FINANCING THE INCLUSIVE CITY

A case study of the Danish model of affordable and social housing

LUISE NORING

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This research brief is part of the City Solutions by the City Finance Lab.

The City Finance Lab is a vehicle for deepening and accelerating urban problem-solving. The City Finance Lab is a source of applied research on the most promising models of emerging urban governance and finance to tackle hard economic, social, and environmental challenges and to fuel investments in cities.

In this way, the aim of the city solutions presented by the City Finance Lab is to speed up the process by which one city’s solutions are captured and codified to be adapted and tailored to other cities. Our research will inform the policies and practices of national and local governments as well as global corporations, philanthropists, and financial institutions.

City Finance Lab is administered by City Facilitators.

As a business economist, Dr. Luise Noring is apt for specializing in urban governance and finance, including economic assessments and socioeconomic impacts of urban regeneration and development, business models and financial mechanisms for implementation of both large scale urban regeneration and smaller neighbourhood interventions. Noring has for several years focused on identifying and making available models for self-governing and self-financing cities, including institutional vehicle and finance mechanisms for infrastructure and housing.

Noring has a background in supply chain management, including a Master in supply chain management and a Ph.D. in supply chain partnerships. For the past years, Noring’s focus has shifted to include research into the complexity of cities homing in on understanding how cities are governed and financed. Noring’s research is applied and gathers experience and lessons across predominantly European cities. Focus is on distilling best practices and developing methods and tools that allow for those practices to be adapted and adopted across cities. While most of Noring’s work is EU-funded, she has also been commissioned by the Brookings Institution, Siemens Cities, LSE Cities, and La Fabrique de la Cité, the philanthropic branch of Da Vince Group, amongst others. With first-hand knowledge of field research into cities, urban challenges, and solutions, Noring has developed broad experience with global cities and city stakeholders.

Noring is an Assistant Professor and Research Director heading a team of researchers and project coordinators at Copenhagen Business School. She is an expert in sustainable urbanisation, renaturing cities, and nature-based solutions. Since 2016, Noring’s company, City Facilitators, has provided specialist advice and guidance on urban growth, business development and urban finance mechanisms.
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ABSTRACT

Normally, the task of providing affordable and social housing falls to local governments and their administrations. Municipalities must single-handedly work out how to deliver and finance affordable and social housing in a city context that is often dominated by a free market paradigm. However, cities operating in free market economies often prioritise attracting talent and investment, which often contradicts efforts to provide affordable and social housing, as the capital gains achievable from these are diminutive in comparison with the gains from other, more profitable development and infrastructure investments. The logic follows that private capital always chooses the investments with the highest returns. As affordable and social housing rarely yield high returns, the task of providing it falls on municipalities; however, these are often strained for public finances and face a multitude of conflicting investment demands. The question is then: How can cities provide affordable and social housing with a shortage of fiscal resources and a multitude of conflicting political demands?
INTRODUCTION

In an era of increasing economic inequality and decreasing economic mobility, housing segregation can make bad conditions worse. We know that housing segregation impedes economic mobility and thereby reinforces economic inequality (Chetty et al. 2015). In addition, by not providing affordable housing in cities, effective medium and lower wages decrease, as medium- and low-paid employees (e.g., nurses, teachers, policemen) spend added costs and time commuting to and from work, for which they are not compensated in monetary terms (Berry, 2006).

If we want to successfully tackle social inclusion in cities, we have to rethink the political and economic infrastructures tying our cities together (Anderson, 2018, interview). By providing the basis for a diverse city, economic growth in the city is enhanced, as the economy thrives with access to employees with multiple skill sets and salary ranges (Eeckhout et al., 2014). We must rethink the institutions tasked with delivering and financing affordable and social housing. In an attempt to find new and better institutional and finance models, this report explores the Danish model of affordable and social housing (Thelle et al. 2016).

Three components characterise the Danish model of affordable and social housing:

- **Non-Profit.** This characteristic provides the basis of a model that is cost-efficient and where all cost savings are translated into reductions in rental prices. In this way, profits are not withdrawn to serve the owners; rather, profits are translated into price reductions for a population segment that is highly price sensitive. As an added benefit, this set-up provides the tenants with a sense of ownership, as all tenants contribute to and harvest the benefits of cost-efficiency. As follows, the model encourages the tenants to cherish their property – both through their sense of ownership and through the direct link between costs and savings.

- **Self-Governance and Self-Organisation.** In light of the current intense debate about citizenship and citizens’ empowerment, presenting a model based on self-governance and self-organisation is powerful. The concept of a “housing democracy” underpins this model, where self-governance and self-organisation guide every housing estate and cooperative. In this scenario, the tenants elect leaders for individual estates and for the cooperative as a whole. They help make important decisions on behalf of all the tenants. Housing democracy works as a conduit for tenants into the housing cooperative management and board of directors, who help manage the accumulated wealth of the cooperatives.

- **Tenant Self-Financing.** Built into this financial model is the accumulation of collective savings. Savings are accumulated within each affordable and social housing estate, cooperative, and across the industry, with all savings paid into private non-profit cooperatives by the tenants. This provides the basis for self-financing of the entire industry. In addition, it also creates a strong sense of solidarity, which means every tenant’s contributions go towards collective building renovations, energy infrastructure, green recreational areas, cycling and walking pathways, and social activities.

In short, this model can be used by any city wanting to empower citizens and give the city back to the citizens. This report presents a new model for urban development that is free of fiscal constraints, political demands, and prioritisations. As a self-governing and self-financing model, it generates almost all of the necessary funds and offers ample opportunities for citizen-driven, citizen-empowered urban development.
THE MODEL

The figure below illustrates how part of the tenants’ rents goes towards savings that are accumulated in and subsequently reinvested in the industry by the National Building Fund (KAB, 2016):

In Denmark, there are 2.4 million dwellings for a population of 5.6 million. Of these 2.4 million dwellings, 55% are privately owned, 5% are private cooperatives, 20% are rentals, and 20% are affordable or social housing. Approximately one in five people live in affordable or social housing.¹

Copenhagen’s population increases annually by approximately 12,000.² For this reason, amongst others, there is a general housing shortage – which is particularly pronounced in relation to affordable and social housing. In addition, there is an annual turnover of only 10–15% of all affordable and social housing units. Therefore, people are often signed up for an affordable or social housing apartment for 10–15 years before they are awarded an affordable or social housing apartment. Regardless of income, the minimum age for signing up is 15 years old, in order to prevent people from gaming the system by signing up children at birth. Christian Høgsbro, CEO of the largest single housing cooperative, AAB, recognises that subsidised housing for everybody may cause some concern. However, affordable and social housing in Denmark is financed by a loan from the national and local governments. There is the recognition that the housing cooperatives serve a social purpose to the benefit of society at large. Christian Høgsbro concludes: “For this [latter] reason, political consensus exists for the affordable and social housing industry” (Høgsbro, 2018, interview).

