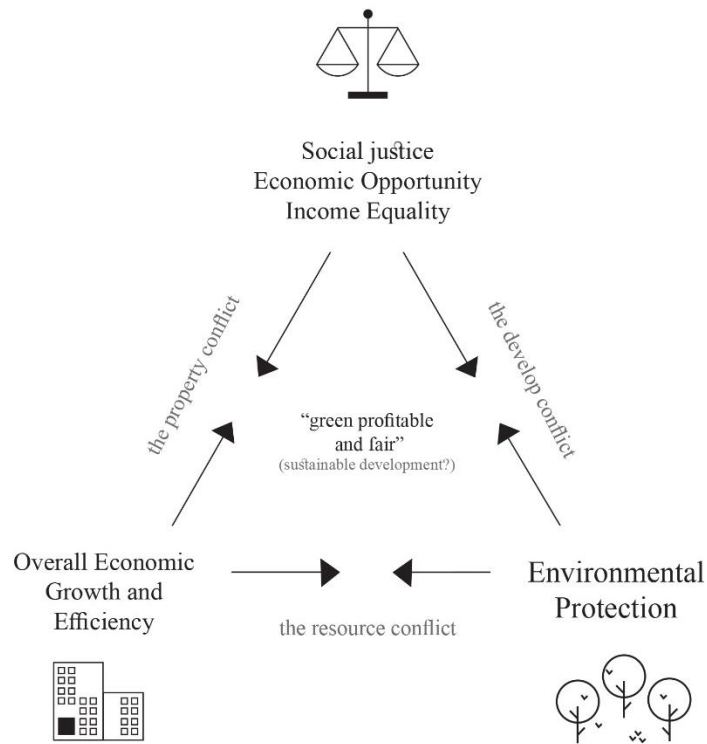
Figure 9 The triangle of conflicting goals for planning, and the three associated conflicts (Campbell, 1996, p.298) The graphics edited by the author.
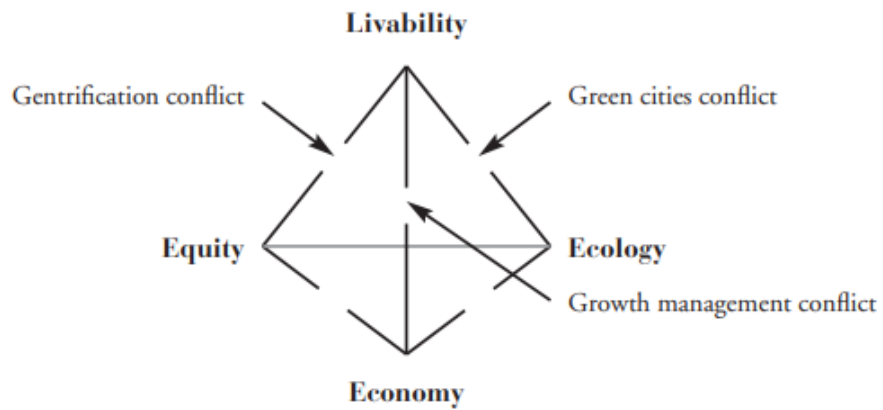

Figure 10 The sustainability/livability prism: Value conflicts and gaps (Godschalk, 2004, p.9)

This prism perhaps adds two other relevant conflicts to the scope of this research, the growth management conflict, and the gentrification conflict. The first arises from "competing beliefs in the extent to which unmanaged development, beholden only to market principles, can provide high-quality living environments (Godschalk, 2004, p.8)." The latter "arises from competing beliefs in preservation of poorer urban neighborhoods for the benefit of their present populations versus their redevelopment and upgrading in order to attract middle- and upper-class populations back to the central city (Ibid.)."

Despite acknowledging the importance and centrality of the environmental aspect of sustainable development regarding housing, we leave it out of this study because of time and scope limitations. In the following, we look at some of the prominent definitions of social sustainability in chronological order.

Yiftachel and Hedgcock (1993) define urban social sustainability with wording very close to that of sustainable development by the Brundtland Report.

> *"Urban social sustainability is defined ... as the continuing ability of a city to function as a long-term viable setting for human interaction, communication, and cultural development. It is not necessarily related to the environmental and economic sustainability of a city, although links often exist between the three areas" (Yiftachel and Hedgcock, 1993, p.140).*

This definition doesn't directly refer to equity as a component of social sustainability but narrows the social functions of the society to human interaction, communication, and cultural development. It also leaves out the actors responsible to create this sustainability which might be a better definition to generalize the urban processes in various contexts.

Stren and Polèse (2000) first define social sustainability with a more general view on the social functions by including equity and justice but limit the actors to policies and institutions. "Social sustainability refers to policies and institutions that have the overall effect of integrating diverse groups and cultural practices in a just and equitable fashion (Stren and Polèse, 2000, p.3)." Later in the book, they define the social sustainability applicable to a city.

"Social sustainability for a city is defined as development (and/or growth) that is compatible with the harmonious evolution of civil society, fostering an environment conducive to the compatible cohabitation of culturally and socially diverse groups while at the same time encouraging social integration, with improvements in the quality of life for all segments of the population"
(Stren and Polèse, 2000, p.15-16).

Bramley and Power (2009) identify two overarching components of social sustainability in their literature review: issues related to social equity and issues related to the sustainability of the community itself. Yiftachel and Hedgcock (1993) however, have added urbanity to these components before. Social equity is mainly an attribute of distributive social justice and the provision of access to services, facilities, and opportunities, making it a strong policy concern (Bramley and Power, 2009). This research is more associated with social sustainability in sense of social equity by the provision of affordable housing and social inclusion. Stren and Polèse (2000) also emphasize this aspect of distribution in relating urban policies that can grant social sustainability.

"Urban policies conducive to social sustainability must, among other things, seek to bring people together, to weave the various parts of the city into a cohesive whole, and to increase accessibility (spatial and otherwise) to public services and employment, within the framework, ideally, of a local governance structure which is democratic, efficient, and equitable (Stren and Polèse, 2000)."

Based on the review of the existing literature, Vallance et al. (2011) have produced a three-pillar definition of social sustainability. This definition consists of the development, bridge, and maintenance, each respectively meaning, what people need, what is good for the bio-physical environment, and what people want (Vallance et al., 2011). The third pillar might be often overseen, as the urban processes are too busy meeting the needs of people (Ibid.). Enough attention might not be paid to the fact that people also should be wanting to live and continue living in a city to make it sustainable, instead of just leaving the city in the first opportunity (Ibid.). While they admit that these three pillars sometimes conflict, they specifically name development and

maintenance as areas of conflict. (Ibid.). They also advocate for more than just a little policy attention to social sustainability, which might be called "social engineering" by the neoliberals.

Despite the earlier attempts of the other scholars, in a recent study, Eizenberg and Jabareen (2017) point out that a clear, comprehensible, and useable definition of social sustainability doesn't exist, and the existing indicators of social sustainability are derived from the practice and political agendas instead of the theory.

To create a conceptual framework of social sustainability, Eizenberg and Jabareen (2017) put risk as the main element of social sustainability. The belief is that there is a need for sustainable development when there are risks and hazards, as for environmental sustainability the same is relevant (Ibid.). The figures below give a summary of the conceptual framework by Eizenberg and Jabareen (Ibid.).
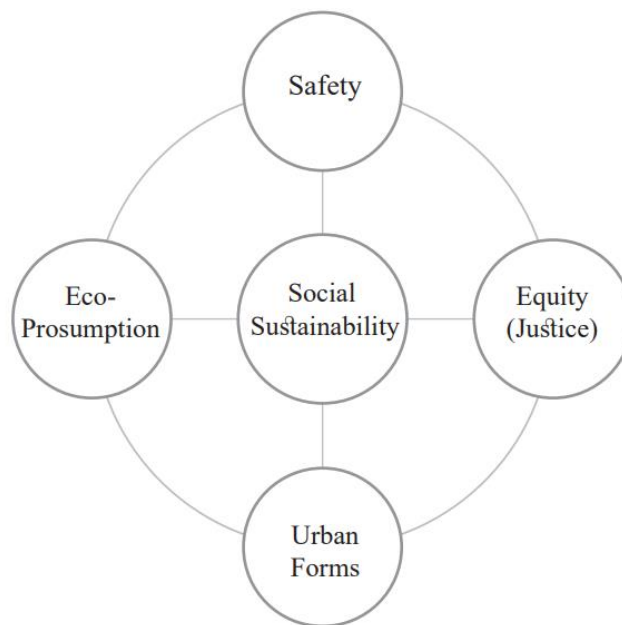

Figure 11 Concepts of social sustainability (Eizenberg and Jabareen, 2017, p.11) The graphic is edited by the author.

Table 1. Concepts of social sustainability and their functions and practices.

Concept	Theoretical Premise	Main Components	
1. Safety	Risk is the ontological foundation of the social sustainability framework. Safety and security for humans and non-humans is the fundamental requirement of sustainability and social sustainability	a.	Adaptation measures in order to cope with risk and uncertainties
		b.	Urban vulnerability matrix: understanding the social and demographic dimensions of risk
2. Equity	Social, economic, and environmental injustice pose risk to society as well as to the efforts of coping with climate change threats and uncertainties. More just policies and less inequality reduce the alienation of people from their living spaces, enhance their ability to cope with vulnerabilities, and foster the development of feasible environmental objectives.	a. b. c.	Recognition Redistribution Participation
3. Eco-prosumption	It is the responsibility of society to reduce future risk and help mitigate local and global efforts.	a.	Mitigation measures
4. Sustainable urban forms	Physical urban form is crucial for achieving sustainability, safety, and social agendas.	a. b. c. d. e. f. g. h.	Compactness, Mixed land uses, Diversity, Clean energy, Passive solar design, Greening, Sustainable transport, Renewal and utilization

Figure 12 Concepts of social sustainability and their functions and practices (Eizenberg and Jabareen, 2017, p.12).

The author believes that the components of the sustainable urban forms (figure 12), which are, based on their descriptions, more relevant to this research are very narrow and decontextualized. Yet points c and h are relevant to the context of Nyhavna, Trondheim. The diversity here refers to all types of diversity, from housing type to income diversity. It's mentioned that the living qualities of the urban areas decline without diversity (Eizenberg and Jabareen, 2017). The negative impact of lack of diversity is increased segregation, car travel, congestion, and air pollution. However, this categorization might be a bit off as social diversity is classified in the physical form of the urban areas. Component h is the process of reusing the urban lands that no longer serve the purposes of today's needs, such as brownfields (Ibid.).

Not as a definition, but as an indicator of social sustainability, Séguin and Germain (2017) suppose that if people from different social groups don't experience any kind of sociospatial segregation while sharing the urban spaces then it can be an accurate sign. For this indicator to be more encompassing I would replace "sharing the urban space" with "sharing the urban experience." In doing so the limitation of the indicator to space and geography is lifted.

Many social scientists have observed that, even as cities develop, and as differences widen among regional urban systems, the degree of social inequality, cultural conflict, and political fragmentation experienced within urban boundaries has increased, and even sharpened. These discontinuities are related to many factors, but among the most powerful of these must be the combination of increasing international migration, public-sector cutbacks, and labor-market restructuring arising from technological change and international economic integration (Stren and Polèse, 2000). These factors are also evident in Norwegian context as well which will be later discussed.

3.3 Social Justice

Scott Campbell defines social justice as "the striving towards a more equal distribution of resources among social groups across the space of cities and of nations" (Campbell, 1996, p.303). Iris Marion Young in her book, *Justice and the Politics of Difference*, argues that the contemporary philosophical theories of justice, as Campbell did, downgrade social justice to distributive justice, which is "the morally proper distribution of benefits and burdens among society's members" (Young, 1990, p.15). But social justice, from Young's (1990) point of view, should take a step back and realize itself in the social structure and institutional context that creates the distributive patterns. This theory makes apparent the need to explore the roots of the lack of social justice in the systems that institutions work within.

3.4 Social Exclusion

Peter Somerville in a 1998 study of social exclusion, after reviewing the existing definitions of exclusion, concludes that the meaning of social exclusion is produced through a mixture of economic, social, and political processes . This complexity creates a variety of socially excluded

groups but what all these groups have in common is "a sense of social isolation and segregation from the formal structures and institutions of the economy, society and the state" (Somerville, 1998, p.4). Séguin and Germain (2017) referencing other works emphasize this disaffiliation in proximity terms and broaden it from family to neighborhood and from a neighborhood to a city. In summary, social exclusion is a lack of sense of belonging.

Rules are exclusionary to the ones who don't conform to them. The rules that have the effect of generating or reinforcing the systems of exploitation and discrimination should be distinct from the ones that don't (Somerville, 1998). We should be careful when using the word "rules" because then a person who doesn't conform to a rule might be affiliated with vandalism and being a criminal. But rules can come in many variations, for example in terms of affordable housing in Norway. The social housing eligibility rules apply to people from certain incomes which excludes others from being eligible to receive certain benefits. These rules might generate inequality and lead to social exclusion.

Sommerville (1998) sees low social mobility and a lack of it as a sign of the existence of social exclusion. He then relates the social exclusion to the institutions concerned and points that if the nature of exclusion is to be studied, we have to investigate in these institutions such as the labor market, the state welfare system and the core ideology of individual responsibility (Ibid.). In relating this theory to the context, Berit Irene Nordahl,(2013) who is the head of research at Oslo Metropolitan University and an expert of housing studies in Norway, also has a paper in which she discusses the inclusionary housing topic through the theory of institutional change.

3.5   Social cohesion and social mix

Like many other social definitions as seen in this work as well, a universal definition or measurement tools for social cohesion doesn't exist (Fonseca et al., 2019). Referring to Bruhn (2009), Fonseca et al. state that this lack of definition is a result of a variety of contexts with different characteristics (Ibid.). After a comprehensive study of the existing literature with different approaches towards social cohesion, Fonesca et al. offer the following definition of this subject:

"The ongoing process of developing well-being, sense of belonging, and voluntary social participation of the members of society, while developing communities that tolerate and promote a multiplicity of values and cultures, and granting at the same time equal rights and opportunities in society"
(Fonseca et al., 2019, p.246).

This definition takes into consideration the previous scholarly work, society resilience indicators, and interlinks the factor of sense of belonging to resilient societies, which is a social risk-preventing factor (Fonseca et al., 2019). They also categorize the concept of social cohesion in three levels, individual, community, and institutions. The relation between these three levels is shown in the figure below:
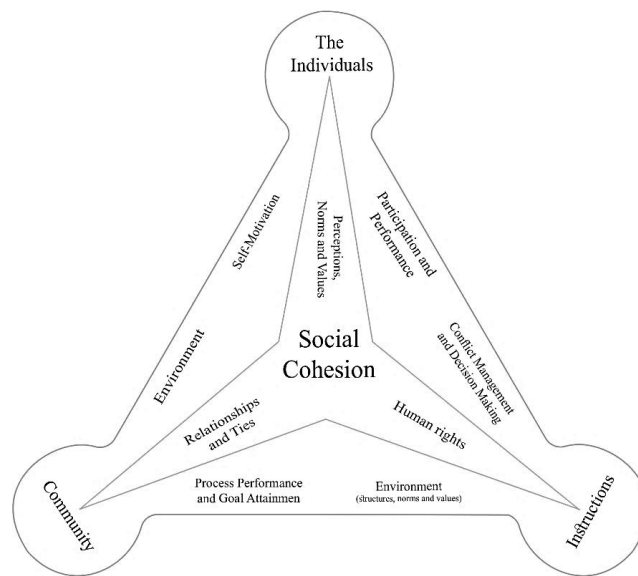

Figure 13 Framework to characterize social cohesion (Fonseca et al., 2019) The graphic is edited by the author

The level that is relevant to our thesis is the level of institutions that are responsible for setting policies. The reduction of inequalities and exclusion is associated with this level (Fonseca et al., 2019).

But the question is whether social mix as a goal of urban policy can result in social cohesion or not. The notion of social mix first came to light in mid-19th century Britain, where it was associated with utopian ideals of connecting various social groups. After the Second World War, it then reappeared in the social justice debates and now internationally it has been associated with the issue of social exclusion in the areas clustered with a low-income population (Arthurson et al., 2015). Van Doorn in the 1950s disapproved of the focus on the local level social networks which he believed denied the increased mobility of the people and the fact that the inhabitants were then less dependent on their immediate surroundings (van Kempen and Bolt, 2009) This would be even more relevant now that the people are connecting through internet and social media. Yet, in many western European countries, creating social diversity in residential areas is an important goal of the housing policymakers (Galster, 2007). Meanwhile, many perceive social mix as a side of a coin, of which the other side is state-led gentrification (Arthurson et al., 2015, Lees, 2008).

The policymakers and governments call this "positive gentrification" (Lees, 2008) and justify this by relying on the notion that socially mixed urban areas can tackle the negative neighborhood effects caused by the segregation of the disadvantaged. Social mix can create equal access to job opportunities and more diverse social networks (Ibid.). It can also improve the reputation of the stigmatized neighborhoods (Ibid.). The people of higher income can also act as the role-models for others (Ibid). Despite these perceived advantages, a comprehensive body of literature questions the efficiency and actual benefits of this hypothesis (Costarelli et al., 2019). For example, seemingly, mixing people from very different income groups doesn't result in effective social returns, however, if the income gap is thinner, then the social effectiveness might improve (van Kempen and Bolt, 2009). The other theory that van Kempen and Bolt refer to is that social interaction at the neighborhood level happens when the actors are in very close proximity to each other, so that's the scale that social homogeneity or heterogeneity matters, yet "spatial proximity is not a sufficient condition for social interaction" (van Kempen and Bolt, 2009, p.461).

Another factor that affects social interaction is the tenure model of the dwellers. Based on previous evidence, the activity patterns of the homeowners and renters differ from each other and they hardly interact (van Kempen and Bolt, 2009). In a US study on ethnically diverse neighborhoods, Putnam (2007) concludes that in the short-term, social cohesion including trust, community participation is

decreased but in the long-term, the members become comfortable with diversity and the social cohesion improves. Galster (2007), concludes from a theoretical analysis that for neighborhood social mix to be operative there should be a careful study of the optimal neighborhood mix mechanism that is based on the policy context.

However, all this literature seem to be referring to injecting a new social class into an already knitted community fabric, but in the case of my thesis, I am exploring building social mix in a context that has not been built yet and the neighboring communities are from different groups of society. The current perception is that the land value and construction costs in Nyhavna are so high that only the rich can afford to live there unless there is intentional municipal intervention. One of the theorists that also explores diversity in new urban developments as well as the inner-city development is Susan Fainstein. She perceives planners to be in an "insoluble dilemma" when it comes to implanting diversity. In her view, the planners are being accused of inauthenticity and can't decide whether to "leave the market to take its course or impose an oxymoronic diverse order" (Fainstein, 2005, p.6).

In conclusion, even though creating social mix might not be a generally approved solution, maintenance of social cohesion can be an important policy goal. Cossiers and Kesteloot (2012) emphasize this notion, by giving an example of a city center dominated by segregation either by the rich or the poor that rob the city of the chance of a genuinely cohesive city, the governance of which should take into account the interest of all citizens. They also accentuate a holistic cohesion at the city level, not just the deprived areas.