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¹ www.socialministeriet.dk/media/9188/almene-boliger-i-danmark.pdf
² www.kk.dk/sites/default/files/Status%20p%C3%A5%20K%C3%B8benhavn%202016.pdf
RENTAL PRICES

Skovgaard Nielsen et al. (2017) note that in many instances the municipality does not use its entire stock of social housing. Jens Elmelund, CEO of KAB, believes that this is because, despite being substantially below market price, social housing can still be beyond the fiscal capacity of the most vulnerable groups in society (Elmelund, 2018, interview). The average rental price fixed by the national government for affordable and social housing is 72 DKK/m² (11 USD) per month. In comparison, the average rental price in the private market is 150 DKK/m² (24 USD) per month. In contrast, the average monthly rental price for a municipal social housing apartment is 3,000–4,000 DKK (468–625 USD), which means that the municipalities are obliged to provide gap financing for social housing. The table below offers a comparison between the different prices of rental apartments in Copenhagen:

<table>
<thead>
<tr>
<th>Price per month of a 70 m² apartment</th>
<th>Market</th>
<th>Affordable housing</th>
<th>Social housing</th>
</tr>
</thead>
<tbody>
<tr>
<td>10,500 DKK</td>
<td>1,640 USD</td>
<td>5,000 DKK</td>
<td>3,000 - 4,000 DKK</td>
</tr>
<tr>
<td></td>
<td></td>
<td>780 USD</td>
<td>468 - 625 USD</td>
</tr>
</tbody>
</table>

Another reason why municipalities may not want to use all of their social housing stock is that they will negotiate with the housing cooperatives to provide favourable access to parts of or the entire housing estate to, for instance, people with employment, divorcees, single parents, the elderly, students, etc. Sometimes, the municipalities use this to create a greater socio-economic diversity of residents in the housing estate, neighbourhood, or city (Skovgaard Nielsen et al., 2017). Thus, the municipalities will waive their right to use 25–33% of cooperatives’ housing for social housing in return for the housing cooperatives providing favourable access to certain population groups.

As Christian Høgsbro explains: “We do not keep track of who moves into the apartments by municipal allocation, but we may decide to give precedence to students, divorcees or other groups in the apartments that we manage ourselves” (Høgsbro, 2018, interview). Thus, Christian Høgsbro recognises that on occasion, such as during the European refugee crisis of 2014–2017, housing cooperatives had to accommodate political pressure and give precedence to, for example, refugees. In order to counter the accumulation of certain groups and achieve socio-economically mixed neighbourhoods, housing cooperatives must “offer attractive dwellings, so that [they] can attract the socio-economically advantaged tenants” (Høgsbro, 2018, interview). In this way, the political demands requiring housing cooperatives to provide preferred access to certain segments of the population and equally strong political demands requiring housing cooperatives to offer socio-economically diverse neighbourhoods disrupt the waiting list system that the housing cooperatives operate within.

HOUSING ALLOWANCE

As Bent Madsen, CEO of the National Building Fund, explains: “One way of supporting the poorest segments of the population is through public subsidies, such as the municipalities’ housing allowance.” Madsen explains that in order for the system of public subsidies to work optimally, there needs to be a close dialogue and collaboration between:

- The National Building Fund, which provides open access to a website (www.danmarkbolig.dk) with all affordable and social housing, including prices. All prices and available housing are updated twice a day;
- The municipalities, who determine which citizens are eligible to receive housing allowance; and
• The individual housing estates, who work directly with the municipalities and receive information on the actual rental price (e.g., rental price – housing allowance) that each tenant should be charged.

The compensation from the housing allowance flows directly from the municipalities to the housing cooperatives. In this way, the municipal housing allowance is deducted from the rent that the tenants have to pay. The tenants are charged their rent minus the housing allowance provided by the municipality flowing directly to the housing cooperative in the form of compensation. This system ensures the municipalities do not pay the housing allowance directly to the most vulnerable groups of society who may be tempted to spend the money for other purposes. And as Bent Madsen confirms: “It also means that there are a minimal number of tenants that are evicted, because most tenants pay their rent” (Madsen, 2018, interview).

DISTINCTION BETWEEN AFFORDABLE AND SOCIAL HOUSING

In 2016, national parties across the political spectrum introduced the Planning Act, which mandates that 25% of all new residential buildings is affordable housing. Consequently, affordable and social housing is closely tied to a city’s urban fabric, as a lot of new builds are located within the city proper, such as the large urban regeneration of the deindustrialised harbours. Ensuring that affordable and social housing is part of urban development ensures that Copenhagen and other major cities grow into socio-economically diverse cities.

Almost a hundred years ago, KAB, AAB, DAB, and other affordable and social housing cooperatives in Copenhagen long-term leased land from Copenhagen municipality. When the leases expired around the year 2000, the cooperatives agreed with Copenhagen municipality to increase the share of housing that Copenhagen municipality can reserve for particularly vulnerable tenants from 25% to 33% in return for the freehold of the leases. In Greater Copenhagen, the rate of housing reserved for municipal allocation remains 25%. Of that 25%, the local municipality is allowed to allocate 25% for particularly vulnerable tenants – except within Copenhagen city centre. In this way, 33% of the 25% of affordable housing in Copenhagen is in effect social housing. The table below summarises the division between affordable and social housing (KAB, 2016):

### TABLE 2. THE SHARE OF AFFORDABLE VERSA SOCIAL HOUSING IN COPENHAGEN AND GREATER COPENHAGEN

<table>
<thead>
<tr>
<th></th>
<th>Affordable housing</th>
<th>Social housing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copenhagen</td>
<td>25% of all new builds</td>
<td>A third of the 25% of affordable housing</td>
</tr>
<tr>
<td>Greater Copenhagen</td>
<td>25% of all new builds</td>
<td>A quarter of the 25% of affordable housing</td>
</tr>
</tbody>
</table>

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3 [http://naturstyrelsen.dk/media/nst/Attachments/planlovenpengelsk2007.pdf](http://naturstyrelsen.dk/media/nst/Attachments/planlovenpengelsk2007.pdf)
BACKGROUND

HISTORY

During the three first decades of the 20th century, Denmark transformed from being an agricultural society to an industrial society. People moved into the cities, where the factories were located. Living and working conditions were better for working class citizens in the cities than for those living in rural areas and working in agriculture (DAB, 2017).

The social housing concept was first introduced in Denmark in the 1850s, when Copenhagen was more densely populated than Paris and London, and the medical profession was concerned with the rapid spread of fatal diseases in the city’s poor neighbourhoods. Consequently, on the medical profession’s recommendation, social housing started with the purpose of providing good housing conditions for the working class. Early examples are found across the city and include Brumleby, built between 1854 and 1872 by the Danish Medical Association, and Kartoffelrækkerne, built between 1873 and 1889 by the Workers’ Association.

Fifty years later, in 1912, strong trade unions established their own cooperative housing associations. These were modelled on the highly successful and thriving farmers’ cooperatives that, still today, own and manage entire food chains, including farms, supermarkets, and even their own commercial bank. The agricultural sector in Denmark, which is almost entirely organised by cooperatives, accounted for 25% of all Danish exports in 2017. In this way, the membership-driven cooperative model, which shares risks and rewards, has strong roots in the Danish economy and society.

RECENT TIMES

The English translation of affordable and social housing is “general housing” (in Danish, almen boligbyggeri) and “generally helpful housing” (in Danish, almennyttig boligbyggeri). “We do not call it social housing, because of its negative connotations. It would counter our efforts of attracting all kinds of people including socio-economically advantaged people to the housing estates,” says Christian Høgsbro (Høgsbro, 2018, interview).

In the early days of modern affordable and social housing during the 1960s and 1970s, general housing was meant for everybody. However, during the 1970s, Copenhagen experienced massive urban sprawl enabled by the expansion of public infrastructure and private ownership of automobiles. This coincided with economic prosperity, and the majority of middle-class citizens purchased their own homes in the suburbs rather than becoming tenants of general housing. Thus, the expansion of affordable and social housing at the time served the large influx of “guest workers” (Høgsbro, 2018, interview). Skovgaard Nielsen et al. explain that, even though Danish affordable and social housing is, in principal, for everyone, “it has increasingly become a social housing sector in the traditional sense” (Skovgaard Nielsen et al., 2017, p. 143). In this way, there is an accumulation of migrants and their descendants living in affordable and social housing. As many of this population reside below the national average for employment rates, living standards, and incomes, the housing with the densest concentration of migrants and descendants resemble segregated social housing areas (Skovgaard Nielsen et al., 2017).

RESEARCH METHOD

In addition to research of newspaper cuttings, academic articles, and statistical data, this report’s research is based on a series of stakeholder interviews and materials made available by the CEOs of Denmark’s three largest cooperatives: AAB, DAB, and KAB. Furthermore, interviews with the CEOs of the National Building Fund and the Danish Building Defects Fund provide the foundation for the empirical analysis.

4 http://lf.dk/tal-og-analyser/statistik
5 www.aab.dk
6 www.dabbolig.dk
7 www.kab-bolig.dk
8 https://lbf.dk
9 www.bsf.dk/om-fonden/in-english/general-information
DISTINCTION BETWEEN HOUSING COOPERATIVE AND HOUSING ADMINISTRATION COOPERATIVE

There are two types of housing cooperatives in Denmark:

1. **Housing Cooperatives**: Cooperatives that own their own affordable and social housing estates, such as AAB.

2. **Housing Administration Cooperatives**: Cooperatives that administer independent self-owned housing estates, such as KAB and DAB. The independent housing estates are free to terminate their engagement with KAB and DAB and choose a different housing administration cooperative.

In this report, the collective term for both types of cooperatives is housing cooperatives. The illustration below shows the relationship between the different key actors in the industry:

**FIGURE 2. ILLUSTRATION OF THE INDUSTRY ACTORS**
In both types housing cooperatives, the tenants play a significant role:

1. The **tenants are members** of the cooperatives and contribute financially to the operations of the housing cooperatives and the operations of the whole industry through contributions to the National Building Fund and the Danish Building Defects Fund.

2. Due to a **housing democracy** that prescribes the election of tenants as representatives of the affordable and social housing, the system has a built-in feeder system for the upper echelons of management in the housing cooperatives, including a board of directors.

The figure below, illustrates how this feeder system works:

**FIGURE 3. ILLUSTRATION OF THE “HOUSING DEMOCRACY” AND HOW IT FEEDS INTO THE MEMBERS OF THE BOARD OF DIRECTORS OF THE COOPERATIVES**

<table>
<thead>
<tr>
<th>Board of directors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Housing cooperative</td>
</tr>
<tr>
<td>Housing representatives</td>
</tr>
<tr>
<td>Housing estate representatives</td>
</tr>
<tr>
<td>Housing estate representatives</td>
</tr>
</tbody>
</table>

**TENANTS AND HOUSING DEMOCRACY**

Even though the housing cooperatives are non-profit, they focus on reducing operational costs, since cost reductions translate into lower monthly rental prices for the tenants, who are, in effect, the contributors and beneficiaries of the funds accumulated in the housing cooperatives and the industry funds.

There are several ways of obtaining cost reductions that lead to a reduction of rent:

1. Overall efficiency gains in the administrative and operational costs of the housing cooperative;
2. Cost savings obtained by the individual housing estates that are exclusively translated into rent reductions for the tenants of that particular estate.

Hence, each housing estate has its own finance and accounts. Equally, if an estate is increasing its expenditure, this is translated to higher rental prices for the tenants of that particular estate. The rent of the tenants is based entirely on the costs of the land, construction, administrative, and operational costs of each housing estate; and the administrative and operational costs of the housing cooperative.

When asked why KAB is determined on reducing costs, Jens Elmelund replied: “Firstly, we have a strong mission: to build good and cheap housing! Secondly, the board of directors consists of the tenants. We call the model ‘housing democracy’.” Housing democracy is a uniquely Danish feature introduced in the 1970s. Through democratic elections amongst the tenants, the individual tenants in each building, estate, and eventually cooperative are elected for governing positions. “When the tenants say that the service standard of the estate is too low, I can rightly tell them that this is, in part, their own responsibility,” says Jens Elmelund, and continues, “I tell them, ‘you decide the level of service that you want and how much you want to pay for it.’ If the tenants litter, more money will be spent on cleaning up. The tenants decide.” The funds to support social cohesion and strengthen self-governance through the housing democracy stem predominantly from the National Building Fund (Elmelund, 2018, interview). In this way, the tenants themselves set the priorities, housing rules, oversee investments, resolve complaints about the management of a building or an estate, and balance the books.

AAB, KAB, DAB, and other cooperatives, alongside the National Building Fund, continuously invest resources in strengthening the housing democracy locally because it is considered vital that the tenants
engage and understand the model – in part, because the local housing democracy works as a feeder system to higher level management of the housing cooperatives (Elmelund, 2018, interview).

PRESENTATION OF THE HOUSING COOPERATIVES

AAB

AAB was founded in 1912 and is the oldest and largest single housing cooperative, with 19,000 affordable and social rental apartments in Copenhagen and Greater Copenhagen. Then, as today, AAB’s mission is “to provide available and appropriate dwellings for all in need at a reasonable rent and to give tenants the right to influence their own living conditions.” AAB was initiated by the Danish newly founded working class and trade unions.