3.6   Diversity as in the urban form

Diversity of the urban form can refer to a mix of building types (Fainstein, 2005). But the question is, can a mix of building types generate a social mix as well? Fainstein borrows evidence from Amsterdam, New York, and London, and argues that the mix of ethnicities and social classes that can be seen throughout all parts of Amsterdam, unlike New York and London, is not a result of the diversity of urban form but the social welfare programs of the Dutch state. "…Because the Dutch state provides substantial subsidies both to bring down rents and to support households in domiciles more expensive than they could otherwise afford" (Fainstein, 2005, p.10).

3.7 Affordable housing subsidies

There's a broad consensus that limiting land provisions and building regulations are curbing the affordable housing supply as well (Galster and Lee, 2021) On the other hand, international organizations such as the United Nations, the World Bank, and the Asian Development Bank have sided with the market-enabling policies and programs of the public sector instead of the public sector being a direct housing provider on the supply side. As a result, the traditional funding models of affordable housing have been replaced by Public-Private Partnerships(Ibid.). Rental subsidies on the demand side in comparison to supply-side subsidies are generally more market-conforming, cost-effective, transparent, and consumption efficient (Ibid.). For example, one of the programs that have proved to be beneficial to affordable housing provision is inclusionary housing (Ibid.) in which the developers are bound to sell or rent a share of their new development to people from lower incomes.

3.8 The economics of waterfront development

"Neoliberal ideology rests on the belief that open, competitive and unregulated markets, liberated from state interference and the actions of social collectivities, represent the optimal mechanism for socioeconomic development" (Peck et al., 2009, p.50). Sager in a 2014 study, tried to put in words whether the allegations of internationally hegemonic dominance of neo-liberalism in urban plans are acceptable. As the context of the study, he chose the waterfront development of Nedre Elvehavn in Trondheim. He finds that undoubtedly neoliberalism is an important influence but there are other variables at play that make us question the hegemony of neo-liberalism in urban planning.

"A certain combination of coffee shops, restaurants, financial headquarters and shopping centre does not define an area as the product of neo-liberal planning. One has to study the balance between policies, regulations and detailed changes of the physical urban fabric reinforcing neo-liberal values on the one hand, and those strengthening environmentalism, inclusiveness and participatory democracy on the other (Sager, 2014, p.290)."

3.9 The critique of theory

Most of the theoretical studies that place the land, property, and their relation to housing in the national law are coming from the American context. Or they come from the countries that emphasize the social function of the land. In the context of Norway, deciphering these theoretical understandings can help craft urban policies more efficiently.

The reverse practices of creating social mix, in which affluent neighborhoods are made available to lower income groups, are less studied in the theories of social mix. It is understandable because the usual practice can lead to gentrification and the researchers were trying to address this issue in order to prevent it. Another lack of comprehensive studies is associated with social mix in Norwegian context. Studies that identify the attributes of a successful social mix, which can be conducive to social cohesion, are vital. In general, I found a lack of housing theories that are context-based in the Norwegian housing studies, or at least in the English language literature.

4   Research Scope and Methodology

The research question of this thesis is:

>   What are the challenges and opportunities of implementing socially mixed affordable housing in Trondheim, Norway?

To answer this question, the study is conducted through the analysis of a case study. This approach allows a researcher to scrutinize data in a specific context (Zainal, 2007). Usually a case examines a small geographic area (Ibid.), such as Nyhavna in this research, which enabled a close examination of the Norwegian approach to housing in this context in a limited timeframe. To break down the research question into manageable bits, a series of sub-questions were produced, addressing these main themes, the research question, and the importance of the topic. These questions and their relation to the main themes of the research are shown in figure 14. Based on these questions, four research methods were used in this study: Literature review, an experimental method, survey, and interviews with key informants.

The study began when the two main themes were chosen as the primary focuses of the thesis, housing, and Norway. Housing was the area of interest of the researcher and having the context as Norway was a choice made after an assessment of the data gathering opportunities during the outbreak of Covid-19. To narrow the research down further, three interviews with experts in the housing studies in the Norwegian context and one with a municipal representative were conducted, in addition to an introductory study of housing in Norway. The summary of the information regarding these interviews are presented in figure 15. This resulted in narrowing down the themes in three subjects: affordable housing, social mix, and a case study of the future development of Nyhavna in the city of Trondheim.
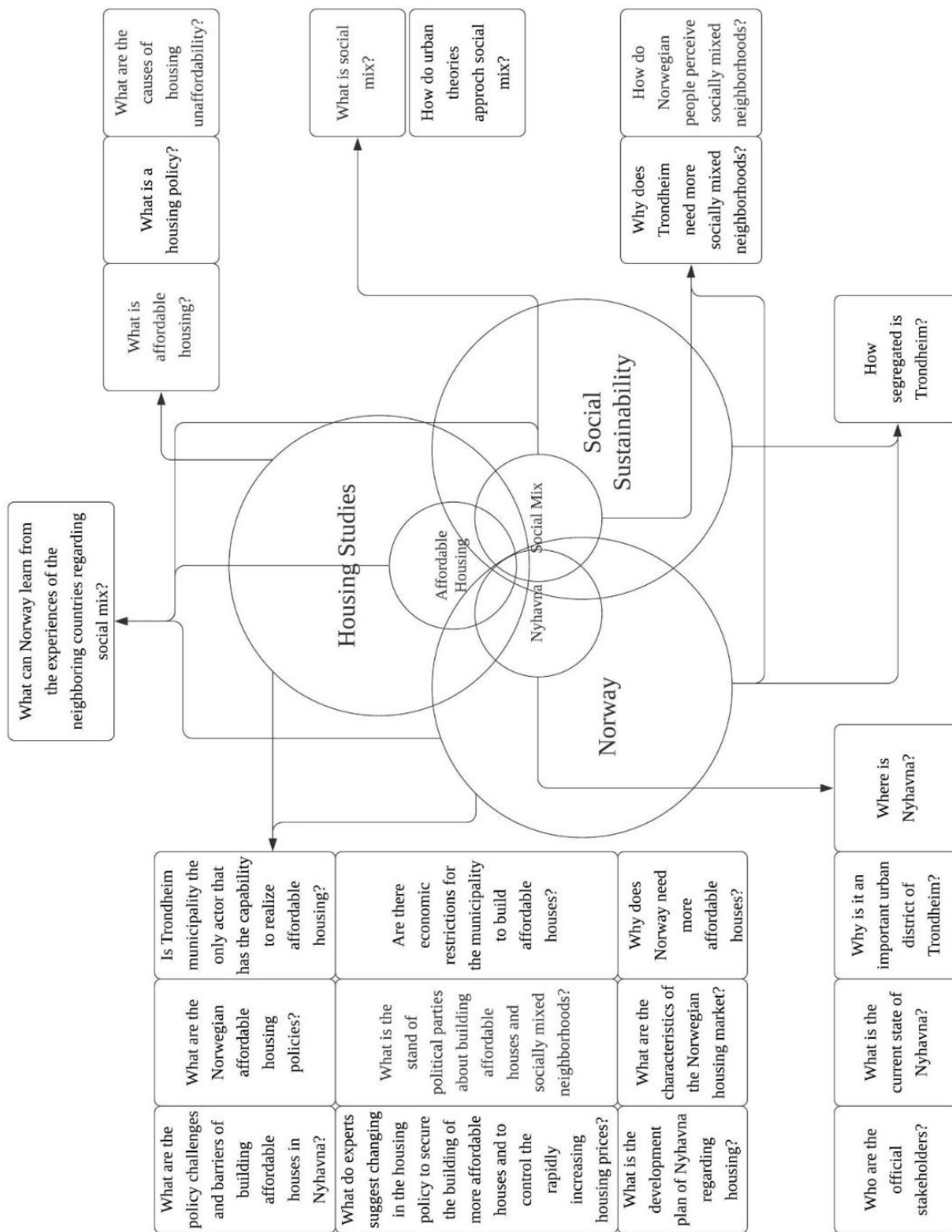
Figure 14 The main themes of research and the sub-questions associated with them
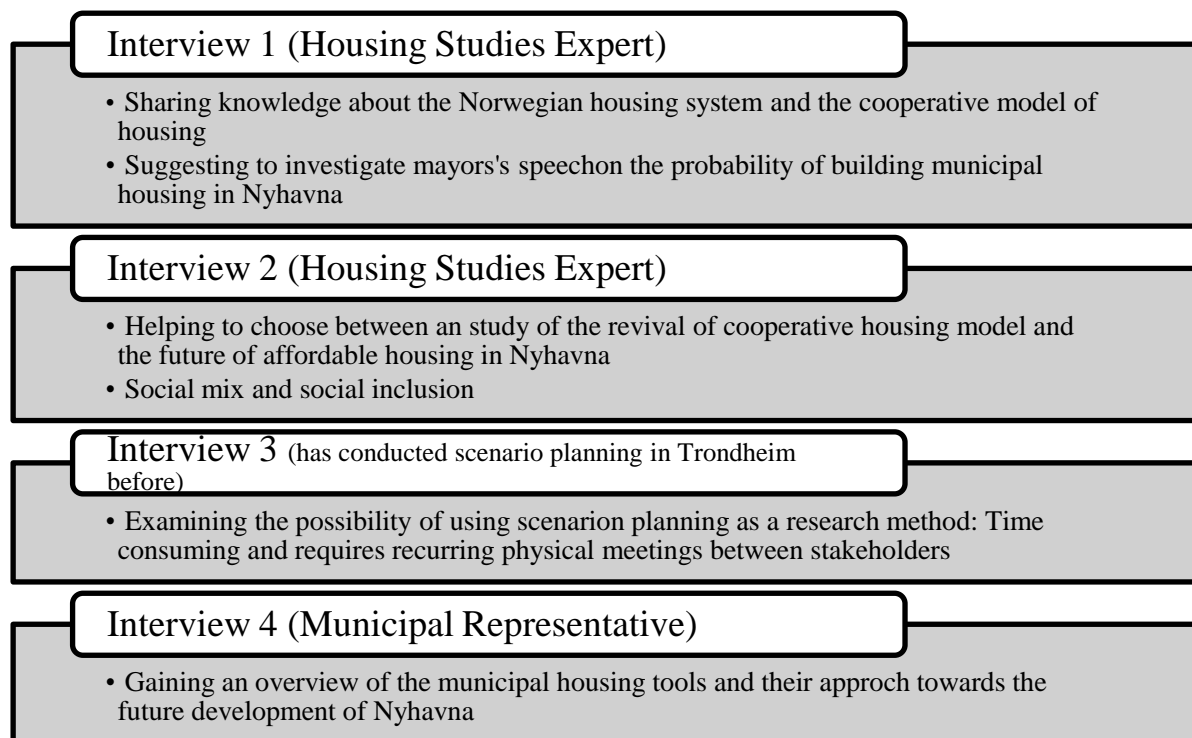
Interview 1 (Housing Studies Expert)
- Sharing knowledge about the Norwegian housing system and the cooperative model of housing
- Suggesting to investigate mayors's speechon the probability of building municipal housing in Nyhavna

Interview 2 (Housing Studies Expert)
- Helping to choose between an study of the revival of cooperative housing model and the future of affordable housing in Nyhavna
- Social mix and social inclusion

Interview 3 (has conducted scenario planning in Trondheim before)
- Examining the possibility of using scenarion planning as a research method: Time consuming and requires recurring physical meetings between stakeholders

Interview 4 (Municipal Representative)
- Gaining an overview of the municipal housing tools and their approch towards the future development of Nyhavna

Figure 15 An overview of the early-stage interviews

4.1 Literature review

In this thesis, reviewing the existing literature is a key method because literature reviews are useful when attempting to present an overview of a specific subject or challenge (Snyder, 2019). This sort of review is commonly used to assess the current level of knowledge on a certain issue (Ibid.). It can be used to develop research agendas, identify research gaps, or just discuss a particular topic (Ibid.). Aware of the lack of the researcher's prior knowledge on the housing policy and market in Norway, literature review was used to gather information on the said topic. A combination of the gathered data is collected in three chapters, namely background, theory, and context.

"Google Scholar" search engine was used to find applicable articles, using different variants of keywords relevant to a topic. The aim was to find peer-reviewed articles with the most citations to begin the process. In the contextual studies, however, it was necessary to read through the

governmental and institutional reports and websites such as "*Kvalitetsprogram for Nyhavna*" (Quality Program for Nyhavna) as well.

After finding the relevant papers through snowballing (finding more papers in the references of the prominent papers), the important parts of the texts were highlighted and coded in Nvivo (Qualitative data coding software). As a result, all the relevant data to a specific topic could be found in the same place. For example, figure 16 shows the hierarchy of the codes used to categorize 22 of the English-language articles in the context section (all the shown codes are not used in this document.)
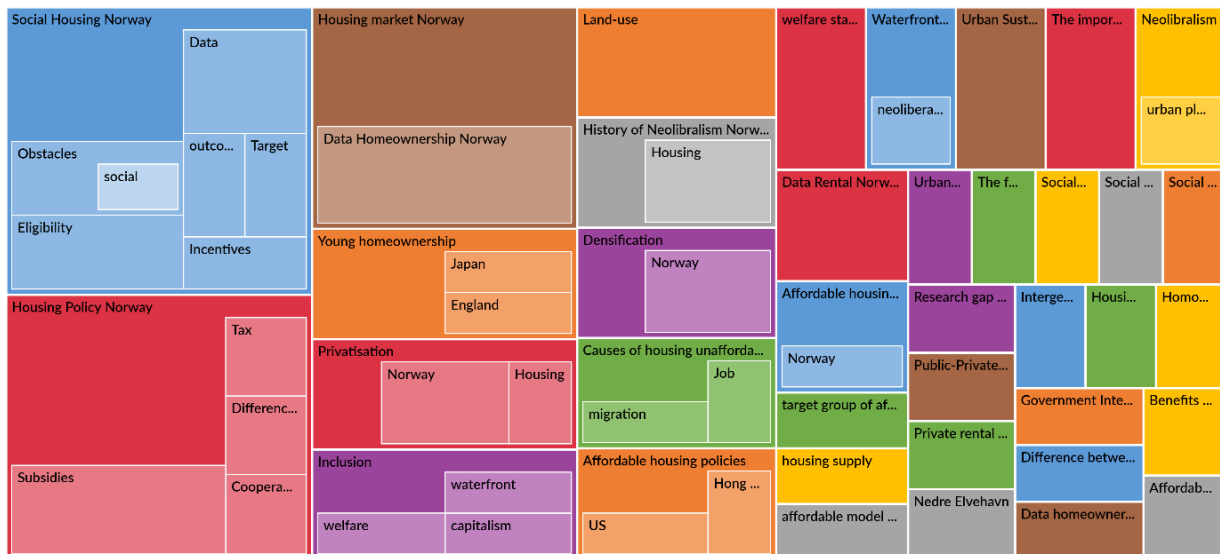

Figure 16 Hierarchy of the codes used to categorize 22 of the English-language articles, produced by Nvivo, the surface of each topic indicates the frequency of the code

4.2   Key informant Interviews

Key informant interviews entail interviewing a small number of people who are likely to give important information, views, and perspectives on a certain topic (Kumar, 1989). Based on the topic, the researcher identifies appropriate groups that the informants can be selected from (Ibid.). The initial aim of this study was to reach representatives from the academia, municipality, and Trondheimhavn as the shareholders, and residential development companies. Emails including a

summary of the research and the themes of the interviews were sent to the identified people of interest in each group. Unfortunately, academia and the municipality were the only responsive groups.

The information regarding the select interviewees including an imaginary name, their approximate age, profession, length of the interview, and the method used to document the data is presented in figure 17. A total of 420 minutes of key informant interviews has been conducted over 6 weeks. The personas are sorted in chronological order that the interviews happened. The interesting ideas and viewpoints of the earlier interviewees were debated in the later ones. It probably would have been beneficial to have a roundtable debate with all the informants available in the end to develop the conversation further.
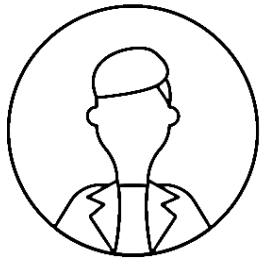
Abiding by the research ethics, the aim of the research was explained to the interviewees were and asked for consent prior to conducting the interviews.
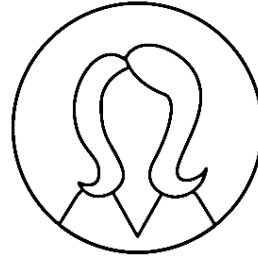
C.C.
25-35
Project Leader at City
Planning office of
Trondheim Municipality
35 minutes
Note-taking, Online
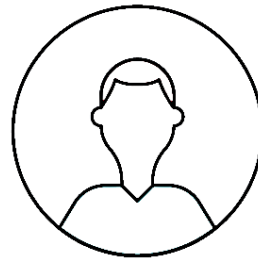
Maxwell
30-40
Associate Professor at
Faculty of Economics
50 minutes
Note-taking, Online

Neils
70-80
Professor Emeritus at
Department of Civil and
Environmental
Engineering
70 minutes
Note-taking, In Person

Fran
30-40
Associate Professor at
Faculty of Landscape
and Society
45 minutes
Recorded, Online

Brighton
25-35
Experience with
conducting in-depth
social research in
municipal housings
45 minutes,
Recorded, In Person

Margareth
50-60
Researcher at
Department of
Architecture and
Planning
50 minutes
Note-taking, In Person
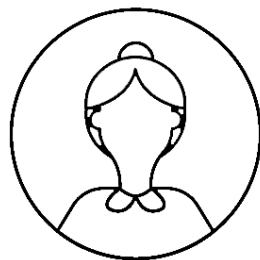
Grace
50-60
Professor at NTNU
Department of
Architecture and
Planning
55 minutes
Recorded, Online
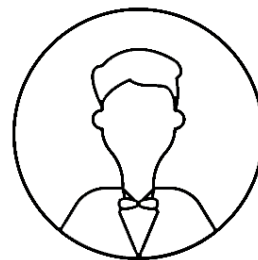
Morty
40-50
City Planner at the
Municipality of
Trondheim
Researcher at Bopilot
research Project
70 minutes
Recorded, In Person

Figure 17 Key informant interviewees and the relevant information: Name, approximate age, occupation, length of interview, and the documentation method. The list is in chronologic order reading from left to right

The most opposing ideas came from the economist's point of view, aka Maxwell. The detailed information gathered through each interview is presented in the findings section. The only interview that didn't go as planned was the one with Neils, where he took charge of the interview and led the discussion. I couldn't ask the questions I prepared before because he was very much interested in the topic of Svartlamon.