Every year, AAB contributes 108 million DKK (17 million USD) to the savings of the National Building Fund. On a whole, today, the affordable and social housing sector contributes 2.9 billion DKK (48 million USD) annually to the savings of the National Building Fund (Olsen, 2018, interview).

KAB

KAB was also founded approximately 100 years ago by what was considered the “better citizenship” at the time. Today, KAB works with housing development in a broader sense. They build, rent, and manage affordable, social, and municipal housing and provide services within, among other things, energy management and building consultancy. KAB is a housing administration cooperative that differs from AAB in the sense that KAB does not own the housing estates that it manages. The management of housing estates in KAB’s administration have chosen KAB and they can in effect terminate their engagement with KAB and sign up to another housing administration cooperative, such as DAB.

DAB

DAB, another large Danish housing administration cooperative representing 50 housing cooperatives, 360 buildings and 54,000 housing units, was founded in 1942 by four men representing the entire political spectrum. Year 1942 was right in the middle of World War II that drove much of the industrialisation and urbanisation spurring the demand of affordable and social housing for the new urban working class. DAB covers the whole country, - rather than just Copenhagen and Greater Copenhagen.

The below outline of how DAB operates is emblematic of how most of the housing cooperatives operate:

Tenants

As a housing administration cooperative, DAB serves the housing estates in the same way that KAB does. The housing estates are self-governing and self-financing entities (Niels Olsen, 2018, interview).

DAB is owned by the tenants. “Our clients (e.g., the tenants) are our owners” (Niels Olsen, 2018, interview). In practice, this happens by the tenants owning part of DAB in the form of guarantees. However, there is no financial winning from possessing guarantees. Yet, it does mean that the tenants become owners of DAB (Niels Olsen, 2018, interview).

Niels Olsen (interview, 2018) confirms that at the last annual meeting, there were 430 representatives: “These are all tenants that help manage each housing estate and thereby contribute to DAB with their work, knowledge and dedication.” There is one representative for every 200 housing units.

The Board

Seventeen members sit on the board of DAB. The chair and the second chair of the board are both tenants. Two board members are employee representatives. Another two members are mayors – one Social Democratic and another Conservative. Lastly, there are two external board members. The board manages operations and the economy. The board also makes decisions concerning the digital development and the political development. DAB operates as a key account manager for the board of directors by providing all the fiscal data required for the board to make qualified decisions (Niels Olsen, 2018, interview).

Building Administrators

In the same vein, DAB acts as the HR manager for the building administrators that are hired and funded by each housing estate. The building administrators fulfill an important role in supporting DAB’s presence for each housing estate. The building administrators manage the heating system, elevators, clear snow, and other practical tasks that must be done for the
estate to run smoothly. For each 80–90 units, there is a housing administrator to handle the daily caretaking of the tenants and housing estate. “The housing administrators also serve a vital social role. They will keep an eye on an elderly resident, who has fallen ill,” says Niels Olsen. The building administrators are employed by the local housing estate. “If the municipalities or national government should cover the costs of providing this social tissue, they would get a shock at the price” (Niels Olsen, 2018, interview).

Niels Olsen finds that DAB, as an administrator, is under constant transformation: “Not that many years ago, we sent out letters by post, then we sent out emails. But today, it is robots sending out messages via the citizens digital platform (e.g., a digitalised platform that all Danish citizens have access to and that is used for all communication with the public sector).” Thus, to keep up to date with a changing society, DAB is implementing new efficiency measures on a continuous basis (Niels Olsen, 2018, interview).

With regard to the challenges faced by the housing administration, Niels Olsen explains: “The challenge is that, on the one hand, we have to be big in order to harvest the economies of scale, and on the other hand, we have to be small and close to the tenants and their everyday challenges” (Niels Olsen, 2018, interview). For this reason, every year, just before the summer, Niels Olsen and the board of directors spend three weeks travelling around Denmark visiting all the DAB housing estates, where they talk with tenants, representatives, and building administrators.

THE NATIONAL BUILDING FUND

“With a large savings capacity, the National Building Fund is vulnerable to raids from national politicians. But what does it look like when the politicians take from the most vulnerable in society to finance the welfare state?”
Bent Madsen, CEO of the National Building Fund

Background
The National Building Fund was founded in 1966. Currently, it operates with a deficit of 6 billion DKK (1 billion USD). However, Christian Høgsbro, also chairman of the board of the National Building Fund, estimates that annual revenue will reach 4 billion DKK (67 million USD) per year by 2030. “By the 2030s, depending on the interest rate, the state will have no loan obligations for affordable and social housing, because we are saving up money in the National Building Fund” (Høgsbro, 2018, interview). In relation to this, Bent Madsen, CEO of the National Building Fund, states: “We would much rather not continue to receive state loans, because it makes us privy to political speculations. We would rather distance ourselves from national government and politics” (Madsen, 2018, interview).

The National Building Fund was established by national parties from across the political spectrum, but it was not until the end of the 1990s that 65% of all housing cooperatives became members and started contributing to the National Building Fund. Today, 99% of all housing cooperatives in Denmark are members of and contribute to the National Building Fund. In order to ensure the fiscal independence of the National Building Fund, national government transferred half of all rental revenues dating back from before 1999 to the National Building Fund during what was coined the Financial Reform of 1998. For buildings constructed after 1999, affordable and social housing residents are free to independently take up mortgage loans of up to 36 years and operate independently of the National Building Fund.

The political diversity in the affordable and social housing industry is still very evident, as some housing estates were started by the philanthropic branches of right-wing parties, while other estates were started by the left-wing trade unions. Yet, today, across the political divide, all the housing estates are united and collaborate within each housing cooperative and within the National Building Fund.

“The fact that everyone is now part of the National Building Fund allows us to maintain an overall high standard on all our housing”
Bent Madsen, CEO of the National Building Fund

Bent Madsen continues: “In earlier days, we saw one housing estate that was fiscally solid, and another that was on the verge of bankruptcy. Today, we can balance surpluses with deficits across all the housing estates using the National Building Fund as an equalisation mechanism” (Madsen, 2018, interview).
Municipal Government A-Deposits
The National Building Fund is the result of the housing settlement of 1966, where several large political parties agreed that the Danish affordable and social rental market should become normalised vis-à-vis market-driven rental pricing (Gyldendal, n.d.). Rental prices in many smaller housing cooperatives were maintained below market level, which distorted the housing market in Copenhagen and other large cities across the country. The settlement meant that rental prices for affordable and social housing should increase to market level, while the municipal housing allowance should ensure that the most vulnerable groups in society were able to stay in their apartments despite an increase in rent.

The aim of the housing settlement (Gyldendal, n.d.) was to have a rental housing market that had normalised market prices by 1974. Bent Madsen explains that this initiative was an enormous lift that entailed every rental apartment in Copenhagen receiving a visit from the municipal Housing Commission that market estimated the rental price of each apartment. This went well until 1973, when the Oil Crisis hit the country, causing unemployment to rocket and inflation to go rampant. In this economic climate, the Danish population no longer supported the initiative (Madsen, 2018, interview). However, today, this regulation mechanism of rental prices, known as A-deposits, provides an influx of 1.1 billion DKK (173 million USD) annually to the National Building Fund. These A-deposits are calculated as 70% of the difference between the estimated market rent and the actual rent per 1 April 1967. All affordable and social housing taken into use before 1 January 1963 and up to 1974, when the initiative stopped, contribute with A-deposits to the National Building Fund. The A-deposits are calculated in real terms and represent on average 5 DKK (0.8 USD) per m² of the affordable and social housing between 1963–1974 (KAB, 2016).

National Government G-Deposits
In 1975, the national government introduced the G-deposits, which withdraw a fee per m² of the affordable and social housing rentals built before 1 January 1965. In 1983, the initiative was expanded to include rentals built before 1 January 1970 (KAB, 2016). However, the National Building Fund can, upon special agreement, exempt the housing estates that have received fiscal support from the Fund itself, the municipality, or the national government. The table below presents the fees per m²:

<table>
<thead>
<tr>
<th>Built before 1 January 1965</th>
<th>Built 1 January 1965–31 December 1969</th>
<th>Special agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>G-deposits to the National Building Fund</td>
<td>61.40 DKK per m² (9.65 USD per m²)</td>
<td>27.45 DKK per m² (4.31 USD per m²)</td>
</tr>
</tbody>
</table>

These fees are valid from 2015 and are regulated according to the building expenses index. Importantly, the National Building Fund can extend both the G- and A-deposits to include newer affordable and social housing that do not fall within the time periods covered by these initiatives. However, the National Building Fund has not yet used this right (KAB, 2016).

One hundred percent of G-deposits go to the National Building Fund. Of this, 40% is retained and redistributed across housing cooperatives by the National Building Fund. The remaining 60% is known as the “withdrawal rate” and is the accumulated savings of each housing cooperative that they can spend on renovations at their own discretion. However, two thirds of the withdrawal rate must go towards maintenance, including new bathrooms, kitchens, fire safety, climate protection, etc. (KAB, 2016).

AAB contributes 21 million DKK (3.3 million USD) annually to their G-deposit savings which are currently 300 million DKK (47 million USD). In this way, the withdrawal rate allows the housing cooperatives to redistribute their funds across the housing estates, as every housing estate contributes and the funds flow back into the housing estates across each housing cooperative (Høgsbro, 2018, interview).
Mortgages
When the National Building Fund first started, the length of a mortgage was 66 years. “This made a bad business model, because the inflation swallowed any potential profits,” says Bent Madsen (Madsen, 2018, interview). When the duration was reduced to 30 years in the late 1960s, enormous savings accumulated relatively quickly in the National Building Fund. Thus, it is of crucial importance that the rental price of the affordable and social housing tenants continues after the mortgages have been paid, as, thereafter, the rent goes towards the savings of the National Building Fund. Thus, the expired mortgage payments represented a revenue of 229 million DKK (36 million USD) in 2007. It is estimated that this amount will be 3 billion DKK (470 million USD) in 2020 and 3.4 billion DKK (530 million USD) in 2030 (KAB, 2016).

Roles and Responsibilities of the National Building Fund
The main roles and responsibilities of the National Building Fund are presented below. These form part of the “national disposition fund” within the National Building Fund (KAB, 2016).

Renovation of existing buildings by covering rent deficits and making capital injections. Each housing estate and cooperative sets the rental price based on revenue. If there are large expenses, the rental price will increase. In order to prevent sharp increases in rental prices, the National Building Fund covers the expenses and makes the investment in the properties. Renovations include maintenance, improvements, refurbishing, joining smaller and larger entities, and climate adaptation measures.

Since 1991, the National Building Fund has supported the Danish Building Defects Fund, providing funding for more thorough building damages and renovations, with 1 billion DKK (157 million USD) during the period of 1991–2002, 1.8 billion DKK (280 million USD) during 2002–2006, and 2.4 billion DKK (380 million USD) during 2007–2010. In 2010, the Building Settlement provided the framework for additional increases in funding for more thorough building damage repairs and renovations (KAB, 2016).

The gradual reduction is emblematic of declining demands for funding for large building damage repairs and renovations, as many of the buildings demanding resources from the 1960s and 1970s were the first to receive major investments and renovations. Also, the National Building Fund was emptied by the national government in 2007. More information about this follows under the section “Political Interference”.

### TABLE 4. NATIONAL BUILDING FUND INVESTMENTS IN THOROUGH BUILDING DAMAGE REPAIRS AND RENOVATIONS

<table>
<thead>
<tr>
<th>Year</th>
<th>Investment Billion DKK (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>10 (1.57)</td>
</tr>
<tr>
<td>2012</td>
<td>7 (1.10)</td>
</tr>
<tr>
<td>2013</td>
<td>6 (0.94)</td>
</tr>
<tr>
<td>2014</td>
<td>6 (0.94)</td>
</tr>
<tr>
<td>2015</td>
<td>4 (0.63)</td>
</tr>
<tr>
<td>2016</td>
<td>4 (0.63)</td>
</tr>
<tr>
<td>2017</td>
<td>2.5 (0.39)</td>
</tr>
<tr>
<td>2018</td>
<td>2.5 (0.39)</td>
</tr>
<tr>
<td>2019</td>
<td>2.3 (0.36)</td>
</tr>
<tr>
<td>2020</td>
<td>2.3 (0.36)</td>
</tr>
</tbody>
</table>
TABLE 5. THE NATIONAL BUILDING FUND CONTRIBUTION TO SOCIAL ACTIVITIES AND RENTAL PRICE REDUCTIONS

<table>
<thead>
<tr>
<th>Year</th>
<th>Annual investment in social activities in million DKK (USD)</th>
<th>Of which a certain share is designated rental price reductions in million DKK (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>600 (94)</td>
<td>200 (31)</td>
</tr>
<tr>
<td>2007–2010</td>
<td>400 (63)</td>
<td>200 (31)</td>
</tr>
<tr>
<td>2011–2014</td>
<td>440 (69)</td>
<td>220 (35)</td>
</tr>
<tr>
<td>2015–2018</td>
<td>465 (73)</td>
<td>233 (37)</td>
</tr>
</tbody>
</table>

Support for social activities, such as strengthening housing democracy. By investing and empowering the tenants, the National Building Fund fosters a sense of ownership and solidarity. As the tenants manage the individual housing estates and sit on the board of the cooperatives, it is vital to inform, educate, and strengthen citizenship. The individual housing estates are only allowed to invest in social activities when these form part of a larger municipal initiative. In this way, municipal approval, coordination, and evaluation of social activities are part of the investment schemes. Table 4, below, highlights the annual investments in social activities and the share of investment that goes towards rental price reductions (KAB, 2016).