After the interviews were conducted and transcribed, Nvivo software was used again to put the similar topics in different interviews together and facilitate the analysis of data. The graph below shows the hierarchy of the most talked-about themes, the surface being an indicator.
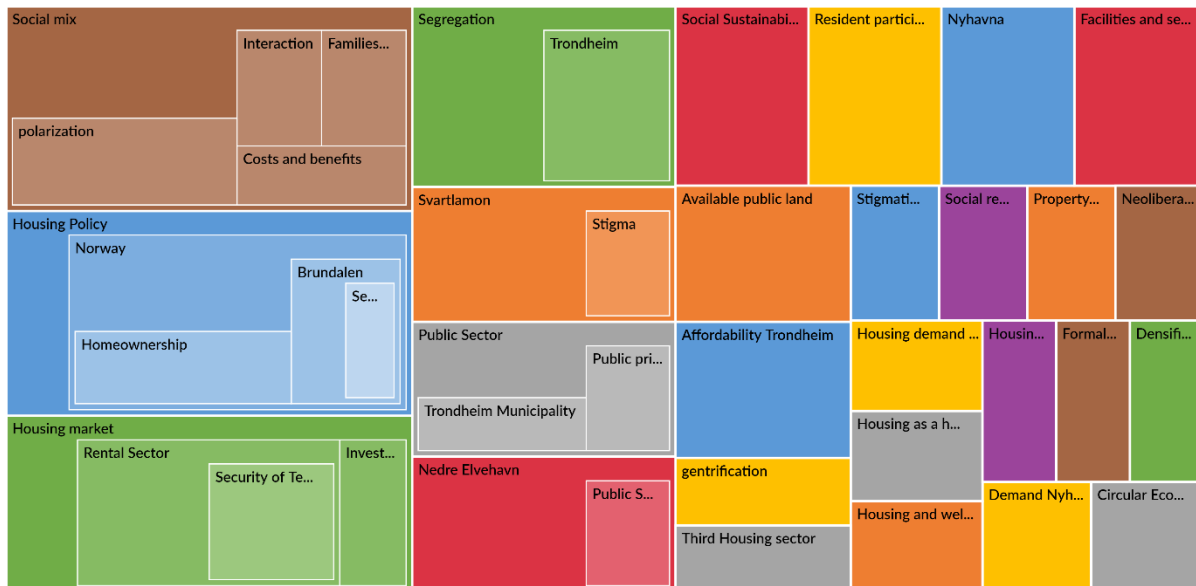
Figure 18 Hierarchy of the codes used to categorize the key informant interviews, produced by Nvivo, the surface of each topic indicates the frequency of the code

4.3 Self-completion Survey

One of the aims of this study was to measure people's tolerance of social mix in the Norwegian context, to identify whether it can be counted as one of the challenges or not. To gather data on this matter, it was decided to use an online survey as one of the methods of research. This form was

generated by Google Forms. Survey research is mainly used to test a hypothesis or to clarify a theory better (Payne and Payne, 2004). A pre-test of the questionnaire, as suggested by Payne and Payne (2004) was handed to a few numbers of friends beforehand and their opinion was asked. In the beginning, all the questions were open-ended but after the pre-test, it was decided to use a mix of open-ended and numerically rated items to make it easier for respondents to understand and answer.

In the quantitative part, the respondents were asked to rate housing affordability in Trondheim, from 1 to 5, 5 being not affordable at all. The two following questions were very crucial as the first one could be an indictor to rate segregation in Trondheim and the other one could be used to fulfill the main aim of the survey:

- Is it important what kind of people are your neighbors based on their age, household type (single person, family, etc.), income, and ethnicity?

Mark only one oval per row.

	not important at all	somewhat important	important	very important
Age Group	◯	◯	◯	◯
Household Type	◯	◯	◯	◯
Income	◯	◯	◯	◯
Ethnicity	◯	◯	◯	◯

- Based on the factors mentioned in the last question, how diverse would you rate the members of your current neighborhood?

	not diverse at all	somewhat diverse	diverse	very diverse	I don't know
Age Group	◯	◯	◯	◯	◯
Household Type	◯	◯	◯	◯	◯
Income	◯	◯	◯	◯	◯
Ethnicity	◯	◯	◯	◯	◯

In the qualitative part, the idea was to see what people think about Svartlamon and Nedre Elvehavn, two districts of Trondheim which will be introduced in the next chapter and can be perceived as the two opposite ends of the social mix spectrum.

The target group was the whole population of Trondheim. To reach a sample that gives answers with a 5% margin of error, it was needed that approximately 400 people answer this survey. From the beginning, it was not expected to reach this number but still, the number of the respondents was so low that the data cannot be used to draw conclusions and generalize the public opinion. A total number of 16 people took part in the survey, 2 of which didn't submit correctly.

The QR code linked to the survey was handed out in Trondheim and the survey was available online since the beginning of May 2021. To reduce biased opinions, the Facebook groups that were chosen were neutral and general groups with the whole population of Trondheim as their target group, for example, it wasn't a university group or a group associated with the events at Nyhavna. Facebook was chosen because it is very much in use by the majority of the Norwegian population. But for some reason, the survey could not fulfill its goals, yet I made use of the open-ended question in the findings chapter.

4.4 Experimental Method

To gather public opinion about affordable housing in Nyhavna, I used an experimental method. On the 17th of April 2021, I planned to use a rare sunny day to go to the city center of Trondheim and interview people. On such days, people usually use the opportunity to spend time in the sun, so the

city center gets crowded. On the first day, I couldn't find the courage to talk to people. The next day, I went back. This time, I felt less anxious and stood in the main city square with a sign saying: *AFFORDABLE HOUSING IN NYHAVNA DISCUSSION.* The expectation was that this sign will intrigue people to show interest and approach me

I got there by 2 PM and for about half an hour no one approached me. I changed my place to another corner of the square so that more people would pass me by. To me this sign was an obvious message, asking people to come and talk, but from the experience, the message of the sign was not clear enough as people would just read the sign in confusion. I decided not to say anything and experiment with this sign that day.

Figure 19 Weeks later, a friend of mine sent me this photo that she came across accidentally, and apparently, a stranger has taken a photo of me while I was standing in the square, and has posted it on Instagram

It was about 45 minutes later that two young boys approached me and asked me about the meaning of the sign. I asked them if they knew about the development that's about to happen in Nyhavna. They were positive and I had a half-an-hour long interview with them, during which another person joined the discussion. The description of the interview can be found in the appendix.

May 10th, 2021, I once again went to the city center of Trondheim but this time I brought a print of the QR code that was linked to the research survey alongside my sign. I stood there and observed how people reacted and more important than that was my observation of people and how they interact with each other in this most welcoming part of the city. Anyway, as I was standing a man in his late forties, early fifties approached me. At first, he thought that I'm advertising affordable housing in Nyhavna but then I introduced my research. He was seemingly disappointed but continued to hear me out. I asked him to scan the QR code, but he said that he prefers if I just interview him and ask the questions myself. During the survey interview I found out that he claimed to be one of the founders of Svartlamon, I used this opportunity to ask questions about Svartlamon after we were done with the survey.

After this conversation and half-an-hour-long wait, a girl in her late 20's approached me, and I asked her the survey questions. Interestingly she was also a student in a field related to urban planning and the conversation took about 40 minutes. To record data, I took notes. The description of these two interviews can also be found in the appendix. In the findings chapter, I refer to the people interviewed through this method as street interviewees.

4.5 Limitations and Reflections

This study started during the international outbreak of Covid-19. It meant that the data-gathering opportunities would be faced with many uncertainties. These uncertainties were surrounding the questions such as the following ones:

- How can I contact people and expand my network?
- Are people willing to have online interviews or are they tired of the monotony of the situation and will not accept it?
- Is it possible to travel to and investigate other fields?

- What are the online methods of data gathering?

The only way to find answers to these questions was to start working. Making sense of the situation and the research possibilities was a lengthy process but it was tried to design a research that can be handled in the time left and is adaptable to the changes.

Because of Covid-19, an accessible place nearby was chosen as the research context. However, this brought about another challenge, which was the language. Even though not impossible but reading the Norwegian planning documents was time-consuming. My intermediate knowledge of the language and Google Translate were used as tools to translate these documents. One of the reasons that the survey was not answered by more people might have been the language too, apart from their potential disinterest in the subject.

I believe these two were the most pressing challenges regarding this research and the hardest part was choosing an appropriate research question. Otherwise, the process went smoothly afterward.

5   Context

In this part, I try to study the Norwegian housing market and its policies, with a special focus on Trondheim and Nyhavna. The various tools that the municipality of Trondheim can through them provide affordable housing subsidies are also mentioned. Another goal here is to realize what are the factors that are creating the uprising housing prices and what are the current solutions at work. This part is also contributing to the findings section and all the desk-based findings regarding the context are to be found here.

5.1   Housing Market and Policy in Norway

Nordahl (2020) asserts that the housing supply mechanism in Norway today has a "neoliberal" approach, where nearly 100% of all the new houses are supplied by commercial builders, built on private land, and sold on the free market (Nordahl, 2020). However, this was not the case earlier, from 1945 onwards, housing was one of the evolving pillars of the Norwegian welfare state (Sandlie and Gulbrandsen, 2017). The main goal of the Norwegian housing policy, throughout the postwar period and now is enabling the homeownership of as many people as possible (Gulbrandsen, 2004, Bysveen and Knutsen, 1990) and to even out economic inequalities in society (Nordahl, 2020). The ownership was either promoted individually in rural areas and in small to mid-sized towns or cooperatively in larger towns and cities. This promotion was done through production subsidies and market regulations (Sandlie and Gulbrandsen, 2017). Increased homeownership can possibly bring society benefits such as enhanced maintenance of the dwellings and increased citizen participation (Galster and Wessel, 2018). It can also increase the chance of the next family generation to be homeowners as well. However, in the next section, the key informants elaborate further on this matter.

This housing policy was designed to spread ownership among many instead of it being clustered in the hands of a few. The clearest expression of this thinking was by Trygve Brattelie in the early 1950s, saying that the people's housing needs should be shielded from profit and commercial gain, and to simply put it, it should not be a field for business (Gulbrandsen, 2004). The decade after the Second World War was when the cooperative model of housing ownership was introduced in Norway. In this model, the dwellers have shared ownership of the houses and the land. These

cooperative houses were also known as social housing which received subsidies from the state bank and also the prices of these houses were regulated (Støa, 2017). The allocation was based on the fixed rules of seniority and the waiting time (Fagerberg et al., 1992) These state controls kept the prices of the cooperative housing way less than their real market prices (Ibid.) However, in the 1980s with the turn of the governmental ideologies towards neo-liberalism, these subsidies and regulation were lifted and the cooperative dwellers could sell their housing plots with prices competing with the market prices (Nordahl, 2020, Støa, 2017, Fagerberg et al., 1992, Tranøy et al., 2020). In Nordahl's words, this was a turn from a supply-oriented policy to a consumer-oriented policy, meaning that the affordability support came in form of the means-tested financial help (Nordahl, 2020).

07459: Population, by year. Trondheim, Persons.
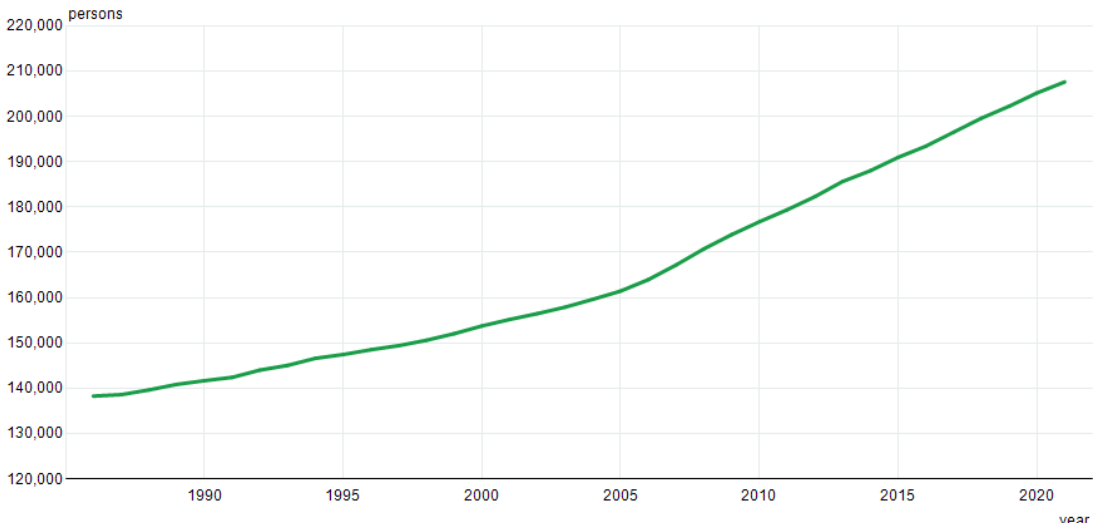
Figure 20 The population trend of Trondheim over the last three decades (Statistics Norway, 2021)

based on the figure above (20), the population of Trondheim has been rising steadily over the recent decades, an increase in the number of immigrants being one of the main causes. We can assume that the trend will continue in the future as well and an increase in the population means an increase in the housing demand. From a demand and supply point of view, it is argued that there is an

imbalance in the Norwegian housing market, where the demand is high and relatively the housing production is too low (Gram et al., 2011, Støa, 2017). Because of the high demand and high land prices, housing is expensive. Compared to other European countries, Norway generally have a higher overall house price growth and prices have increased between five and seven percent per year since 2008 (Støa, 2017).

The emphasis on homeownership in Norway has had a reductionist effect on the private rental market, which is now only a marginal part of the housing sector in Norway (Sandlie and Gulbrandsen, 2017). Another study among the OECD countries indicates that Norway comes first in the ranking related to the median rent costs as a percentage of the disposable income (Tranøy et al., 2020). Another point that has impacted the rents is the increase of buy-to-let buyers, who buys houses not as their primary dwelling, but with the expectation of economic gains. This phenomenon has increased the rents (Tranøy et al., 2020). An interesting finding in the Norwegian housing market is that on average it is less expensive to own a house than to rent. We find this out by comparing two statistics from the year 2018, where the average median rent in Norway was 76823 Kroners, but the average cost of the interests and installments for owners was 67422 Kroners (Statistics Norway, 2018).

The public rental in Norway is offered by the local municipalities and it accounts only for four percent of the total housing stock (Sørvoll, 2019). The Trondheim municipality website offers a description of the people who are eligible for municipal housing, a part of this criteria is as follows, which is translated from Norwegian (Trondheim Kommune, 2020a):

> *"You must be without suitable housing and not be able to obtain housing yourself, or with the help of others. It must be economic, health or social conditions that prevent you from finding a place to live. The fact that you have a low income is not enough to get municipal housing… Applicants who can benefit from other housing instruments to obtain or retain housing shall not be granted municipal housing."*

This housing allowance is based on the applicant's income and not their expenses and it's strictly means-tested. In some cases, it's also possible to buy the house that renter lives in with a deduction

of 50000 Norwegian Kroner on the account of the municipality from the full amount of housing purchase. Municipal housing is seen as a transition opportunity for the households to get back on their feet financially and is not in favor of increasing welfare dependency.

As of 2020, the highest salary that was eligible to receive municipal housing among other criteria was 237,301 Norwegian Kroners for single-person households but to enter the housing market and buy a house then the salary should mount to 400,000 Norwegian Kroners (Trondheim Kommune, 2020b). This gap is not overlooked by the municipality housing plan and it was advised to create a third housing sector to cover it. We will investigate this sector in a later part of this document.

In a report published 10 years ago, it was believed that in the past, social housing policy was largely a matter of housing supply but now most people live well and safely, but this does not apply to everyone. Social housing policy is now more a matter of assisting individuals and families to a satisfactory living situation and maintaining it over time. The development has gone from having a home to living (Gram et al., 2011). Today, we know that the main issue of the Norwegian housing market is still the lack of sufficient supply of housing in comparison to the population growth.

Husbanken, the Norwegian State Housing Bank, is the main agency implementing Norwegian social housing policy on the national level (Husbanken, 2017). It is, in fact, a bank that provides loans both to the supply side actors and the demand-side actors. This institute puts emphasis on diversity and describes a good living environment as a varied population composition and ensuring a stable living environment among other things (Schmidt, 2014).

As the Norwegian housing market and policy is more focused on homeownership, then it's natural that even the least-advantaged are also looking forward to purchasing a house of their own (Trondheim Kommune, 2020b). People who do not qualify for private loans can obtain a start-up loan allowing them to purchase their primary residence (Ibid.). No equity is required to get a start-up loan, which is perhaps the most important difference between this loan and loans from the other banks (Ibid.). In addition, a fixed interest rate and a back-payment of 50 years give the borrower better liquidity. Start-up loans can be given to families with children, the elderly, people with disabilities, or others who live in an unsuitable home and either want to buy or improve their house (Husbanken, -). However, the young in the establishment phase are not eligible receive a start-up

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loan (Ibid.). If it's uncertain that the payee can service a loan then they will not be eligible as well (Ibid.). The total amount of the loan is capped each year, so there is only a limited number of applicants who will receive it and, in some instances, the applicant may not receive the loan.

The Housing Foundation in Trondheim (Boligstiftelsen I Trondheim) is a municipally initiated foundation that owns a significant housing and real estate share in Trondheim (Narvestad et al., 2021). In 1972, when it was first established, the foundation was in charge of renting out municipal housing. Originally the target of the foundation was people on the minimum pension income and other people of low income receiving social security benefits. But now the target is much narrower due to changes in the Housing Bank eligibility criteria. By decreasing the demand in this way, many of the houses belonging to the Housing Foundation are now empty (Narvestad et al., 2021). The maximum lease length of three years and the rents that are not much different from the market prices are also other negative factors making this housing option less attractive. The housing allocation is usually in more deprived neighborhoods of Trondheim which are stigmatized. This can also contribute to the households' willingness to rent in private market instead (Ibid.). The foundation is now planning to create more diverse neighbourhoods by renting out the current empty apartments to people from other social groups. The housing foundation now owns 870 apartments in 23 blocks in Trondheim.

A representative of Rødt political party, which is a merger of the Workers' Communist Party and the Red Electoral Alliance and also the owner of the smallest share of the parliamentary seats, in an opinion piece published in Addressa newspaper, finds the shrinking municipal housing sector a problem in Trondheim (Lysestøl, 2020). In November 2019 the municipal director in Trondheim presented a case to the city council. It was stated that the municipality in 2019 had sold municipal apartments for 100 million Kroners and an equal share is planned to be sold in 2020. Half of the income from the sale, however, will be used for completely different objectives than municipal housing (Lysestøl, 2020).

Derived from the parties' official websites, the table below gives a summary of the housing politics of the four most influential political parties in Norway that has the most parliamentary presentations.

Name of the party	Arbeiderpartiet	Høyre	Fremskrittspartiet	Senterpartiet
Political direction	social democratic	Conservative	libertarian	-
Seats after 2017 election	49/169	45/169	29/169	19/169
Housing policy	-Increase the housing supply -Less public sector intervention -Simplification of the construction process	-Homeownership -Increase the housing supply -Good living environment -Climate-friendly construction industry -Strengthened role of the Housing Bank - Varied and stronger rental sector - Inclusionary housing	-Increase the housing supply Repeal the property taxes and documentation fees -Flexible Construction Policies -Empower the bank with the decision-making of the mortgage allocation -Attend to the student housing issues	-Safe and stable living conditions -Realize the role of housing within the welfare state -Homeownership -Well-functioning rental market -Assist the first-time buyers -Target homelessness -Universal design -Strengthened role of the Housing Bank -Primary-dwelling tax benefits

Figure 21 The housing politics of different political parties in Norway

A target approved by different parties as the solution to the current housing issues is the increase of the housing supply, some believe in public sector interventions and others believe in decreased market regulations, so there's no consensus on how to achieve this target. Here we can look back at the experience from the UK and the changes in urban discourses. When Margaret Thatcher was in power, the urban policy took under tax breaks and there was a reduction of planning regulations (Imrie and Raco, 2003). This change was made to encourage capital investment in the cities (Ibid.). As a result, however, inequality and poverty in the cities intensified and cities became segregated. Later, when the labor party took over the government, they believed that the power should be passed through the power hierarchies meaning that the local initiatives should be empowered (Ibid.). The requirement for this change was that people were more willing to participate in urban governance processes and take responsibility for their environment (Ibid.).

Nordahl in a 2013 study, acknowledges that even though the escalating house prices for many years has been regarded as the most serious housing policy challenge in Norway, no current policy documents discuss instruments aiming at increasing the number of affordable houses (Nordahl, 2013). She also mentions that the stakeholders and policy makers should first become aware that there is a need for affordable housing and the current policies are not feasible, second, they should be familiarized with the alternative policies, and third how far these new policies deviate from the existing ones. In Norway, the municipality has the initiative to pass the costs related to technical and green infrastructure, organization, and development pace to the developers (Trondheim Kommune, 2020b). However, they are not empowered with the tools to make developers build and sell the units to a certain group as it might happen in other countries such as England (Trondheim Kommune, 2020b, Nordahl, 2013).

As mentioned before one of the reasons why housing is unaffordable in Norway is the imbalance between supply and demand where, the population growth rate increases faster than the new housing construction rate (Gram et al., 2011). However, this growth is different from region to region, and based on the move-flows the houses in one area becomes empty and then another region has a housing need expansion (Ibid.). The high construction costs are also named as another reason for the lack of affordable housing in Norway (Ibid.).

Sila (2020) points that house prices have been rising faster than incomes in Norway which results in affordability concerns. In contradiction by calculating the share of the houses sold on the market that households can debt-finance on their income and consumption expenditure, Norges Bank reports that the households' capacity has remained approximately the same over the years 2008-2016 (Ibid.). One of the reasons for this stability is the fall of housing interest rates (Ibid.). Meanwhile, if we just analyze the data concerning the households with lower-quartile incomes then we can conclude that affordability has worsened since 2009 (Ibid.).

Academics assert that today, housing has become a policy field that generates inequality in society (Nordahl, 2020). The increasing house prices and limited access to equity and mortgages are producing inequalities among the youth who are trying to enter the housing market (Sandlie and Gulbrandsen, 2017). For example, they become more dependent on parental help (Tranøy et al., 2020). However receiving help from the parents might not produce inequality in the homeownership possibility but can make the process for the excluded lengthy and the housing outcome less desirable (Sandlie and Gulbrandsen, 2017). The other produced inequality is among those who own a house in the urban area and those who live in the rural areas, which makes it more difficult for non-urban dwellers to enter the urban housing market, as the houses in the major cities become more expensive (Tranøy et al., 2020).

From an architectural point of view there are several solutions to this problem. For example, some private developers and architecture firms are focusing on building tiny homes, others are using 3-D printing technology which will decrease the construction costs greatly(Galster and Lee, 2021) . Co-living and shared housing are also becoming another international solution as well, especially among the younger generations and in some countries the governments are supporting this kind of housing development (Ibid.).

From an institutional point of view it has been recommended that The Housing Bank's role as a social housing supporter for the municipalities must be strengthened and further developed (Gram et al., 2011). The Housing Bank should also be given a role as a coordinator of state policy towards the municipalities (Ibid.). The municipalities must have clearer legal framework for their social housing responsibilities (Ibid.). At the same time a secure financial framework should make it

possible for them to take responsibility. The report emphasizes that the rental is short term option for the disadvantaged and more tools should be introduced to guarantee the home-ownership of the people in the lowest quartile as well, especially for the families with children (Ibid.).

5.2   Housing market amid Covid-19

The outbreak of Covid-19 has brought about many uncertainties for the house buyers but one of the preventive measures has impacted the first-time buyers favorably (Norum, 2021). Styringsrenten (the key interest rate) is the interest rate that banks receive on their deposits in Norges Bank to a fixed amount (Norges Bank, 2020). This rate is very important, and it sets the interest rate that banks offer on deposits and loans to their customers (Ibid.). In turn, this rate can affect the exchange rate of the Norwegian Kroner, house prices, and many other important variables in the economy (Ibid.). That's why it's called the "key" interest rate (Ibid.). As of 2020, this rate has been set to zero (Norum, 2021). This change provides strong incentives to buy than to rent, which has triggered accumulating price growth and at the same time has provided many first-time buyers with the means to enter the housing market than the years before, mostly buying in the peripheries of the large cities (Norum, 2021). But this is not expected to be an ongoing trend (Ibid.). The house prices were at the highest level that has ever been in comparison to rental prices in 2020 (Lorch-Falch et al., 2021). Rental prices are an indication of the development in the real value of the houses and this is a sign of overpricing in the housing market (Ibid.). This raise in the house prices have left the buy-to-let investors to keep their apartments empty until they can rent it out with a price competing with the selling price (Ibid.). If these empty apartments were to be sold or rented in the market, then this pressure on the market leading the prices up would have been mediated (Ibid.).

5.3   Third Housing Sector

On 29.08.2019 the city council of Trondheim asked the municipality to investigate how a housing sector for affordable rental housing with the sober standard can be established and contributed to (Trondheim Kommune, 2020b). This sector aims to provide housing for people whose income are not low enough to be entitled to municipal housing and it's not high enough for them to enter the housing market (Ibid.). It is mentioned that the private rental market is a very viable option for this category of people but as long as there are not enough actors in the private rental market that

provide services professionally, then there might be some disruptions especially for the long-term tenants and a decrease in the security of tenure and this might even lead to discrimination (Ibid.). This housing sector is an alternative to the commercial housing market and it will be a non-profit sector, so the houses will be cheaper than the houses on the ordinary rental market (Ibid.). The practice of cooperative housings that happened before in Norway and is happening now only marginally and very close to the market prices is named as an example of the third housing sector (Ibid.). Today, one of the cities in Norway that has been contributing to the existing knowledge of the third housing sector through practice is Oslo (Ibid.).

Borrowing from the examples of the third housing sector in other countries, it is apparent that this sector is based on state support (Ibid.). In Norway, there are currently no government schemes to subsidize the construction of housing that targets the broad section of the population (Ibid.). If the third sector is to be financially supported to provide housing to a wider section of the population, the municipality must within the current subsidy scheme then be prepared to pay the cost itself, otherwise, the state must expand the target group receiving housing subsidies (Ibid.).

The costs that fall on the public sector to finance the third housing sector is dependent on the size of the sector and how much the prices will diverge from the market prices. If the municipality doesn't own the land that, then the developer should be compensated with subsidies for the loss of not selling the plot on the market price. Or there should be subsidies for the buyers to be able to afford the house at a price lower than the actual market price.

If the municipality owns the land, by using a law clause, the municipality can set the price of the built dwellings. A key question then is what significance this has for the land price. There is one generally accepted price model for valuing land for development purposes; the residual model. The model is based on what can be built and sold on the plot and that the plot price becomes a residual you can calculate by deducting development and construction costs, as well as the investment risks. If the plot price is a residual, changes in the market price for what is to be sold (more or less) will fully be passed on to the plot price. Based on "residual thinking", it is cost-indifferent whether the municipality owns the plot itself in case the land is sold to the developers.

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A municipal report (Trondheim Kommune, 2020b) on the third housing sector states that: There is some uncertainty as to whether the creation of a strong third housing sector is compatible with the welfare state goal of enabling homeownership for the majority of people. Furthermore, this can lead to lock-in effects and black markets, as well as could be affected by EU regulations on illegal state aid. It is also unlikely that the use of public subsidies to a third sector will contribute to increasing the total number of dwellings so that house prices are driven downwards.

After an analysis of the Norwegian housing policy and the experience from abroad, it's apparent that in the current legal framework and the funding schemes coming from the state, the only way that a third housing sector can be created is through significant use of the municipal funds. The municipal director will not recommend that the municipality should provide housing subsidies to a third housing sector to establish affordable rental housing. Such an initiative in that case must come from a governmental initiative in form of legal and possibly financial instruments (Trondheim Kommune, 2020b). Inclusionary housing is suggested as an "interesting clue." Such changes in planning legislation should be proposed to state authorities if it is a local policy desire for affordable rental housing in the third sector.

It has been realized that there might be unidentified paths that the third housing sector can work within. To expand knowledge and investigate innovative and sustainable ways of providing affordable housing, a research initiative called "BOPILOT" has been established.

5.4   Housing demand in Trondheim

Bopilot is a research project that explores the possibilities of the third housing sector in Trondheim and Bergen. In 2020, the Bopilot project in collaboration with LEVA Urban Design created a survey to measure the demand-side preferences of the Trondheim inhabitants. This survey had close to 2000 participants all over Trondheim. Based on this survey the five following points are the top priorities of housing quality:

1. Access to outdoor areas (garden, balcony, etc.)

2. Proximity to nature and green areas

3. Affordability

4. Transport options (to work, school, meetings, etc)

5. Good living environment/neighborhood

The affordability issue which comes third is mostly expressed by the renters. They have chosen it as their first or second priority but for the homeowners, affordability falls to the sixth priority on average.

When the participant were asked how they think the housing costs could be reduced the answers were as follows:

1. Enter into a lease-to-own agreement (Timed lease with right of first refusal)

2. Contribute to the community

3. Participate in building parts of or the entire house

4. Divide secondary living areas with other people (e.g. living room, storage, etc.)

5. Sober standard (matching the absolute needs of the household without any luxury)

6. Contribute with networking or planning

7. Contribute with knowledge in finance or property management

8. Divide necessary living areas with other people (e.g. bathroom, kitchen, etc.)

5.5   Norwegian Densification Goals

Increasing the density of the urban settings has many benefits regarding different aspects of urban sustainability. In relation to social sustainability, density can provide more people with adequate urban infrastructure, services, and facilities (Hernandez-Palacio, 2016). From an economic point of

view, densification can cut the building and development costs (Ibid). Most importantly from the environmental point of view, density can reduce the use of resources and urban land. It also reduces the energy consumption of transport and the operation of buildings and the infrastructure (Ibid.) The planning policies promoting sustainability in Norway have also emphasized the role of densification in their regulations, however, Hernandez-Palacio points out that there is a lack of practicable policy reform that can implement densification.

In 2012, the average urban density was 2592 inhabitants per km2 which is relatively very low in comparison to the average density in the built-up areas of Europe which is roughly 4345 inhabitants per km2 (Ibid.) These data show the potential of Trondheim to have denser urban qualities and its potential to cut off its horizontal development which might be recognized as urban sprawl. In Trondheim Environmental Policy for Transport in 2008, it was mentioned that about 80% of the new homes should be built inside the existing urban boundaries (Ibid.) In the case of transforming former industrial land to new mixed-use urban areas, Sager (2014) points to the fact that it's more politically and environmentally favorable than the transformation of farmlands and green areas.

5.6   Current housing policies of Trondheim municipality

Sustainability and public health lie at the heart of the Norwegian housing policy on various scales from municipal plan to the state (Trondheim Kommune, 2020b). Sustainability here is referring to social, environmental, and economic sustainability (Ibid). Acknowledging that there is no common definition of social sustainability, here it is referred to as the policy that enables the whole population of a city to take part in various living areas (Ibid.). It is, however, not mentioned what "taking part" (*ta del* in Norwegian) exactly means.

It's emphasized that the physical solutions should contribute to the stimulation of social interaction, participation, and a sense of belonging, all of which lead to stability, security, and safety in the local community. A diverse housing and population composition is also mentioned as another aspect of social sustainability. The housing policy also abides by the sustainability goals of the United Nations (Ibid.) The plan implies ease of the construction regulations especially regarding student housing, aiming for a bigger private and more professional rental sector.

5.7 Nyhavna

Based on the Boligfeltbasen, which is an information base for the Trondheim municipality's known housing developments, the residential development in Nyhavna is expected to start in 2024 at the earliest and will be a 20-year-long development process. The total number of the newly built units in the area is an estimated number of 3133.

Cooperation on Nyhavna began at a time when the Ports and Waters Act did not allow the transformation of port areas. However, the new Ports Act (*havnelov* in Norwegian) in 2020, created the possibility of developing the Norwegian ports' areas for other purposes. On January 28th, 2021, the Trondheim municipality reached a shareholder agreement with the company, Trondheim Havn, which itself is an inter-municipal company owned by 13 municipalities in the Trøndelag county (Trondheim Havn, n. d.), to create a new company called Nyhavna Utvikling AS (Trondheim Kommune, 2021).

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        ┌─────────────────┐
        │    Nyhavna      │
        │  Utvikling AS   │
        └─────────────────┘
          │             │
┌──────────────┐  ┌──────────────┐
│  Trondheim   │  │  Trondheim   │
│ Municipality │  │  Havn IKS    │
│     67%      │  │     33%      │
└──────────────┘  └──────────────┘
                          │
                  ┌──────────────┐
                  │  13 Other    │
                  │ municipalities│
                  │ of Trøndelag │
                  │    county    │
                  └──────────────┘
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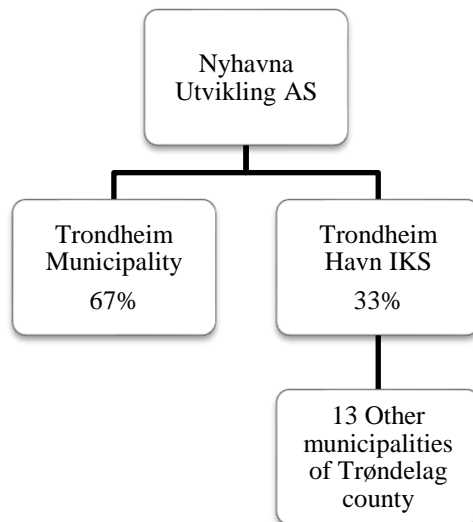
Nyhavna will be transformed from an industry and port district into an attractive and sustainable city center district by the water. The aim is to create new qualities alongside the already existing good qualities (Trondheim Kommune, 2020c). This goal is to be reached through the development of various land-uses, keeping some of the already-existing industries, and preserving the cultural heritage in this area. Trondheim's elected representatives have high environmental ambitions for Nyhavna as well. This new district close to the city center will have to be inclusive for the entire population of Trondheim (Helle, 2020). In 2020, Trondheim municipality introduced a quality

program (*Kvalitetsprogram for Nyhavna* in Norwegian), which gives direction to the future development of Nyhavna. This report also mentions the qualities of the future housing development under the title, Varied housing offer, as follows:

Housing construction and densification are high on the agenda in debates on urban and urban development. To maintain a good living environment in urban areas, a high quality of housing, outdoor spaces, and public spaces should be offered. A dense urban environment is another viable quality in the design of the city's private and public spaces. City council political platform for 2019-2023 states that: "We want through our ownership (at Nyhavna) ensure that it will be a district that has alternatives forms of housing and contributes to social equalization." At Nyhavna, a diverse offer of housing types is anticipated so that families with children, first-time buyers, and low-income people can live in Nyhavna. This is how housing development at Nyhavna can contribute to creating a socially sustainable city and even out social differences. The population characteristics and housing structure in adjacent areas shall be used as a basis for the assessment of housing composition in Nyhavna.

As mentioned here, achieving a diverse housing composition has been on the agenda of the municipality and as in an interview Ellen Aga Kildal, the project manager of the Quality Program in the city planning office of the Trondheim Municipality, declared, there is also political backing of this idea. Yet the municipality has no tool to force these requirements on the developers, the only thing that the municipality is capable of is encouragement.

It's also mentioned in the municipal housing policy plan 2020-2024 to demand social housing in the prime locations of the city where the municipality can have the right of the first refusal (which is related to the bidding process when houses are sold in Norway and is not very relevant to this topic to be described here.) Even though the municipal goal is to spread the social housing throughout the city, it's not specifically mentioned in the quality program that the municipality demands these houses in Nyhavna.

A group of the workers of the Rambøll, which is an international consultant in construction and architecture, etc. with a branch and 1500 employees in Norway, have published a debate piece in Addressa newspaper. This piece is a critique of the quality program. They believe that the quality

program doesn't ensure access to affordable housing and is too vaguely worded. From an architectural point of view, they believe that a diversity of housing types should be offered and asked for in regulations so that a diversity of people can live in Nyhavna (Skorpa et al., 2020).

There are two estimated budgets for affordable housing in the Housing policy plan of Trondheim 2020. In this report, the number of new units in Nyhavna is 2500 (Trondheim Kommune, 2020b). The first concept is that 20 percent of this portion will be affordable rental houses which will approximately cost 1.1 Billion Norwegian Kroners (Ibid.). The second is an imaginary development throughout Trondheim that 20 percent of the annual housing production will be affordable rental houses which will cost 600 million Norwegian Kroners each year (Ibid.). This calculation is based on building new houses close to the city center. If the transaction happens in the second-hand market of the housing, then the subsidies will be less but the maintenance cost will increase. 20 percent of 2500 is 500, meaning that building affordable houses in Nyhavna is nearly three times more costly than the second concept.

5.8 The neighboring districts

Nedre Elvehavn

To study Nyhavna and how the future development will turn out to be, it's beneficial to look at the other similar, already-developed context in Trondheim which is Nedre Elvehavn. Nedre Elvehavn has been developed with the aim to prevent the decline of the city center and in line with the densification goal. This area consists of a mix of functions such as residential apartments, restaurants, a shopping mall, and offices, and is considered one of the most expensive districts in Trondheim to buy or rent a house.

Figure 22 Nedre Elvehavn Aerial view (Trondheim Havn, 2010)

Eli Hatleskog in a study of Norwegian cooperative housings writes about the Elvehavn Brygge as a case study to explore to what degree participatory design is practiced in the Norwegian context. The development process has been very similar to the ongoing process of Nyhavna. A research project called Barn I Byen (children in the city) was started in 2002 to help participate the potential future homebuyers in the design of their homes (Hatleskog, 2013). After the participatory design process which gave the developers the benefit of political leverage, none of the participants, mainly due to the high purchasing costs, could live in these apartments (Hatleskog, 2013).

The map below shows the median income in the various postcodes in Trondheim. That is, the middle income if all the incomes for those who live in the postcode are listed in order from lowest to highest. The darker colors mean higher income (Riaz, 2019). Nyhavna is already an industrial

area, but being counted in the same boundaries as Nedre Elvehavn, it is considered among the areas with higher income and thus in evident polarization with the neighbouring districts. However, parts of Lademon being taken into the same boundaries has leveled down the impact from Nedre Elvehavn.
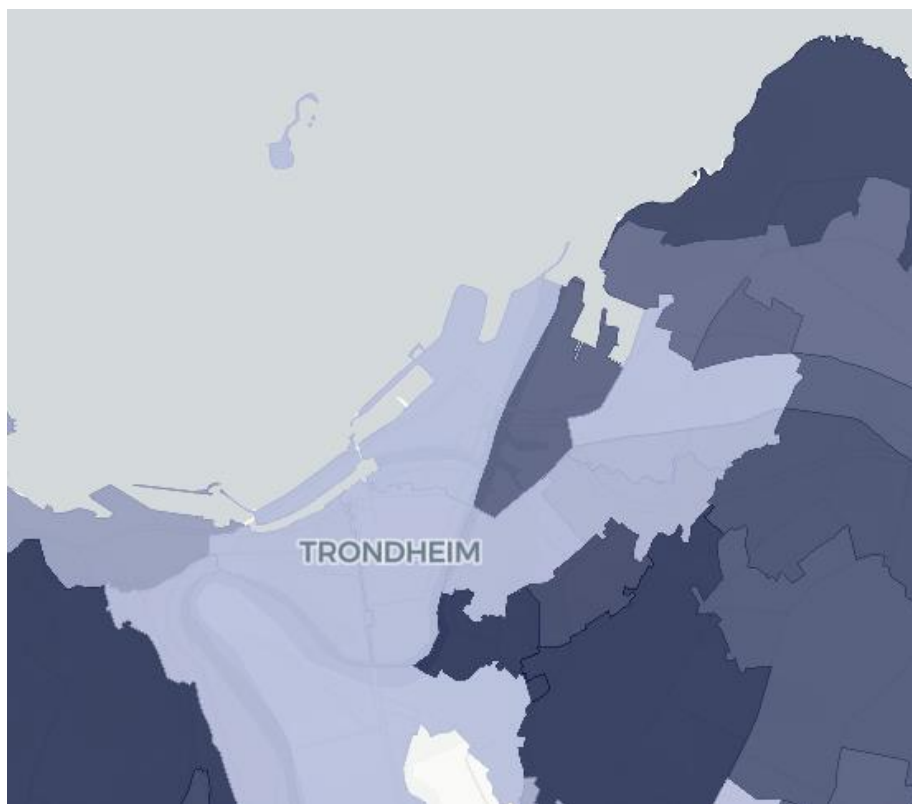
Figure 23 The heat map of median income in various postal codes of Trondheim (Riaz, 2019)

Svartlamon

Based on their official website, the housing foundation of Svartlamon was established in 1990s, the fight for this area started when the developers wanted to destruct the old buildings that were considered as the heritage of the city. Moreover, the activists wanted to maintain this area as a cheap and affordable district close to the city center. The area is organized and operated according to principles of sustainable solutions, transparent economy, low standard, and affordable rental. The foundation defines Svartlamon as unity, creativity, counterculture, volunteerism, participation,

inclusion, community, ecology, art, culture, family, friendship, music, tolerance, festival, and freedom.