Fiscal support for demolitions and infrastructure. Five hundred million DKK (79 million USD) was set aside for the year 2011–2014 for funding 60% of demolitions and infrastructure investments. Of this amount, during the period 2011–2016, 150 million DKK (23.5 million USD) was designated for infrastructure investments in the affordable and social housing areas. The remaining 40% is covered by the municipalities, housing cooperatives, and mortgage providers.

Operational costs. The National Building Fund can provide fiscal support to housing estates that are unable to finance themselves. This support takes the shape of deficit coverage, operational costs, rental guarantees, and rental subsidies.

Funding new dwellings. Like many prosperous cities across the world, Copenhagen and other large cities in Denmark grow steadily every year. The increased demand for new dwellings is accompanied with price increases. Without a fiscally strong industry, little affordable and social housing is available. The National Building Fund refunds the national state subsidies. Thus, it is important to emphasise that the state subsidies are loans that are repaid after 40 years. The following table shows the distribution of state subsidies in comparison to funding from the National Building Fund in investments in new dwellings (KAB, 2016).

THE DANISH BUILDING DEFECTS FUND

The Danish Building Defects Fund gained its political momentum in the late 1970s, when a housing estate in Albertslund, a suburb of Copenhagen, experienced severe damage with a flat roof construction that leaked water and caused mould. In 1978, the housing minister, Erling Olsen, executed a new law that allowed national government to provide fiscal support for repairs of construction damage for affordable and social housing. This fiscal support stemmed from a percentage share of new affordable and social housing construction costs. By 1984, the housing ministry dealt with damage claims from 44 affordable and social housing estates, representing an investment of 885 million DKK (139 million USD) (Byggeskadefonden, 2017). A national government hearing of all the different actors in the affordable and social housing industry led to a proposal to reduce the period of legal responsibility of the developers from 20 to 5 years. The National Building Fund objected to this. Subsequently, Local Government Denmark (e.g., KL) supported the National Building Fund’s concern, and the proposal was not passed. This is emblematic of the historical alliances that were formed when the National Building Fund was first established.

12 www.investopedia.com/terms/s/subsidy.asp
Table 6. Contributions to the Construction of New Dwellings

<table>
<thead>
<tr>
<th>Year</th>
<th>Total contribution Million DKK (USD)</th>
<th>Contribution from the National Building Fund Million DKK (USD)</th>
<th>State subsidies (total contribution minus contribution from the National Building Fund) Million DKK (USD)</th>
<th>The National Building Fund contribution as a percentage of the entire contribution %</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>4.491 (706)</td>
<td>3.173 (499)</td>
<td>1.318 (207)</td>
<td>71</td>
</tr>
<tr>
<td>2003</td>
<td>2.651 (417)</td>
<td>1.458 (229)</td>
<td>1.938 (305)</td>
<td>55</td>
</tr>
<tr>
<td>2004</td>
<td>2.079 (326)</td>
<td>1.102 (173)</td>
<td>977 (154)</td>
<td>53</td>
</tr>
<tr>
<td>2005</td>
<td>2.018 (317)</td>
<td>1.009 (159)</td>
<td>1.009 (159)</td>
<td>50</td>
</tr>
<tr>
<td>2006</td>
<td>2.726 (428)</td>
<td>1.426 (224)</td>
<td>1.300 (204)</td>
<td>52</td>
</tr>
<tr>
<td>2007</td>
<td>43 (7)</td>
<td>11 (1.7)</td>
<td>32 (5)</td>
<td>25</td>
</tr>
<tr>
<td>2008*</td>
<td>965 (152)</td>
<td>246 (39)</td>
<td>719 (113)</td>
<td>25</td>
</tr>
<tr>
<td>2009*</td>
<td>1.895 (298)</td>
<td>466 (73)</td>
<td>1.429 (225)</td>
<td>25</td>
</tr>
<tr>
<td>2010*</td>
<td>2.499 (393)</td>
<td>640 (100)</td>
<td>1.859 (292)</td>
<td>25</td>
</tr>
<tr>
<td>2011*</td>
<td>1.766 (278)</td>
<td>446 (70)</td>
<td>1.320 (207)</td>
<td>25</td>
</tr>
</tbody>
</table>

*As proposed by the Finance Law of 2011

The Board of Directors

In 1986, with the help of the National Building Fund, the board of directors of the Danish Building Defects Fund was founded with 11 members, of which three members were appointed by the National Building Cooperative, one by Local Government Denmark (e.g., KL), one by Copenhagen and Frederiksberg municipalities, one representing the affordable and social housing cooperatives, one representing the self-governing youth housing, one representing the self-governing housing for the elderly, and lastly, two representatives from the housing ministry. The National Building Fund became the secretariat of the Danish Building Defects Fund, which meant that the management of the National Building Fund automatically became the management of The Danish Building Defects Fund (Byggeskademonden, 2017).

Recent Times

The Danish Building Defects Fund is a private industry insurance fund established to fund large-scale repair works on affordable and social housing estates. When it was first established in the 1986, it was an integral part of the National Building Fund. In the 1990s, the scope of operation of The Danish Building Defects Fund had expanded to the extent that a new organisational structure was required. All employees were transferred to the new organisation with a newly appointed CEO. Today, the Danish Building Defects Fund has 20 technical, legal, and administrative employees. However, the financial management of The Danish Building Defects Fund is retained within the National Building Fund (Bønnelycke, 2018, interview).

One percent of all construction costs across the affordable and social housing market are paid into The Danish Building Defects Fund (Madsen, 2018, interview). The Danish Building Defects Fund can fund up to 95% of an entire damage claim. However, the housing estate must always seek to use their existing building insurance, pursue the developer, materials manufacturers, technical advisers, and others responsible for the building’s construction before they make an insurance claim to The Danish Building Defects Fund (KAB, 2016). Since 1 July 2011, renovation works of above 1.000,000 DKK (157,000 USD) per housing estate also have to contribute one percent to the Danish Building Defects Fund.

In 2001, concerns were raised regarding the question of whether the 1% of the purchase price (e.g., land...
and construction costs) is sufficient to meet the needs for future repairs. The recommended solution was to either increase the percentage of the purchase price or require existing housing estates to contribute on an ongoing basis (Byggeskadefonden, 2017). However, by 2006, The Danish Building Defects Fund received declining repair claims and, thus, it was able to manage with the current arrangement. Yet, Ole Bønnelycke says that the Fund is challenged when planning for the future, as the number of new dwellings being built varies greatly from year to year and decade to decade (Bønnelycke, 2018, interview).