Svartlamon housing foundation rents the housing stock from Trondheim municipality, except for some houses with architectural value that are owned by the foundation. The housing foundation manages the homes and collects rent from the residents. The money the foundation receives goes, among other things, to salaries for employees, renovation, and maintenance. The more work the residents do themselves, the lower the rent.

Figure 24 A view of some of the houses in Svartlamon (Schwarzer, 2020)

6 Findings

This chapter categorizes the conducted interviews, mainly with key informants, in relevant themes. The similar and contradictory opinions about each topic are gathered in the same place to give way to further discussion in the next chapter. A key objective of this chapter is to discuss Norway's housing policy and pinpoint potential issues and advantages. These points are then extended to the case study for an investigation of how affordable housing and social mix are possible to be achieved. Following are a list of the topics that were discussed most in-depth:

- Social sustainability and the importance of equity in its definition
- Social mix and how the reverse practice of it in affluent neighborhoods can be more important.
- The optimal social mix in the Norwegian context
- The causes of rising house prices and how they can be controlled
- The vitality of reaching a consensus between different actors regarding the affordability issue
- The municipal tools to provide affordable housing and the defects both generally and concerning Nyhavna.
- The Norwegian housing dynamics, focus on homeownership and marginal private rental sector and how they are contributing to unaffordability
- Svartlamon, Nedre Elvehavn and what could be learned from these urban housing experiences

In the end, there are several suggestions on how affordable housing can be provided in Nyhavna to create a more socially mixed neighborhood.

6.1 Social Sustainability

Acknowledging that there is not a consensus of the definitions of urban social sustainability, two of the interviewees have been asked about their opinion, the overlapping theme in these two given definitions was equity. Fran referred to Suzanne Feinstein and her definition of a just city, naming

democracy, representativeness, and equity as three pillars that can maintain social sustainability. Meanwhile, Grace, refers to Bramley that adds the sustainable community discussion to equity. Both authors have already been mentioned in the theory section of this document. In Grace's view, social equity is easier to quantify which can be regarded as "giving everyone similar possibilities." She believes that both parts that Bramley points out in his definition are relevant to our case in Nyhavna. Because we don't want a segregated city where the rich live in some parts and the poor is pushed to live in the outskirts of the city. It's about the freedom of choice that should be provided to people. Maintaining the freedom to have access to live in any part of the city that they choose to.

Fran in some way complements the said point. She believes that in some contexts, the authorities think that if the participatory methods are undertaken in the process of urban development, or the access to open spaces is provided to everyone then social sustainability is preserved, but one important pillar of social sustainability is equity in terms of access to housing. In the context that she is familiar with, Oslo, affordability is one of the most pressing issues concerning social sustainability. So development is not sustainable if it's doesn't consider affordability vigorously.

Grace was quick to add that in her view, Trondheim is not a segregated city but rather in a very slow process is moving towards that direction. Both Neils and Margareth mentioned that the refugees mostly reside in the southern parts of the city. Grace asserts that in relating social sustainability to Nyhavna, we have to use the possible tools to secure that a variety of people from different social groups can rent or buy a house in Nyhavna.

Social mix

One of the street interviewees had the experience of living in two different parts of Oslo, one was Tøyen and the other Frogner. She, being a young adult, believed that even though the facilities, services, and maintenance in Frogner were much better than Tøyen, it felt more unwelcoming than Tøyen and in her word, Tøyen was more vibrant. Frogner is a posh part of Oslo and Tøyen is a place with blocks of municipal housing and a multicultural atmosphere. The observation that led to this conclusion was that the public spaces in Frogner were harder to fill up than the ones in Tøyen.

Even though she approved of the socially mixed neighborhoods there were two points of conflict that she highlighted, first was a potential conflict of interests. For example, if we mix people based on their age, then the young population might consider that after 11 pm is still an acceptable time to continue partying, but probably some older people are already asleep by 10 pm. So these differences might cause some trouble. The second point that she referred to was that maybe a planner has an optimal combination of people in mind, but in practice, it might not just work. Fran also referred to this conflict of interest in the interview.

"In terms of cohabitation, I don't think that living close to each other can change things so much if you don't interact with the people around you, it's useless and very often instead you have conflicts. Because of course there are different habits, we also think about such a mix in terms of cultural background but also age. For example, at least in Oslo, there are some areas terribly homogeneous in terms of age. The areas only for families or also the areas for young people and so on, but again, this can also lead to conflicts. I think what is very important instead is to try to reach a good social mix when it comes to infrastructures such as schools. When schools are very segregated, I'm really worried. For example, here in Oslo, we have schools on the one side of the city, 98% of children with a Norwegian background and on the other side, the opposite, schools with 98% of children with non-Norwegian background, I think this is very dramatic. So it depends. Social mix itself. I'm not a huge fan. Again, for the reasons that I explained before, but it's also quite worrying in terms of young generation and schools so. I mean, I think that it's important to avoid the situation of extreme homogeneous community in this sense."

One interesting aspect of social mix in the Norwegian context is how it affects the schools. Because of the marginality of the private schooling sector, most people attend the public ones and the mix of people in different areas directly relates to the mix of the students that go to school in that certain area. It was first mentioned by Fran and her experience in Oslo but was a recurring theme in the interviews with Margareth and Morty. For example, Margareth refers to Øya, another district in Trondheim, where some houses by the riverside are very expensive and then there are municipal

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housings in the same area. She used to live there but had to move out because she didn't want to send her child to school with children from very high or low-income families. She believes that the neighborhood she lives in now, near Valentinlyst is more homogenous. I live nearby the same area, and I think it's a white neighborhood. Margareth agreed.

Grace and Morty both mentioned that in some areas of Trondheim, municipal housings are clustered in one area, but now the policy has changed towards spreading these units all over Trondheim. Morty stressed that these blocks that are all municipal housing can create stigmatization associated with that neighborhood. In his words, people might say, " I don't want to live in that rough neighborhood or in that block where people scream and don't take care of the apartment." Brighton also brought up a good point that the simple fact that these apartments, for example in Brundalen, are municipal housing and are known by other citizens to be, carries with it certain labels such as low-income or problematic. That's why the policies are changing.

I talked with Brighton and his observations regarding the community interaction in Brundalen. The municipal housing in Brundalen is a mix of Norwegian residents and refugees. He said that there was not much interaction between the neighbors and they hardly knew one another. The Afghan and Iranian residents were not able to interact with the Norwegian residents because the language was a barrier as they knew neither Norwegian nor English. But even among the Norwegian residents themselves wasn't much interaction happening. He said that they had occasions such as coffee evenings but it was few certain people who always joined. He believed that the fact that they live close to each other, wasn't enough reason for them to interact with each other. The distance that they walked to reach the bus stop is quite short so it decreases the probability of chance meetings happening. There is no sitting area outside as well. He thought that activities that might not require much talking such as urban farming might be a good addition to the area and Boligstiftelse i Trondheim is also trying to figure out both ways that the residents can be in contact with each other and also empower them to take initiative over their houses.

In an interview later, Margareth associated this lack of interaction as an outcome of the situation created by the outbreak of Covid-19 and people's fear of being in close contact with each other.

Another reason that she referred to was that the residents feel insecure to interact because they presume that people with all sorts of problems can be residing in this block.

I asked Brighton to rate the diversity of the municipal housing from different aspects of ethnicity, age, income, and household type, he respectively replied with diverse, mostly old people, not diverse at all, and majorly single-person households. Brighton believes that the reason why the majority are single is linked to the size of the units. He thought it's suitable for a maximum of two people who are comfortable with having one bedroom but if for example, a couple had children then the unit would be overcrowded.

When talked about creating social mix with the experts, one point that was expressed by the three of the interviewees, Morty, Grace, and Fran, was that the usual practice of creating a socially mixed area is to detect an urban area with segregation of low-income families and then try to uplift the area, by either adding facilities and services or creating incentives for the middle-income or high-income facilities to live in that area. This often leads to gentrification and drives the families with low income out of the area. As an illustration of this gentrification Fran gave the example of Grünerløkka, where she resides now, she says that the politicians were happy and celebrating the social mix that they created in this area and the change happened. Now if you go and check the names on the buzzer or post boxes, there are people with Norwegian and Western names. At the same time, this led to an increase of 200% in house prices over ten years and equal access to housing no more exists there. Morty also referred to the district of Lilleby, located on the North East of Trondheim and very close to Nyhavna. When it was first built the houses were mainly low-cost and to uplift the area it was tried to build more high-cost buildings there, that's the usual practice of gentrification.

The given point by the four of the experts was what often we need to practice is the reverse process, meaning that we need to create possibilities for families from low and middle income in the areas with segregation of high-income people, to reside there. Fran argued that the elite are frequently clustered in an area together, which might lead them to alienate from the reality of the social life that occurs in other parts of the city, and often this social group is the one leading the country, so they must have a tangible understanding of the reality. But it's not easy for the municipality as well,

because the elite also possesses all different sorts of power that can control the urban processes, for example, they can hire lawyers and resist.

In the theory part, it has already been mentioned by Galster (2007) that in each particular context there might exist an optimal way of mixing people. Margareth believes that for the social mix to work in the Norwegian context, it's better to maintain a majority of middle-income families in all districts and then supplement it with some families from low and high-income groups. She draws the picture of a parabola to illustrate this optimal mix. Because if we mix very polarized groups then each will seek isolation from the community.

Grace agrees with this opinion, she points out that the neighborhoods should bear a mix of people in different life stages, cultural backgrounds, and incomes. But at the same time, there should be an awareness that people "prefer to have neighbors who are similar to themselves." So for instance if a Turkish family is to be housed in a neighborhood, they better have a small cluster of families with the same cultural background so that they can build their social capital easier, however, this shouldn't lead to neighborhoods where every household is from Turkey.

When asked about her opinion regarding this optimal mix, Fran replied:

> *"...yes, of course, because in general the social structure of the Norwegian society is is more equal, and so there is a large sector of the middle-class. On the other hand, it's always very important to think about the condition that makes social mix again. so OK and these people, where are the public spaces? Where they are going to meet? How these public spaces are structured? What kind of infrastructure? So it's not just putting some social class in a specific place, but also what kind of conditions for coexistence you want to provide."*

In the whole of the conversation, Grace's special emphasis was on the families with children. *"families with children and I think perhaps that's one of the main groups because if we want to reach the goal of more sustainable cities, children need to learn how to live in a more compact kind of neighborhood and more urban neighborhood."* So she thinks it's important to provide the compact urban areas with the living condition suitable for this group, and it's more related to the

housing typologies that offer apartments big enough for families and also the quality of the outdoor areas should be taken into consideration. The exact point has been referred to in the case of Brundalen and why most apartments are occupied by a one-person household. When asked whether she would choose for her children to live in a detached house further out of the center of Trondheim or in an apartment in the center, she said that in the course of her life she was in the same situation and she preferred to raise her children in a detached house, but if there were alternatives in the city center with decent access to services and outdoor spaces for the children then she would have, at least, considered it as an option to live in an apartment. She further gave a real-life example of such a neighborhood in Oslo.

Morty believes that it's not necessary to mix people based on their income, at least concerning municipal housing. What can be done is to pay more attention to who is being selected next to join the housing complex. For example, if now the municipality is going by the list of the applicants and just houses the next person in the queue, it can instead assess the existing mix and based on that decide what are the human capital needs of the complex, and then choose the next applicant. The examples that he gave of human capital were the need for plumbing or the need for a sociology student. He believes that people with low resources shouldn't just be perceived with that label but these people, each have a story that has led them to be in the situation that they are now, we can focus more on that. Margareth asserted that people don't need to already have a certain skill to prove to be beneficial; instead, it's important to empower them. Because she believes that each person has a capability that might be useful in addition to physical abilities. For example, there is someone who is somewhat good at math, she can help the students in early school grades with their homework and contribute to the community.

When the topic of middle-income in the social mix came up again in the talk with Morty, he expressed that it's a smart move to have this large group of middle-income people, but to achieve this expensive neighborhood the solution for the developers is to build smaller units which also causes other problems.

In the view of Neils, the location might not be the top priority when the people from low income are choosing to live in an area because Trondheim is a small city and the provided public transportation is of decent quality. I didn't agree with this statement because when I conducted

fieldwork in Romolslia, a neighborhood located south of Trondheim, one of the main issues for them was lack of access to facilities, and the bus to the center would depart every half an hour.

6.2   The housing market and affordability

One of the street interviewees, based on observation, assumed that people are willing to sacrifice certain standards to achieve their prioritized housing demand when the houses prices are not affordable for them. This came up when we were talking about housing affordability in Trondheim. She rated affordability 4 out of 5, just as more than half of the respondents to the survey did. She described her observation by an example of her friends who live in a house where they have to share a bathroom with four other people but just because the location of their house is central then they accept this questionable living condition.

Maxwell names the following as the reasons behind the increasing house prices in Norway, the first one being the most dominant:

- Rapid urbanization and the growing need for senior housing leading to a lack of sufficient housing supply
- Municipal regulations making the processes long and pricy
- Increase in construction costs
- The concerns associated with the environment and carbon footprint

Morty refuses to agree that an increase in housing supply will curb the house prices:

> *"I disagree with him and that's a sort of rhetoric. The master plan of the*
> *municipality turned many agricultural areas into possible dwellings. And the*
> *argument for that, even though many politicians were skeptical to it, was that if*
> *we build more… Also the left parties supported this change and the reason why*
> *they supported it was that they sort of believed in this argument that if we build*
> *more housing, the prices will go down and low-income families will be able to*
> *to buy. While the reality is that the prices, maybe at a small level, have*
> *something to do with the amount but the investors want to get as much money*

as they can from their investments so they don't build dwellings if they get less

paid for them. So, they are the ones keeping the volume down and also this

price which I talked about earlier, the prices are fixed by the area. So, you can

sell an apartment at a different price in Nyhavna than you can sell someplace

more outside Trondheim. So it's not the volume, it's more the area. Well, if you

tomorrow built 10,000 new apartments and you said to the investors if you

don't build tomorrow, you won't get the permit anymore, and they built all these

10,000 dwellings. Maybe the prices would go a bit down. I heard that in

Tromsø the prices went a bit down because one built so many at the same time.

But I don't know the numbers, maybe it was 10% cheaper than it could have

been. I don't know. But I think it's mostly a myth, but it's the main argument

from the right side, they always argue with that.''

Morty had a discussion with another economist. The economist was claiming that it's easy, you just need to find a partner, and being a two-income family, you can enter the housing market. Morty thinks that life doesn't work like that, what if you split? And he has heard many similar stories that people couldn't afford housing because all of a sudden they split from their life partner. Life is not that easy, people lose their jobs or they become sick. So it's more than an economic calculation.

I shared my thought with Morty that maybe the first step in tackling the affordability issue is to reach a consensus on the main causes of it. He said that in Bopilot, they tried to gather empirical data in form of a questionnaire, asking people the real reason why they are in a situation where they can't enter the housing market. But they have been advised not to, as they cannot ask people questions that might make them feel ashamed or uncomfortable. So, the ethical concerns didn't let them deploy the survey as they first intended to and had to revise it. I have used some information from that survey earlier in this document to analyze the housing demand priorities.

In the interviews, I often started by questioning the statement mentioned earlier from the existing literature that names the Norwegian housing market a "neoliberal" one. Maxwell was furious with such a label and saw it as a lack of academic understanding and didn't give much credibility to this label in the economic sense. He thinks the municipality and state have many regulations when it comes to the new buildings. The trade that happens in the second-hand market, however, might be

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"neoliberal," but what is mainly contributing to the house prices is the newly built housings in the market which can't be called neoliberal.

Fran thinks that housing "unfortunately" might be "neoliberal," her indicator is that the housing sector consists of only a marginal share of social housing.

In the discussion of why the municipality might be unable to provide affordable housing in Oslo, Fran supposed that one of the main reasons is the insufficiency of the available public land there. She believed that if the Trondheim municipality owns the land in Nyhavna or is a shareholder in the ownership of it, then they have to be very careful with how they want to approach it because by selling the land, even though they will get revenue to add to their budget but it will be also a limiting factor in future. When I talked with C.C., she mentioned that there is a lack of consensus in the municipality and other shareholders in Nyhavna whether the land should be sold to a private developer and aim for the maximum profit or not.

As mentioned, one of the factors determining the final housing price of the new dwellings is the costs associated with construction. Grace believes that politicians are in favor of creating social mix but then when they are faced with the actual costs of construction and providing affordable housing then they back out. Earlier we have mentioned what are the budget estimations from the municipality to build affordable housing in Trondheim. Maxwell also in his interview mentioned that for example, providing affordable housing for 100 households in Nyhavna might cost 200 million Kroners which might be a very costly way to maintain welfare. He suggested that this budget can be used to uplift the other more deprived areas of Trondheim by providing more facilities. Margareth believes that a lot of municipal budgets have been used in Saupstad to add services and facilities but still the middle-income families are not choosing to reside in this area. Maxwell himself believes that if the context is emergently in need of social mix then this cost can be paid. Grace adds that the long-term benefits of creating social mix should be taken into consideration when we are calculating the costs and benefits and a shared understanding of the concept that is not merely economical must be created.

> *"Yeah, well, it's almost impossible to argue with such numbers. And also as long as you don't know exactly what is counted into the numbers. So, I think it's*

a very difficult starting point, and if you look at other issues such as sports and art and culture, it will cost money, but we all agree that as a society we need to have certain qualities. And I think urban qualities are much about diversity. Both social diversity, but also diversity in terms of functions and service offers. What kind of shops and facilities? No one wants to have a city where we only have Rema 100 and you know the big chains, it would be a very poor society. It's probably the most economic and efficient, but that's not what we want, and I think also economists agree on that."

One of the street interviewees refers to Singsaker as an ideal place to live in Trondheim, because of the central location and its proximity to different stores, public transportation, other amenities such as the university and its related activities, and sports trails and sports facilities. So, when we are providing facilities, their variety, quality, prominence, and other factors are important.

It's acknowledged that the municipality has a tight budget and housing is just one of the many services that they have to cover so they might not be entirely at fault in this situation.

Private Rental Sector

Two young boys that I talked to during my street interviews, were of the notion that it's easy to make money as a landlord in Norway so the state should make the other investment options more interesting for people and direct the stocks from investment in land to other areas such as technology or cryptocurrency.

The experts I interviewed all believe that it's very easy to buy a house in Norway, "almost too easy." Morty said. Grace calls for a more equal support system for the people who rent. It's said by Maxwell and Grace that the tax system puts more pressure on the renters than the owners, Maxwell adds the costs of moving to this equation and thinks it's not fair as most renters are from the low-income demography. Margareth asserts that the tenants are not aware of their rights and might not have the security of tenure. Fran, even though might seem too extreme, thinks you can even lose your place of residence all of a sudden.

The idea of having a more professional rental sector first came up in an interview with Margareth. *"Private rental market should become more professional so that not every person with a little extra money can buy to let. It's a very safe investment and the landlords don't mind about proper maintenance and don't offer any services."* Grace also thinks it's beneficial to have it, because then the developers would be more concerned with the quality of the houses and the maintenance as it will be their long-term investment, instead of jumping from project to project. Fran thinks it depends on how these professional companies are regulated because it might even financialize the market even more.

Margareth introduced Frost Eiendom as one of the professional private renters in Trondheim. Morty later added that they also have many apartments targeted at low-income families. They might not use it in their branding because that's not the impression I got when I checked their website but Morty said that they are even experimenting with projects where people can also live in apartments where they share common spaces with other people, something like a student housing but for everyone. However, even though being a private landlord is easy and profitable in Norway, if you are doing it professionally, for example, if you ask Frost, they'll say it's not a lucrative business because of the tax regulations.

Another recurring theme in the discussion about the rental market was the security of tenure and the lease lengths that might be considered short-term in comparison to other countries.

6.3   Housing Policy

Morty clarifies the role of Boligstiftelse i Trondheim and the municipality in providing affordable housing. He agrees that the eligibility criteria of the municipal housing is very narrow. He explains that it's not enough to have a low income, but there should be a more challenging condition in your life that prevents you from sufficient financial gain, for example, if you have certain physical or intellectual disabilities. But he also relates the narrowness to the limited number of dwellings at their disposal. I asked why the municipality is selling the units, even though they know that they have a limited number of houses. He replied that those sales are made so that they can tone down the clusters of municipal housings in one area. They will be sold and then the supplement will be bought somewhere else.

About Boligstiftelse in general, they can be founded based on various motivations. For example, a rich person or a politician wants to help the poor, so she creates a housing foundation. It can also be initiated religiously or maybe by a group of people with the same interests such as Svartlamon, in some cases the motivation is economic and that's the case with Boligstiftelse i Trondheim. He explains that in 1972, Trondheim municipality, as many other municipalities all over Norway, saw fit that if they create this foundation then it will facilities inquiring loans from the municipal bank and the loaning conditions will be more advantageous. So this foundation has the municipality as a guaranteed client. That was their only purpose for their existence. They now have more than 800 units all over Trondheim. And the municipality itself has around 3000 dwellings. The case in Brundalen where the municipality aborted the contract of 100 units was the first time in the history of the foundation that such a thing happened and now the foundation has to find clients for these 100 apartments on its own.

He thinks that the municipality is not adjustable to the changing needs. For example, in 2015, there was an influx of asylum seekers as a result of the Syrian war, so the need increased but only after a year and a half the situation changed again and the need decreased and the units were left empty. And the units owned by Boligstiftelse are more critical because even when they are empty the municipality is still obliged to pay the rent. Sometimes it's the other tenants who are burdened with the excess rent split between them. This uncertainty of when the next crisis will be is why there are empty units. Morty continues that one strategy is to keep the units full with the people who are not in an extreme situation as the other applicants until a case comes up and we terminate the contract of the inhabitants. This can not be a good solution because people need to have a stable life and be able to rely on it. It has also been argued that 3 years is too short a time frame for municipal housing and also the politicians agree with that too. Especially when you have children, then the need for stability is more magnified.

Maxwell believes that any restrictive measures on the market to provide affordable housing, like the regulations in Germany, Denmark, and Sweden all affect the house prices, causing them to rise. He mentions rent controls and inclusionary zoning as examples of these policies. I asked him how housing can be a part of the welfare state. By using the mechanism that can control the increasing house prices and lowering them, he replied.

He also mentioned that many of the municipal calculations about the future housing needs are wrong and maybe that's why they don't comprehend the urgency and need of increasing the housing supply.

Margareth also believes that inclusionary zoning is not a good practice:

> *"What should be done is to attract middle-income people to live in Nyhavna. Cross-subsidizing, where the rich will pay for the poor like inclusionary housing is not a good solution." Or "The subsidized houses should later compete in the ordinary market and only the first buyers get the profit, if the houses were to remain in the third sector and the subsidies come from the municipality then it can work."*

Grace and Fran point out the same issue with the inclusionary zoning, the developers dedicating the units with the worst qualities, such as the access to sun or balcony, to the affordable housing. Fran in addition said:

> *"Because anyway, the most important goal of the developers is to make money. So of course, they don't want to use the best areas for affordable housing and so at the very end, it can lead again to segregation after a few years. It's more microsegregation, but yes there is some also bad implication of inclusionary zoning, but at the same time I would say that in Norway would be better than nothing because at this moment we are close to nothing."*

Fran believes that what can be a solution to affordable housing is to have many different policies and alternatives working at one, each directed to a group with their special needs. She thinks that just having one policy to solve the problem is too limiting. She gives the example of Vienna and adds that Norway is in dire need of innovation and creativity when it comes to their housing policy, if the municipalities just want to repeat the same model over and over again it can't work. Morty also touched upon this subject that most people in charge just want to be left alone doing what they have always been doing. They are not open to investigate reform of housing policies or tools that can make a change.

One of the young street interviewees mentioned that he has heard from his father that the property taxes, that accumulate as one purchase more, can prevent land monopoly. Related to the same theme, Maxwell holds the view that property taxes don't have a determining effect on the house prices, in the long run, because it doesn't affect the total cost and a surplus-value is not produced. If there are tax reforms, they can have short-term shocks on the market.

Homeownership

As mentioned one of the main characteristics of the Norwegian housing policy is its focus on homeownership. One of the street interviewees had an interesting observation, she said: "*The culture in Norway is more about ownership but in actuality, we are renting from the bank instead of the municipality.*"

One of the questions asked from the interviewees was that whether they think homeownership is a socially sustainable model of housing or not considering the population growth and the scarcity of the available land.

Grace believes that buying a house is the sensible thing to do in Norway but a huge debt is also a factor that can pin you in to your place, and maybe if you have a low income then moving from a house or keeping up with the mortgages can be very troublesome. But in many private contexts, it's only natural that most people are pushed into homeownership but there is also a category of people who are not in a stable situation in their lives where they prefer to have the freedom of movement so more than being a question of sustainability it's a matter of providing people with the access to having a choice. And she believes most people in Norway are denied this freedom of choice regarding movement and their housing tenancy preference. Fran also believes that the importance of homeownership in Norway is cultural, so much that others will think you are a "loser" if you don't own.

> *"I think that we have to consider differences between what it was in the past*
> *and what it is today because the level of speculation and financialization that*
> *there is now on housing is not the same as it used to be in the 60s or 70s. So, if*

ownership in many countries has worked quite well in the past, it doesn't mean that it will work very well in the future. Because the economics in relation to this sector has changed dramatically. So, in general, I'm not a huge fan of the ownership model, but at the same time I understand that it's something very difficult to change in a country such as Norway, so it takes time and political will, and a lot of resources from the public sector, if there is this will from the political sector. I think it will be possible to try to promote again a new form of rental market or social rental housing and so on. But it requires time, a lot of funding.”

Maxwell first considers the ownership rates in Norway to be quite normal, if they were to be compared with international rates or other parts of Europe, however in comparison to other Nordic countries it can be considered high. Yet he presumes homeownership to be a sustainable model; and to justify this thought, he said that housing usage is very long-term in comparison to other goods and also it's believed that people take better care of their houses when they own it set side by side of renting. He also believed that homeownership grants better social cohesion as people connect better to their neighborhood when they own their houses. Referring to personal experience, Grace thought that it might be true in some cases but also we see that in Svartlamon, even though people don't own and rent their apartments, they still contribute a lot, even more than those who own in other parts of the city and also has a strong connection to their neighborhood.

Fran strongly disagrees with this kind of generalizations. She thinks it might happen but it's not universal. She gives the example of Vienna, where more than half the people rent their dwellings, either publicly or privately, and they even might have better social cohesion and take better care of their houses than in other areas where the majority own their house, for example, in parts of Italy where she comes from.

Third housing sector

Morty expressed that the politicians demanded a bigger third housing sector for the people who fall between, people who are neither able to afford housing in the private market nor eligible to receive

municipal housing. However, he was uncertain whether this utterance from the politicians is regarding this category of people or it is regarding the actual meaning of the third housing sector, which means non-profit organizations providing affordable housing. Morty continued to say that even though the administration office in the Trondheim municipality has been advised to create and enlarge the third housing sector in Trondheim, they in response are highlighting the tight budget and tools of the municipality and claiming state support. However, he thinks their calculations are done by using a very simple formula but they can instead deeply assess the economic solutions and find an alternative way to finance the third housing sector, considering the fact that these alternative solutions can be less profitable in comparison to just selling the public lands.

I asked Morty whether the politicians offered any advice on how the municipality can finance the third housing sector or not. He replied that the politicians are not responsible for that, they just set goals and demands, and it's the administration's responsibility to find out how.

Both Grace and Morty agreed that by just looking at the economic costs, we are missing out on the long-term social benefits of creating a third housing sector and social mix, and they call for a shared understanding of the long-term social and economic costs and benefits.

6.4 Svartlamon

One of the street interviewees claimed to be one of the founders of Svartlamon. Svartlamon is a stigmatized part of the city, said he, because of the significant use of drugs in this area. He pointed out that there are certain labels associated with the residents of Svartlamon, for example, they are called the "potheads" "freaks" "punks" "hippies," on the other hand he pointed out that people know this area positively as an assembly of environmentalists and the people who value sharing.

He thinks that Svartlamon is not in danger of gentrification because the municipality has just recently prolonged their contracts 10 more years. They are in negotiation with the municipality to prolong it even further. He argued that for Svartlamon to keep its community spirit there is a need for a tangible and common goal that the members believed in. He thought that the environmental goals could be an example of this common goal. This exact point was iterated by Neils. He said that the continuation of the life of Svartlamon is in its activism. The political opposition is what makes

Svartlamon an alternative housing option. It's time for the Svartlamon to recruit more activists. It should indeed be loyal to people with housing needs but also it should be loyal to it being an institutional organization. People shouldn't feel too safe with their housing in this area because the third housing sector should be looked at as a point of transition, not a destination. Another reason that the third housing sector works in Svartlamon is that the lost cost is reimbursed by the community contributions and municipal subsidies. The houses there are also old. Maxwell also mentioned the same thing about the costs.

The claimed founder also believed that a solution to resolve the existing issues of the district lies within the recruitment criteria of the new housing applicants. For example, new people should have references from people already residing here and there should be meetings between the organizers and the new applicants before that a new lease is signed. He also believed that the new people should have stronger human capital, being able to help with the refurbishment of the houses and help with the organization. Margareth has before joined a recruitment meeting in Svartlamon as an observer and she said that in the recruitment process for the new members, the aim is to recruit 2/3 of the people with skills that can contribute to the community and 1/3 from people who are in severe financial need. As mentioned before, Margareth believes that even that 1/3 have something to contribute to the community but the skills should be identified and empowered.

In response to what they think of Svartlamon, the survey respondents used the following remarks: "I like it" "I don't know" "close partnership between people and the municipality" "a success" "details could be adjusted" "mixed and affordable" "interesting housing project" "preserved residential heritage" " left room for the dropouts, weirdos, artists, et cetera, who don't wish to live in the way that most other people do" "a very honorable attempt" "interesting" "nice substitute to the city"

When asked if they want to see the same kind of development in Nyhavna as well, the answers were a mix of yes and no, more leaning towards no. The answers were joined by the following remarks: "I prefer more structure" "Nyhavna needs more diverse housing types" "a modern version of it" "not possible, maybe half of the development" "it's more sustainable, vibrant and inclusive"

"I don't care as long as it doesn't cover the view of the fjord" "Not sure" "humanistic values"
"can't keep pace with the development of civilization"

6.5 Nedre Elvehavn

Grace is skeptical whether social sustainability has been maintained in Nedre Elvehavn but she names three efforts to create a social mix there, one is a student collective, which is now owned by SIT but before it was a privately owned rental aimed at people from lower-income. *"In addition, there are some small apartments on the northern part towards the main road, which are very small and probably costs less than the other apartments, but they have worse quality. So they have a kind of a mixture, but it's also a very different quality, so if you are willing to live close to a very noisy and busy road with almost no sun then you can probably get a small flat there."* The third effort was the project aimed at families with children that I have mentioned before in the last chapter. Grace however asserts that even though the majority of those families didn't end up living in Nedre Elvehavn but they were still a representative of their social group and could contribute by giving input regarding their demands and needs.

One of the street interviewees believes that the social mix in Nedre Elvehavn, maybe not in the residential units, but is maintained in the public spaces where you can see a diversity of people, and this mix is being further facilitated through the additions to the spaces from the municipality such as the sitting areas or the water pit that turns into an ice rink during the winter.

Neils mentioned that even though houses don't have much access to outdoor spaces, but they have diverted the need to Strinda park nearby where we find people from Lademon and Svartlamon hanging there as well. The roof gardens also compensate for the lack.

The survey respondents used the following remarks to describe Nedre Elvehavn: "nice, warm, and welcoming" "place to chill" "super fancy" "made for the rich" "metropolitan, high-class vibe" "a bit too fancy" "small and expensive housing units" "looks amazing" "lacks soul" "nice location, bad food"

When asked if they want to see the same kind of development in Nyhavna as well, the answers were a mix of yes and no, more leaning towards no. The answers were joined by the following

remarks: "too posh" "architectural masterpiece" "after the rulebook" "lacks a diverse range of housing" "neighbors don't interact" "if it's without the downsides" "I don't know what's best for Nyhavna" "not much sense of home"

6.6   Nyhavna

It has already been mentioned that the future residential development of Nyhavna will be expensive. One street interview said that as the house prices will be high, the people from lower-income who want to have the privilege of living close to the water can move to other areas such as Trolla or Buran. After a quick search using the website Finn.no which is one of the main sources of finding houses to buy or rent, the only available option in Trolla was a 274-square-meter house costing 11.5 million Norwegian Kroners which is in comparison to the more central parts of Trondheim is somewhat cheaper, there are two available options for rent which are compatible with central parts of Trondheim but not the rent prices in Nedre Elvehavn. This might be another sign that certain stigmatizations apply to different regions in Trondheim.

Morty acknowledges this high demand but he also asserted that there are certain negative points in relation to Nyhavna as well. For example, Nyhavna is still a harbor area and the noise pollution will still exist and the current development is not as "beautiful" as other harbor cities in other countries. The same point was mentioned by one of the street interviewees.

Expecting that the house prices in Nyahvna will be among the more expensive parts of Trondheim, there's a political agenda to have affordable housing in this district. Grace referred to the Mayor's speech that was published in Addresa Newspaper on January 29[th,] 2021: *"The mayor, she went out publicly and said that we will use our power as landowners in order to get more affordable housing at Nyhavna."*

Morty believes that already, there's a mix of people from different backgrounds in the neighboring districts, Lademon, Svartlamon, and in the end, the residents will use the same facilities, for example, the children all go to the same school. But here I have mentioned the danger of polarization in schools, and it might be the case in Nyhavna.

6.7 Recommendations

In this part, I add and summarize the suggestions made by the interviewees on practical ways to initiate social mix and affordable housing in Nyhavna.

One essential part of the practicalities is to find ways to reduce the building costs. When I shared this opinion with the experts, Maxwell suggested that one way is to use already existing buildings. Grace thinks that it can also be very pricy, only if we accept that the result will not be top quality as a new building then maybe it can be a good solution. We can also accept that these qualities will be improved over time, and housing becomes an evolving product. Morty mentioned that opposition to building new is also an agenda in Bopilot, he thinks that we can use the office buildings if not the storages in Nyhavna to turn them into residential units. Also, some buildings in Nyhavna that have a historical significance can be preserved and used again as the ones in Nedre Elvehavn were preserved.

About self-building, I mentioned Selegrend as an example, Grace followed by saying that:

> *"Selegrand, yeah, it might have been some kind of self-building, but that was also in the 70's so things have changed. We had more self-building earlier in Norway and the municipality has had a known unit related to self-building where people advised the home buyers and then it was institutionalized, but it cost a lot of resources from the municipality and I think there were perhaps two people employed there and they had to use all their time helping people. But also, I mean in the long term it might be a good social economic solution, but then at least they decided to stop this."*

One observation that I had concerning Nedre Elvehavn was that some buildings were rented out as Airbnbs to tourists or the workers that stay in town short-term. Morty said that if the future residents of Nyhavna decide to create a Borretslag then these practices can be prevented. Because then they will be obliged to follow certain rules such as having a minimum lease length for the contracts. Being a Borretslag can bring about other benefits such as sharing specific spaces or services, but it depends on the residents to decide.

Grace addresses the lack of budget on the municipality's part and thinks we must minimize the need for municipal subsidies. One way obviously is the partnership with private actors. Another step that can be taken instead is to sell a part of the land to either non-profit organizations such as Svartlamon Boligstiftelse, or perhaps to a group of households that can create one, with an agreement that they should offer a great share of affordable housings. This was suggested by Morty and Margareth as well. In turn, I asked whether these organizations have enough capital to buy and build in Nyhavna or not. Grace replied that they might have but of course, they can also loan from banks. What she thinks is a bigger obstacle than budget is that these organization already have their houses and are not considering expanding their web as a strong alternative housing sector. So, a change of attitude is required. But in case it doesn't work, and the land is to be sold to private developers then the municipality should make demands for affordable housing upon sale.

I asked Morty about the possibility of making demands when the municipality is selling the land, he admitted that it can be possible, an example is a case in the municipality of Bærum, where they needed a lot of senior housing with universal design. Husbanken demanded that they spread the housing all over the city and that was a prerequisite for the municipality if they wanted to be granted a loan. The municipality in this case entered a negotiation with the architects and developers, and by abnegating maximum profit in selling the land, they granted themselves a block mixed of 12 senior housing, 3 families with children, and 50 normal units. In this way, they solved their senior housing demand and also created a socially mixed block.

He also further sheds light on the fact that the woman behind this initiative in Bærum municipality was a person with long experience from the private sector that led to such entrepreneurship. He stresses a need for an understanding of how to do business in the municipality.

Another concept that was iterated in different interviews was the importance of sharing the common areas and other practices that happen in Svartlamon.

7 Discussion and Conclusions

I start this section by revisiting the research question and examine how the findings, both from the literature review and the interviews, are responding it.