In September 2001, a new law mandated municipalities to conduct open tenders for the construction of affordable and social housing. However, the law also notes that, even though the developer can be a privately owned corporation, the property owner and manager must be a housing cooperative. This has fuelled a debate concerning the free market pricing of construction versus the price availability required by the housing cooperatives in the service of their tenants (Bønnelycke, 2018, interview).

National Government Initiative
From 2010, the national government requires that all housing estates have external evaluations of the financial requirements of the housing stock (Byggeskadefonden, 2017). This initiative was welcomed, as Ole Bønnelycke emphasises that one of the principle challenges that The Danish Building Defects Fund faces is the lack of ability to make accurate economic prognoses regarding expenses for future claims. As Ole Bønnelycke concludes, “With these external evaluations, we are better able to plan for the future” (Bønnelycke, 2018, interview).

In 2008, the national government wanted to introduce a similar insurance scheme for the private sector. However, as pointed out by Ole Bønnelycke, the private sector is organised radically different. Ole Bønnelycke continues: “The private sector is not organised around the basic principles of collective solidarity. Thus, in the end, nothing came out of it.” As the private industry lacks a tradition of information sharing and collaboration, it was not possible to leverage the information across the industry required for making accurate estimates of future damages (Bønnelycke, 2018, interview).

ROLES AND RESPONSIBILITIES OF THE DANISH BUILDING DEFECTS FUND

In order to understand why this self-financed and self-managed insurance system works for the affordable and social housing sector and not for the private sector, we must understand the basic characteristics of the system.

The Danish Building Defects Fund has a great emphasis on prevention. Every first and fifth year after a construction is completed, private construction advisers conduct technical evaluations on behalf of The Danish Building Defects Fund. Importantly, advisers who were involved in the construction are not allowed to be involved. The external technical evaluators report severe damages – damages so severe that they would result in an insurance claim (Bønnelycke, 2018, interview). As Ole Bønnelycke explains: “With this technical report, we are able to inform the property owner about damages that could eventually lead to insurance claims.” Five years after completion of the construction, the second technical evaluation is conducted by different advisers than the year-one evaluation. During the year-five evaluation, the property owner guides the advisers and demonstrates how the potential damages have been corrected. Also, both the year-one and year-five evaluations are made publicly available, which has a preventative effect.

During construction, 15% of the construction cost is retained as coverage for any unpredicted expenses, such as repairs. After completion, this guarantee is reduced to 10% and, subsequently, reduced to 2%. However, in most instances, the developer waits with reducing the guarantee to 2% until receiving the year-five technical evaluation from the external advisers. Yet, all three guarantees can be extended beyond the year-five technical evaluation if the owner and developer chose to.

“Our system has the desired effect that the industry regulates itself, improves and eliminates all severe mistakes. To date, we have experienced a large decline in insurance claims, which we predict will remain declined.”

Ole Bønnelycke,
CEO of The Danish Building Defects Fund

Thus, due to the success of The Danish Building Defects Fund and its proactive modus operandi, the industry has experienced a decline from just over 25% of all affordable and social housing estates making severe insurance claims in 1992 to just below 5% of all housing estates making such claims in 2017 (Byggeskadefonden, 2017).

The legal practise regulating the construction industry is known as the “Basic Rules”. The Basic Rules proscribe there being a five-year expiration for insuring damages. However, the damage claim must be made within three years of the fault. The Danish Building Defects Fund uses these rules to
deny claims that concern damages included in the year-one evaluations. If these damages were not rectified, the owner cannot make a claim that falls outside the three-year expiration. In this way, there are strong incentives for the property owner to ratify damages detected in the year-on technical evaluation, as failing to ratify such damages in effect rules out the possibility to make an insurance claim for the same damage at a later stage.

Ole Bønnelycke says: “Just because everybody contributes to the fiscal base of The Danish Building Defects Fund, it does not mean that we are an open treasury you can just put your hand into. We make sure we handle the industry’s fiscal resources with prudence.” (Bønnelycke, 2018, interview). In the same vein, the insurance does not cover the original full cost, as the excess payment is 5% of the claim and buildings and materials deteriorate. The construction industry spends 200–250 billion DKK (31–39 billion USD) per year. An estimated 10% of this amount goes towards construction deficiencies and repairs. “I am not proposing that we built flawlessly, because that would be too expensive. But if we could eliminate the most common and expensive deficiencies and repairs, then we will save a lot of money!” (Bønnelycke, 2018, interview).

The below list recounts the key features of The Danish Building Defects Fund:

The system is entirely automated. The technical advisers are commissioned through an automated system. They upload their report to an open access platform and the system generates an automatic alert that is sent to the property owner, such as the housing cooperative or municipality. The owner is obliged to follow detailed instructions, including deliverables and timelines. If the owner fails to act, the system sends further notifications. If the owner does not react at all, he is considered irresponsible and this will eventually impede his ability to receive insurance.

Capacity building. Concerning how the capacity is enhanced across the industry, Ole Bønnelycke says: “We do not want to chase anyone, but it has a huge preventive effect that all data is made publicly available. You can search on the building, developer, and other keywords across both the affordable and social housing industry and private sector. The purpose is to enhance the knowledge and learning of the entire industry through open data and information exchange” (Bønnelycke, 2018, interview). The fact that the technical advisers providing counselling for developers and owners rotate to other building sites and make evaluations on construction that they have not been involved in contributes to learning and capacity building. In addition, as many of the housing estate owners are large and build year after year, they build up capacity and experience.

The Danish Building Defects Fund commissions approximately 150 technical advisers across the country to conduct year-one and year-five evaluations. This results in approximately 600 evaluations at an annual cost of approximately 300 million DKK (47 million USD) for advisers (Byggeskadefonden, 2017).

Solidarity. If a housing estate finds that, despite having done everything possible and in line with the instructions from The Danish Building Defects Fund, it is unable to correct the damage to the buildings in collaboration with the developer and/or the materials manufacturer, the owner will turn over the case to The Danish Building Defects Fund, who will engage with the developer and/or the materials manufacturer and will, as a last resort, initiate court proceedings. Ole Bønnelycke explains: “We will sometimes spend a lot of resources prosecuting one particular developer or materials manufacturer if we believe the case will make precedence for the whole construction industry.” And Ole Bønnelycke continues: “No company is able to outrun us in a court procedure. We have the resources required to continue to the bitter end, if necessary.” Lastly, Ole Bønnelycke points out that “We have to act as a safety net for the whole industry. There is no such thing in the private industry.” (Bønnelycke, 2018, interview).