- What are the challenges and opportunities of implementing socially mixed affordable housing in Nyhavna, Norway?
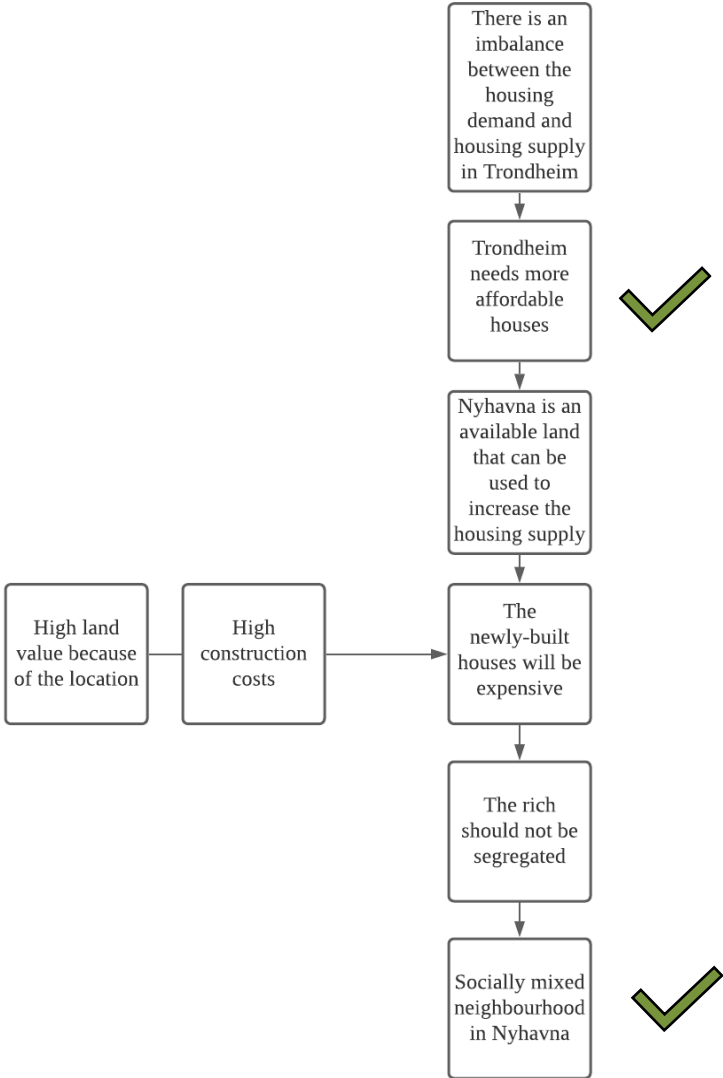

Figure 25 How the relevant concepts lead to answering the research objectives

In the graph of relationships between the concepts below, we first prove that we need to have a mix of housing offers in Nyhavna, meaning that the municipal aim is a valid point. The imbalance between the housing demand and housing supply was mentioned in the existing literature and later was confirmed by the experts. There is consensus between the academia, the politicians, and the municipality that Norway should increase its housing supply in the areas with demographic pressure. However, one can address the unequal urbanization processes in different cities here and look at the problem and its solutions more fundamentally. Despite the mentioned consensus, a general agreement on how to achieve this target doesn't exist. And one of the main disagreements is on the role of the governmental institutions in the provision of housing supply.

In the case of Nyhavna, what is apparent is that it's an available land close to the city center of Trondheim. As mentioned in the Norwegian densification goals section, building dense urban areas is sustainable according to all three pillars of sustainable development. So, in connecting the Sustainable development goals that were mentioned in the background studies, the residential development of Nyhavna among other land functions is a sustainable decision.

Apart from densification goals, one downside to building residential units in this area is that the housing outcome will be among the more expensive parts of the city, as was the case in Nedre Elvehavn. But what is the problem with having an urban neighborhood where only the rich can reside in? To answer this question, I would phrase it as: what is the problem with excluding other social groups from access to live in a certain urban area?
It was mentioned that densification is socially sustainable because it can serve more people with adequate urban infrastructure and facilities. It shouldn't be forgotten that, as mentioned before, Trondheim is now a model city in sustainable urban development and the aim here is to maintain sustainability. In the theory section, we have identified social equity as one of the pillars of social sustainability, and if sociospatial segregation is experienced then it's an indicator that the development is not sustainable. So, in Nyhavna, creating a social mix is important to maintain social equity even maybe more than it is to produce certain neighborhood effects.

Based on the interviews with the key informants, we must prevent the segregation of the elite. There was a consensus that the reverse process of social mix, facilitating the low- and middle-

income households to have access to live in the areas segregated by the high-income, is not often practiced but should be.

The idea of having an optimal social mix in a neighborhood, based on the context, was mentioned in the theory, and the proposed optimal social mix by the key informants in the Norwegian context is:
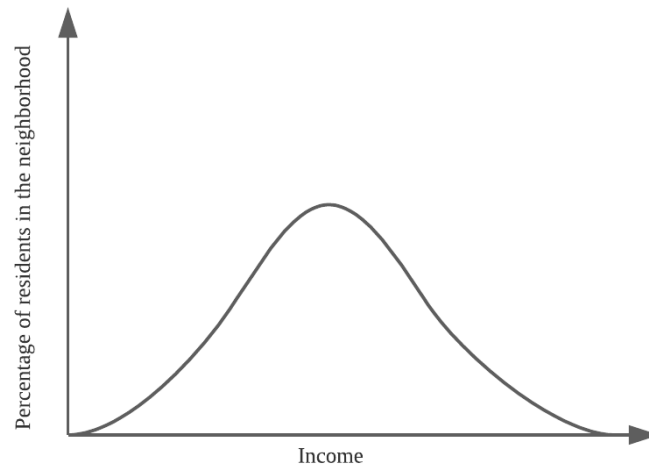

Figure 26 The optimal social mix based on income in the Norwegian context

The meaning of this schematic overview is that it's better if most of the households in a Norwegian neighborhood are from middle income. This is just an opinion that the key informants in this study agree upon, but it can open a path for further research with the following question:

- What are the neighborhood effects of the optimal social mix suggested by the experts?

To name the challenges associated with creating social mix and building affordable housing in Nyhavna, first I designate the identified challenges in the Norwegian housing market and policy. Second, I name the three housing sectors in Norway and the challenges each face or create in realizing this aim.

Housing policies such as inclusionary zoning and rent control, homeownership, and the private rental market were the themes discussed with the key informants and how each can help or challenge affordable housing and the creation of a social mix.

My expectation was a unison agreement on the use of inclusionary zoning, as it was mentioned in the literature as a practical tool used in the neighbouring countries. But when I asked about inclusionary zoning, most of the informants didn't perceive it as a functioning solution. In summary, any policy, the products of which should at some point compete in the private market, might not be a good and long-term solution, especially in Norway that they have had a similar experience with housing cooperatives. At some point, the gap between real house prices and the cooperatives was so big that there was a need for policy reform. But the same problem might not apply to the third housing sector if the units possessed by this sector do nott eventually end up in the market. I think that the main problem with cooperatives was that their aim was enabling homeownership, which was a good solution after the second world war, but now, with the demographic pressures and a change in lifestyles, the focus might have to shift from ownership towards rental, for the households "falling in between." While the private market is working towards keeping the house prices stable.

Another point of discussion was the focus on homeownership in Norway, which is in theory presumed to have more benefits than rental, in relation to social cohesion. When discussed with the informants, they asserted that it could be the case, but there are also examples such as Svartlamon or Vienna, where most of the houses are rental but the community is much more close-knitted and people contribute to the maintenance of their neighborhood. And also, as mentioned in theory a huge focus on homeownership, even though it can be beneficial in some cases, can also be a factor that contributes to housing commodification and might generate inequality. The informants also pointed out that it can be a limiting factor for people who are not in a stable life situation.

It's been discussed that the goal of social mix can be achieved through building affordable houses by all the three existing housing sectors, namely, municipal housing, private sector, and the third housing sector. The first one is subject to the municipal budget restrictions, even though they are the biggest shareholder of the land. The second one is subject to maximum economic gain which

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will result in small housing units so that the middle-income can afford them. The informants both from academia and the municipality saw the last one, the possibilities of which are still understudied, as a sector that can contribute to creating a social mix in Nyhavna. However, how this sector can be financed is still a question that might have answers. These possible answers are already introduced in the recommendations section, but a summary of them are:

- Reducing construction costs through using the existing buildings
- Resident contribution
- Partnership between the municipality and housing foundations (Boligstiftelse) or other non-profits (third housing sector).
- Demanding affordable housing from the developers while selling the land
- Practicing a culture of sharing

The third housing sector is also viable theoretically. A quote by Kemeny (1995) was mentioned that non-profits that are working as safety nets of the social problems created by the free market should work alongside it, instead of competing in the same market. Nevertheless, if we emphasize homeownership through the third sector, then it is futile because we are essentially sending the housing units out to compete on the free market.

In conclusion, there was a long way from the first municipal interview where C.C. in a very sure statement agreed that the municipality has neither the tools nor the budget to assure the provision of affordable housing in Nyhavna other than suggestion to the developers. Apart from the need to learn from other countries and what are the characteristics of successful urban policies, one can learn a lot from the context itself and the evolution of the urban policies through time.
In the beginning of the document, I have mentioned that the other pillars of sustainability are similarly important as social sustainability and I would like to finish the thesis with one more suggestion. Further research could combine the provision of affordable housing in Nyhavna with economic or environmental sustainability and investigate possible solutions.

References

AALBERS, M. B. & CHRISTOPHERS, B. 2014. Centring Housing in Political Economy. *Housing, Theory and Society,* 31**,** 373-394.

ANCELL, S. & THOMPSON-FAWCETT, M. 2008. The Social Sustainability of Medium Density Housing: A Conceptual Model and Christchurch Case Study. *Housing Studies,* 23**,** 423-442.

ARBEIDERPARTIET En boligpolitikk for framtiden!

ARTHURSON, K., LEVIN, I. & ZIERSCH, A. 2015. What is the Meaning of 'Social Mix'? Shifting perspectives in planning and implementing public housing estate redevelopment. *Australian Geographer,* 46**,** 491-505.

BARNETT, C. & PARNELL, S. 2016. Ideas, implementation and indicators: epistemologies of the post-2015 urban agenda. *Environment and Urbanization,* 28**,** 87-98.

BENGTSSON, B. 2001. Housing as a Social Right: Implications for Welfare State Theory. *Scandinavian Political Studies,* 24**,** 255-275.

BRAMLEY, G. & POWER, S. 2009. Urban Form and Social Sustainability: The Role of Density and Housing Type. *Environment and Planning B: Planning and Design,* 36**,** 30-48.

BRUHN, J. 2009. The Concept of Social Cohesion.

BRUNDTLAND, G. H. 1987. *Our common future,* Oxford, Oxford University Press.

BYSVEEN, T. & KNUTSEN, S. 1990. Impacts of liberalization of the cooperative housing sector in Norway. *Scandinavian Housing and Planning Research,* 7**,** 155-166.

CAMPBELL, S. 1996. Green Cities, Growing Cities, Just Cities?: Urban Planning and the Contradictions of Sustainable Development. *Journal of the American Planning Association,* 62**,** 296-312.

CAPROTTI, F., COWLEY, R., DATTA, A., BROTO, V. C., GAO, E., GEORGESON, L., HERRICK, C., ODENDAAL, N. & JOSS, S. 2017. The New Urban Agenda: key opportunities and challenges for policy and practice. *Urban Research & Practice,* 10**,** 367-378.

CASSIERS, T. & KESTELOOT, C. 2012. Socio-spatial Inequalities and Social Cohesion in European Cities. *Urban Studies,* 49**,** 1909-1924.

COSTARELLI, I., KLEINHANS, R. & MUGNANO, S. 2019. Reframing social mix in affordable housing initiatives in Italy and in the Netherlands. Closing the gap between discourses and practices? *Cities,* 90**,** 131-140.

EIENDOM NORGE. 2020 *Sykepleierindeksen H1 2020 Er norske boligpriser problematisk høye?* [Online]. Available: https://eiendomnorge.no/aktuelt/blogg/sykepleierindeksen-h1-2020 [Accessed 22/05/2021].

EIZENBERG, E. & JABAREEN, Y. 2017. Social Sustainability: A New Conceptual Framework. *Sustainability,* 9.

FAGERBERG, J., CAPPELEN, A. & MJØSET, L. 1992. Structural change and economic policy: The Norwegian model under pressure. *Norsk Geografisk Tidsskrift-norwegian Journal of Geography - NORSK GEOGR TIDSSKR-NOR J GEO,* 46**,** 95-107.

FAINSTEIN, S. S. 2005. Cities and Diversity: Should We Want It? Can We Plan For It? *Urban Affairs Review,* 41**,** 3-19.

FONSECA, X., LUKOSCH, S. & BRAZIER, F. 2019. Social cohesion revisited: a new definition and how to characterize it. *Innovation: The European Journal of Social Science Research,* 32**,** 231-253.

GALSTER, G. 2007. Neighbourhood Social Mix as a Goal of Housing Policy: A Theoretical Analysis. *European Journal of Housing Policy,* 7**,** 19-43.

GALSTER, G. & LEE, K. O. 2021. Housing affordability: a framing, synthesis of research and policy, and future directions. *International Journal of Urban Sciences,* 25**,** 7-58.

GALSTER, G. & WESSEL, T. 2018. Reproduction of social inequality through housing: A three-generational study from Norway. *Social Science Research,* 78.

GODSCHALK, D. R. 2004. Land Use Planning Challenges: Coping with Conflicts in Visions of Sustainable Development and Livable Communities. *Journal of the American Planning Association,* 70**,** 5-13.

GRAM, B. A., BERNT, J. F., GRØNDAHL, K. K., HANSEN, I. L. S., JOHANNESEN, Ø., MÆLAND, M., NORDVIK, V., STANGNES, R., VÅGSLID, L., ØSTENSJØ, I., BLOMLI, M. J., ASTRUP, K. C., ENDRESEN, B., FLAATTEN, A. S. & TORP, P.-E. 2011. Rom for alle, En sosial boligpolitikk for framtiden.

GRANOVETTER, M. 1985. Economic Action and Social Structure: The Problem of Embeddedness. *American Journal of Sociology,* 91**,** 481-510.

GULBRANDSEN, L. 2004. Home ownership and social inequality in Norway. *Home ownership and social inequality in comparative perspective***,** 166-186.

HARVEY, D. 2008. The right to the city. *The city reader,* 6**,** 23-40.

HATLESKOG, E. 2013. Cooperatives, Control or Compromise? The Changing Role of Participation in Norwegian Housing. *Footprint,* 7**,** 99-114.

HELLE, T. 2020. *Hva mener du om utviklingen av Nyhavna?* [Online]. Trondheim 2030 Available: https://trondheim2030.no/2020/09/08/mener-du-noe-om-utviklingen-av-nyhavna/ [Accessed 26/3/2021].

HERBERT, C., HERMANN, A. & MCCUE, D. 2018. MEASURING HOUSING AFFORDABILITY: ASSESSING THE 30 PERCENT OF INCOME STANDARD. *Harvard Joint Center for Housing Studies***,** 25.

HERNANDEZ-PALACIO, F. 2016. A transition to a denser and more sustainable city: Factors and actors in Trondheim, Norway. *Environmental Innovation and Societal Transitions,* 22.

HODGSON, G. M. 2017. Karl Polanyi on economy and society: a critical analysis of core concepts. *Review of Social Economy,* 75**,** 1-25.

HOLLAND, B. 2015. Typologies of national urban policy: A theoretical analysis. *Cities,* 48**,** 125-129.

HØYRE. *Boligpolitikk* [Online]. Available: https://hoyre.no/politikk/var-politikk/bolig/ [Accessed 27/04/2021].

HUSBANKEN. 2017. *About the Housing Bank* [Online]. Available: https://www.husbanken.no/english/about-the-housing-bank/ [Accessed 13/04/2021].

HUSBANKEN. - *Startlån og tilskudd fra kommunen* [Online]. Available: https://www.husbanken.no/person/startlaan/ [Accessed 13/06/2021].

IISD, S. K. H. 2019. *UNECE, Trondheim Establish Centre of Excellence to Promote SDGs at Local Level* [Online]. Available: https://sdg.iisd.org/news/unece-trondheim-establish-centre-of-excellence-to-promote-sdgs-at-local-level/ [Accessed 13/05/2021].

IMRIE, R. & RACO, M. 2003. *Urban renaissance?*

New Labour, community and urban policy, Bristol University Press.

KEMENY, J. 1995. *From Public Housing to the Social Market: Rental Policy Strategies in Comparative Perspective*, Routledge.

KUMAR, K. 1989. Conducting key informant interviews in developing countries *A.I.D. program design and evaluation methods ; no. 13*.

LEES, L. 2008. Gentrification and Social Mixing: Towards an Inclusive Urban Renaissance? *Urban Studies,* 45**,** 2449-2470.

LEISHMAN, C. & ROWLEY, S. 2012. Affordable housing. *The Sage handbook of housing studies*, 379-96.

LORCH-FALCH, S., PLOTS, L. & ÅGOTNES, T. 2021. *Bråbrems i utleiemarkedet* [Online]. NRK. Available: https://www.nrk.no/norge/11.000-utleieboliger-star-tomme_-brabrems-i-utleiemarkedet-1.15360598 [Accessed 12/06/2021].

LYSESTØL, P. M. 2020. *Rødt om kommunale boliger: Hvorfor har Trondheim avskaffet den sosiale boligsektoren?* [Online]. Adresseavisen. Available: https://www.midtnorskdebatt.no/meninger/ordetfritt/2020/01/03/R%C3%B8dt-om-kommunale-boliger-Hvorfor-har-Trondheim-avskaffet-den-sosiale-boligsektoren-20658658.ece [Accessed 27/04/2021].

MASLOW, A. H. 1943. A theory of human motivation. *Psychological Review, 50(4)*, 370–396.

MITCHELL, C. S., ZHANG, J. J., SIGSGAARD, T., JANTUNEN, M., LIOY, P. J., SAMSON, R. & KAROL, M. H. 2007. Current state of the science: health effects and indoor environmental quality. *Environmental health perspectives,* 115, 958-964.

MULLINER, E., MALYS, N. & MALIENE, V. 2016. Comparative analysis of MCDM methods for the assessment of sustainable housing affordability. *Omega,* 59, 146-156.

MURPHY, L. 2014. 'Houston, we've got a problem': The Political Construction of a Housing Affordability Metric in New Zealand. *Housing Studies,* 29, 893-909.

NARVESTAD, R., NIELSEN, B. F. & FORSHAUG, A. K. 2021. Utvikling av sosialt bærekraftige boligløsninger i Boligstiftelsen i Trondheims bygningsmasse.

NORDAHL, B. 2013. Convergences and discrepancies between the policy of inclusionary housing and Norway's liberal housing and planning policy: An institutional perspective. *Journal of Housing and the Built Environment,* 29.

NORDAHL, B. I. 2020. Building affordable homes : Challenges and solutions in the Nordic Region. *In:* TUNSTRÖM, M. (ed.) *Nordregio Report.* Stockholm: Nordregio.

NORGES BANK. 2020. *Styringsrenten* [Online]. Norges Bank. Available: https://www.norges-bank.no/tema/pengepolitikk/Styringsrenten/ [Accessed 12/06/2021].

NORUM, H. 2021. Flere førstegangskjøpere i 2020. *NRK*.

OHCHR 2009. Fact Sheet No. 21, The Human Right to Adequate Housing. UN Office of the High Commissioner for Human Rights.

PAYNE, G. & PAYNE, J. 2004. Key Concepts in Social Research. London: SAGE Publications, Ltd.

PECK, J., THEODORE, J. & BRENNER, J. 2009. Neoliberal Urbanism: Models, Moments, Mutations. *SAIS Review of International Affairs,* 29**,** 49 - 66.

POLANYI, K. 1944. *The great transformation: the political and economic origins of our time,* Boston, Massachusetts, Beacon Press.

PUTNAM, R. D. 2007. E Pluribus Unum: Diversity and Community in the Twenty-first Century The 2006 Johan Skytte Prize Lecture. *Scandinavian Political Studies,* 30**,** 137-174.

QUIGLEY, J. M. & RAPHAEL, S. 2004. Is Housing Unaffordable? Why Isn't It More Affordable? *Journal of Economic Perspectives,* 18**,** 191-214.

RIAZ, W. 2019. *Skattekartet: Skal du flytte til nytt nabolag? Sjekk hva de tjener på andre siden av byen.* [Online]. Aftenposten. Available: https://www.aftenposten.no/norge/i/GGXeO6/skattekartet-skal-du-flytte-til-nytt-nabolag-sjekk-hva-de-tjener-paa?code=2lLTr96xdvrUjObhVDpiQLPtUJvUU5Ftlk71XgSXWvPMMzhuM0NMytk992S4eTEh [Accessed 25/06/2021].

SAGER, T. 2014. Ideological traces in plans for compact cities: Is neo-liberalism hegemonic? *Planning Theory,* 14**,** 268-295.

SANDLIE, H. & GULBRANDSEN, L. 2017. The Social Homeownership Model – the Case of Norway. *Critical Housing Analysis,* 4**,** 52-60.

SCHMIDT, L. 2014. Kompakt by, bokvalitet og sosial bærekraft.

SCHWARTZ, H. & SEABROOKE, L. 2008. Varieties of Residential Capitalism in the International Political Economy: Old Welfare States and the New Politics of Housing. *Comparative European Politics,* 6**,** 237-261.

SÉGUIN, A.-M. & GERMAIN, A. 2017. The Social Sustainability of Cities. *In:* MARIO, P. & RICHARD, S. (eds.) *2 The Social Sustainability of Montreal: A Local or a State Matter?* : University of Toronto Press.

SHARIF, M. M. & RAJAGOPAL, B. 2020. *Opinion: Housing must be at the heart of the COVID-19 response and recovery* [Online]. Devex. Available: https://www.devex.com/news/opinion-housing-must-be-at-the-heart-of-the-covid-19-response-and-recovery-98448 [Accessed 25/03/2021].

SILA, U. 2020. The drivers of Norway's house prices. *OECS Economics Department Working Papers* Paris.

SKORPA, I. K., KJØLLE, K. H., RONGEN, A., BREIBY, C. & FINES, I. 2020. *Bærekraftig byutvikling på Nyhavna?* [Online]. Adresseavisen. Available: https://www.midtnorskdebatt.no/meninger/ordetfritt/2020/12/13/B%C3%A6rekraftig-byutvikling-p%C3%A5-Nyhavna-23142726.ece [Accessed].

SNYDER, H. 2019. Literature review as a research methodology: An overview and guidelines. *Journal of Business Research,* 104**,** 333-339.

SOMERVILLE, P. 1998. Explanations of Social Exclusion: Where Does Housing Fit in? *Housing Studies,* 13**,** 761-780.

SØRVOLL, J. 2019. The Dilemmas of Means-tested and Market-oriented Social Rental Housing: Municipal Housing in Norway 1945-2019. *Critical housing analysis,* 6**,** 51-60.

STATISTICS NORWAY. 2013. *Survey of consumer expenditure, 2012* [Online]. Available: https://www.ssb.no/en/inntekt-og-forbruk/statistikker/fbu/aar/2013-12-17 [Accessed 26/3/2021].

STATISTICS NORWAY. 2018. *Dwelling economy for households* [Online]. Available: https://www.ssb.no/en/bygg-bolig-og-eiendom/bolig-og-boforhold/statistikk/boforhold-levekarsundersokelsen [Accessed 9/06/2021].

STATISTICS NORWAY. 2019. *Housing conditions, survey on living conditions* [Online]. Available: https://www.ssb.no/en/bygg-bolig-og-eiendom/statistikker/bo [Accessed 14/04/2021].

STATISTICS NORWAY. 2020a. *12407: Monthly earnings, by level of education, contents, year and measuring method* [Online]. Available: https://www.ssb.no/en/statbank/table/12407/tableViewLayout1/ [Accessed 12/04/2021].

STATISTICS NORWAY. 2020b. *Leiemarkedsundersøkelsen* [Online]. Available: https://www.ssb.no/lmu [Accessed 12/04/2021].

STATISTICS NORWAY. 2020c. *Poverty-related problems, survey on living conditions* [Online]. Available: https://www.ssb.no/en/sosiale-forhold-og-kriminalitet/statistikker/fattigdom [Accessed 14/04/2021].

STATISTICS NORWAY. 2021. *07459: Population, by region, contents and year* [Online]. Available: https://www.ssb.no/en/statbank/table/07459/chartViewLine/ [Accessed].

STØA, E. 2017. Norway - Towards more Sustainable Residential Communities.

STREN, R. E. & POLÈSE, M. 2000. *The Social Sustainability of Cities : Diversity and the Management of Change,* Toronto, University of Toronto Press, Scholarly Publishing Division.

TORGERSEN, U. 1987. Housing: the Wobbly Pillar under the Welfare State. *Scandinavian Housing and Planning Research,* 4**,** 116-126.

TRANØY, B. S. 2008. Bubble, Bust and More Boom: The Political Economy of Housing in Norway. *Comparative European Politics,* 6**,** 325-345.

TRANØY, B. S., STAMSØ, M. A. & HJERTAKER, I. 2020. Equality as a driver of inequality? Universalistic welfare, generalised creditworthiness and financialised housing markets. *West European Politics,* 43**,** 390-411.

TRONDHEIM HAVN. n. d. *About us* [Online]. Available: https://trondheimhavn.no/en/about-us/ [Accessed 26/3/2021].

TRONDHEIM KOMMUNE. 2020a. *Kommunal bolig* [Online]. Trondheim Kommune Available: https://www.trondheim.kommune.no/kommunal-utleiebolig/#heading-h2-3 [Accessed 1/4/2021].

TRONDHEIM KOMMUNE 2020b. Kommunedirektørens forslag til: Boligpolitsk plan 2020 - med tilhørende HANDLINGSDEL 2020-2024. Trondheim Kommune.

TRONDHEIM KOMMUNE 2020c. Kvalitetsprogram for Nyhavna. Trondheim Kommune.

TRONDHEIM KOMMUNE. 2021. *Etablerer felles eiendomsselskap for å utvikle Nyhavna til ny bydel* [Online]. Available: https://www.trondheim.kommune.no/aktuelt/nyheter/2021/etablerer-felles-eiendomsselskap--for-a-utvikle-nyhavna-til-ny-bydel/?fbclid=IwAR1Faupk1_IwUXMVe_OvPby76q12vAS0-iE0VlH05v4IYr00fkkuJnQzKVE [Accessed 26/3/2021].

UN HABITAT 2018. SDG 11 Synthesis Report 2018: Tracking progress towards Inclusive, Safe, Resilient and Sustainable Cities and Human Settlements,. Nairobi, Kenya.

UN. SECRETARIAT 1996. The Habitat Agenda :goals and principles, commitments and Global Plan of Action : note. [New York] :: UN.

UNITED NATIONS DEPARTMENT OF ECONOMIC AND SOCIAL AFFAIRS 2016. *The Sustainable Development Goals Report 2016*, United Nations.

UNITED NATIONS HUMAN SETTLEMENTS PROGRAMME 2020. *World Cities Report 2020*, United Nations.

VALLANCE, S., PERKINS, H. C. & DIXON, J. E. 2011. What is social sustainability? A clarification of concepts. *Geoforum,* 42**,** 342-348.

VAN KEMPEN, R. & BOLT, G. 2009. Social cohesion, social mix, and urban policies in the Netherlands. *Journal of Housing and the Built Environment,* 24**,** 457.

WANG, J. 2018. Urban Policy. *In:* FARAZMAND, A. (ed.) *Global Encyclopedia of Public Administration, Public Policy, and Governance.* Cham: Springer International Publishing.

YIFTACHEL, O. & HEDGCOCK, D. 1993. Urban social sustainability: The planning of an Australian city. *Cities,* 10**,** 139-157.

YOUNG, I. M. 1990. *Justice and the politics of difference,* Princeton, N.J, Princeton University Press.

ZAINAL, Z. 2007. Case study as a research method. *Jurnal Kemanusiaan,* 9.

Appendix

Survey Discription and Questions

Afordable Housing & Social Mix in Nyhavna

Hi, welcome to the "affordable housing and social mix in Nyhavna" survey!

This survey is made by Nikoo! Nikoo is a current master's student of Urban Ecological Planning at NTNU. By filling this survey, you will help her out on her path of gathering data relevant to her thesis.

Let's see what her thesis is about:

If you're familiar with Trondheim, you know that Nyhavna is an industrial shoreline area in the north of Trondheim. The area is said to be transformed into a vibrant part of the city consisting of new land-use functions such as residential, commercial, and cultural buildings. But from the experience, if there are any residential plots built in Nyhavna, they will be expensive, as the neighboring residential development in Nedre Elvehavn.

In my thesis, I explore whether the municipality has enough tools to make its aim of having a diverse housing offer a reality; whether the municipality should even plan in some way so that people from all incomes can reside in Nyhavna; what are the barriers and challenges of building affordable housing here and also, it's even more important to research what people want to see happen in Nyhavna.

You can either fill out this form or contact me by email, I would be more than happy to have an online face-to-face interview with you. My email is: nikoom@stud.ntnu.no

By filling out this form, you agree that you understand the aim of this project and you consent the author to use the data for educational purposes only.

1. How old are you?

2. Where in Trondheim do you live now?

3.Where in Trondheim would you like to live ideally? (if you had all the means and capitals necessary.)

4. On a scale of 1 to 5, how do you rate the housing affordability in Trondheim?

Mark only one oval.

	1	2	3	4	5	
very affordable	◯	◯	◯	◯	◯	not affordable at all

5. Is it important what kind of people are your neighbors based on their age, household type (single person, family, etc.), income, and ethnicity?

Mark only one oval per row.

	not important at all	somewhat important	important	very important
Age Group	◯	◯	◯	◯
Household Type	◯	◯	◯	◯
Income	◯	◯	◯	◯
Ethnicity	◯	◯	◯	◯

6. Based on the factors mentioned in the last question, how diverse would you rate the members of your current neighborhood?

	not diverse at all	somewhat diverse	diverse	very diverse	I don't know
Age Group	◯	◯	◯	◯	◯
Household Type	◯	◯	◯	◯	◯
Income	◯	◯	◯	◯	◯
Ethnicity	◯	◯	◯	◯	◯

7. Would you live in a neighborhood where more than 50% of the residents are from a different social group than yours?

8. Do you think it's necessary to build residential units in Nyhavna? Why?

9. What do you think of Svartlamon?

10. Do you want to see the same kind of housing development in Nyhavna? Why?

11. What do you think of Nedre Elvehavn (Solsiden)?

12. Do you want to see the same kind of housing development in Nyhavna? Why?

13. Any more thoughts?

The Description of The Experimental Method

On the 17th of April 2021, I planned to use a rare sunny day to go to the city centre of Trondheim and interview people. On such days, people usually use the opportunity to spend time in the sun, so the city center gets crowded. On the first day I couldn't find the courage to talk to people. The next day, I went back. This time, I felt less anxious and stood in the main city square with a sign saying: *AFFORDABLE HOUSING IN NYHAVNA DISCUSSION.* I got there by 2PM and for about half an hour no one approached me. I changed my place to another corner of the square so that more people

would pass me by. To me this sign was an obvious message, asking people to come and talk, but from the experience the message of the sign was not clear enough as people would just read the sign in confusion. I decided not to say anything and experiment with this sign that day.

It was about 45 minutes later that two young boys approached me and asked me about the meaning of the sign. I asked them if they knew about the development that's about to happen in Nyhavna. They were positive. I explained that it's very likely that if there is not intervention then the same development that happened in Solsiden would happen in Nyhavna as well and if we want to have affordable housing in Nyhavna then the municipality should have more tools. Their first reaction was that the demand will be high in Nyhavna so it's very usual to have high prices as well, if people from other income classes want to live near the shoreline then there are cheaper alternative locations such as Trolla and Buran for them. I replied that it's not fair to push the disadvantaged people to the outskirts of the city just because they are poor.

As we were talking, another young man, joined the conversation as well.

When I was explaining the social sustainability theories, I felt like the argument is not convincing enough, either because of my lack of knowledge or because the theories are not strong enough.

The two young boys called themselves "socially left but economically right," they believed that the property taxes which raise the more houses you own can prevent the land monopoly. He heard this when his father had a conversation about it with a friend.

The young man that joined us later was socially and economically left, and a sociology student. He backed me up on the social reproduction theory and the requirement for the state intervention, but the young boys valued social liberty more and believed in the necessity of a free market. The young man gave an example of Berlin and the housing regulations there, the big rental sector which helps more people live in better conditions.

I told them that Norway is a neo-liberal country and the housing market has been functioning freely for the last forty years and now we see that the inequality in the market is on a rise.

I asked them whether I will have the right to have a house or not if I chose not to work. They believed that contribution to the society is what makes people deserve housing. The young guy said that the disadvantaged people are more likely to remain poor because they don't have the same opportunity so it's not just about being lazy. The young boys who came from well-off families told the stories of their father and how they could become rich just relying on their own hard-work. The young guy opposed that the competition and prices weren't as high when their fathers were making their way up the ladder. They agreed.

At another point of the discussion, the young boys told me that it's easy to make money as a landlord so the state should make the other investment options more interesting for people and direct the stocks from investment in land to other areas such as technology or cryptocurrency.

May 10th 2021, I once again went to the city center of Trondheim as the weather proved to be sunny again, however not for long. This time I brought a print of the QR code that was linked to the research survey alongside my sign. I stood there and observed how people reacted and more important than that was my observation of people and how they interact with each other in this most welcoming part of the city. People of all income groups were there, going on about their lives peacefully, however each person was in a bubble with the people they were in the square with. That's normal, people need a reason to interact with strangers. It won't just happen by being in the same space. What can that reason be?

Anyway, as a I was standing a man in his late forties, early fifties approached me. At first, he thought that I'm advertising affordable housing in Nyhavna but then I introduced my research. He was seemingly disappointed but continued to hear me out. I asked him to scan the QR code but he said that he prefers if I just interview him and ask the questions myself. During the survey interview I found out that he claimed to be one of the founders of Svartlamon, I used this opportunity to ask questions about Svartlamon after we were done with the survey. The following is a summary of the hour-long talk that we had:

Svatlamon is a stigmatized part of the city, because of the significant use of drugs in this area. This man himself as a resident didn't like the increasing drug use in Svartlamon. He pointed out that there are certain labels associated with the residents of Svartlamon, for example they are called the

"potheads" "freaks" "punks" "hippies" on the other hand he pointed out that people know this area positively as an assembly of environmentalists and the people who value sharing. Even at the beginning, it was the biggest political debate of its time in Trondheim. With both people and politicians being for and against the idea. He believed that a solution to resolve the existing issues of the district lies within the recruitment criteria of the new housing applicants. He believed that new people should have references from people already residing here and there should be meetings between the organizers and the new applicants before that a new lease is signed. He also believed that the new people should have stronger human capitals, being able to help with the refurbishment of the houses and help with the organization.

He was of the opinion that for Svartlamon to keep its community spirit needed a tangible and common goal that the members believed in. He thought that the environmental goals could be an example of this common goal. The people's perception of the place have been improved through time, the residents of Svartlamon with the pub and the restaurant and the concerts and the kindergarten could have built more positive public relations. He doesn't think that Svatlamon is in the danger of gentrification because of the contracts that they have with the municipality which soon will be renewed for another 10 years. However they are negotiating to prolong it further than 10 years. He also believed that there could be a more meaningful partnership between NTNU and Svartlamon and the potential could be used more beneficially instead of the students just filling in surveys and taking pictures they could do actual experimental work in this district.

After this conversation and half-an-hour-long wait a girl in her late 20's approached me and I asked her the survey questions. Interestingly she was also a student in a field related to urban planning and the conversation took about 40 minutes.

She would prefer to live in Singsaker or Oya because of the central location and it's close to grocery stores and public transportation and parks. Activities such as the university and related activities and sport trails are nearby. She doesn't desire to live near the fjord line because it's not very beautiful and it's more exposed to weather and other criteria are more important to her.

From 5-10, she rates affordability in Trondheim a 4. Even thouh she herself didn't have a problem finding a house in Trondheim but have seen other people paying high prices for bad living

conditions, for example 5 people sharing a bathroom. For example someone would sacrifice living quality for central location. She found her current apartment through connections that she had. She applied for the student housing but she thinks because of her age and being a master's student she didn't get it.

She was aware of the future development in Nyhavna and have seen the Kommune delplan. She thinks that they have learned from Ilsvika where the park became really popular and they put the public center in this development over private ownership. Because of Nyhavna being close to center and other areas it will be very expensive and problematic from private public interest. But she thinks that for a change it's nice to have social housing in the very best location, west of Nyhavna where it gets the best sun and view.

Her reference for her neighbours, she thinks it's important to have people from different backgrounds for resilience neighbourhoods. For example the Toyen in Oslo where she lived there one summer, in comparison to Frogner which is a posh district, another area she lived another summer. It's more expensive but it's not as vibrant as other parts of the city and the public spaces are not harder to fill up. It's more semi private than Toyen. It's not particularly a gated community but not very welcoming either. It's very well-maintained. When there is social mix then there is a conflict of interests. For example if we live only among young people then the definition of late night differs.

She likes Svartlamon because it's different, more inviting, tickles the curiosity. You don't know what to expect. She lived there another summer and she has friends in that area. She thinks she is more open-minded towards Svartlamon because through her creative activities. It's not for everyone. She wouldn't feel safe there if she didn't know the people there. She enjoys the events there. The culture in Norway is more about ownership but in actuality we are renting from the bank instead of the municipality. There should be a bigger rental market here especially now that people are adapting to live in smaller areas and living by themselves. When you have to pay mortgages then you will be pinned to your place. If there was a bigger competition in rental market then the prices would be lower.

Nedre Elvehavn from an architectural point of view, she doesn't like it. It is rooted to Neoliberalism. But the social mix is maintained through good public space and she hopes that these will be later found in Nyhavna as well. The architecture is after the rulebook but it's not very welcoming.

A combination of Svartlamon and Nedre Elvehavn would be a good solution in Nyhavna but not as low density as Svartlamon because we want a high density in Nyhavna also the diversity of the housing type should be considered.

The municipality has a lot of influence but a lack of money and investments. Even though they own the land it's not enough capital for the development. They might not even have enough experience with large scale developments. But still they should still see that their goals are realized in Nyhavna. In the end, creating social mix is a concept in the planner's mind. You can't say like blah percentage from this background and blah percentage from that background, then it would be a good combination.