Concluding, Ole Bønnelycke emphasises that The Danish Building Defects Fund owes its success to the good collaboration with close industry partners, such as the building owners, developers and operators. The network of privately owned technical evaluators commissioned by The Danish Building Defects Fund to conduct the year-one and year-five evaluations also strengthens the work of The Danish Building Defects Fund and the Fund’s ties to the industry. Lastly, Ole Bønnelycke recognises that throughout time close collaboration with national and local governments has enabled a regulatory system that supports the work of The Danish Building Defects Fund. The flow of funding is emblematic of how the different industry stakeholders collaborate in support of a strong system of affordable and social housing.
Currently, the demand for funding from The National Building Fund and The Danish Building Defects Fund for renovations is 160 billion DKK (26.6 billion USD). Christian Høgsbro emphasises that this demand is illustrative of national government requirements for building renovations, including the installation of renewable heating systems, insulation, thermal windows, handicap-friendly buildings, to name but a few (Høgsbro, 2018, interview).

The flow of funding is as follows:

The rent level is represented by the bold line. In this particular example, the start rental price is set at 450 DKK/m² (70.7 USD) per year. Source: Own development based on Høgsbro, 2018, interview.

The following components characterise the flow of funding:

- Local government provides an up-front interest-free municipal loan that runs for 50 years (e.g., the blue area). The 10% municipal loans are provided for the housing units of 90–105 m². Housing units of less than 90 m² are entitled to an 8% municipal loan, while housing units of more than 105 m² receive 12% in municipal loans.

- The national government initially subsidises affordable and social housing in order to maintain a low entry-level rent for the tenants (e.g., the pale grey area).

- During the period 0–30 years, the tenants repaid the mortgage in the housing estate (e.g., the dark grey area).

- During the period 30–40 years, the tenants repaid the national government subsidies, whereby they in effect are state loans rather than subsidies (e.g., the pale grey area).

- From 40 years onwards, two thirds of the rent contribute to the accumulated savings held by the National Building Fund (e.g., three grey areas). Of this:
  - half is dedicated to new builds;
  - half is dedicated to renovations of the existing stock, other infrastructure investments, and social activities.

- The last third of the rent contributes to the accumulated savings of the individual estates.

**FIXED MORTGAGE REPAYMENT**

The National Building Fund is growing through the contributions of all Danish housing cooperatives and their tenants. The national government has fixed the interest rate that housing cooperatives have to pay on mortgage loans at a maximum of 3%, which
means that the housing cooperatives will never pay an interest rate greater than 3% for repayments of their loans. In the instances where the interest rate is below 3%, the surplus goes into the National Building Fund for new housing construction (KAB, 2016).

Despite national government fixing the interest rate at 3% on mortgage loans, AAB, KAB, DAB, and other housing cooperatives run consignments to achieve the most competitive interest rate on the mortgage loans. Currently, as the interest rate is below 3%, the tenants, in effect, repay 3.4% of the land and construction costs per year. Any savings on an interest rate lower than 3% flow into the National Building Fund.

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**FUNDING FOR NEW BUILD HOUSING**

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**FIXED COST STRUCTURE**

**National Government Initiative**

The Danish Housing Ministry\(^\text{13}\) sets the maximum cost of construction for all affordable housing. In Copenhagen, the maximum cost is 24,000 DKK/m\(^2\) (3,770 USD). This ensures that the rent remains affordable, as the rent is determined based on the cost of land and construction. The link between the costs and the rental prices is of crucial importance, since it enables the industry to be self-financing: low costs translate into low rent, whereby public housing subsidies are not required.

**The Price of Socio-Economic Diversity**

The price of land in Copenhagen is relatively high, which poses a challenge for AAB, KAB, DAB, and other housing cooperatives. If the price of the land is high, little funding is available for the construction. Jens Elmelund states that if the land costs 4,000–5,000 DKK/m\(^2\) (629–785 USD), there is a realistic amount left for the construction. Therefore, as KAB and other housing cooperatives have to work within the 24,000 DKK/m\(^2\) (3,770 USD) price remits set by the Housing Ministry, they cannot pay more than 4,000–5,000 DKK/m\(^2\) (629–785 USD) for the land (Elmelund, 2018, interview). The question is then: how do the housing cooperatives access land at this price in Copenhagen?

In order to answer this, it is important to recall that all new builds in Copenhagen and Greater Copenhagen must contain 25% affordable housing. This forces developers of new build to meet the price of 4,000–5,000 DKK/m\(^2\) (629–785 USD) for 25% of the land in order to adhere to this requirement (Elmelund, 2018, interview). In effect, the land is sold at a discount to compensate for the designated 25% affordable and social housing. “Despite this rule, I have never heard of a new development not making a lot of money,” says Jens Kramer-Mikkelsen, CEO of Copenhagen City & Port Development Corporation,\(^\text{14}\) which has led 50% of all new developments in Copenhagen for the past decade (Kramer-Mikkelsen, 2018, interview).

Whatever price reduction is made is recuperated on the remaining 75% of the land sale. In this way, individual landowners effectively subsidise the 25% affordable and social housing in the new build by paying a premium price that will allow the developer to recuperate the loss from selling 25% of the land at a below market price. In effect, the Planning Act entails a subtle “Robin Hood” redistribution in which the wealthy landowners of new build subsidise the poorer tenants of the 25% affordable and social housing. However, not having the Planning Act would not necessarily lead to a price reduction for the private property owners, as the developers will charge the maximum price that the market can sustain. One could therefore argue that the Planning Act sets the price that enables the city to grow in a socio-economically diverse way.

Christian Høgsbro concludes: “In return, we build a diverse city that adds value in both social and economic terms.” (Høgsbro, 2018, interview).

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\(^{13}\) [www.trm.dk/en](http://www.trm.dk/en)

\(^{14}\) [www.byoghavn.dk/english/about/about2-uk.aspx](http://www.byoghavn.dk/english/about/about2-uk.aspx)
FREE MARKET PRICING

Still, while the Planning Act works as intended, there are other challenges with the free market economy and the politically steered economy. Thus, while the amount of total costs fixed by the Housing Ministry is adjusted for inflation, the index of construction costs is increasing at a faster rate than overall inflation. This makes it difficult for housing cooperatives to maintain the market prices for construction. For constructions built in the 1960s and 1970s, maintaining a cost-based rent is relatively easy, as construction costs were relatively low and the costs have been recuperated (Skovgaard Nielsen et al., 2017). In addition, conveniently, much of the older housing is located centrally within the city proper.

The challenge remains how to maintain low costs and rental prices for new build in the current economic climate of growth where construction costs increase at a faster rate than overall inflation. Thus, municipalities are not able to make use of the 25–33% of all new build they are entitled to, because despite staying within the 24,000 DKK/m² (3,770 USD) remits, the prices are often still considered too high for social housing. Generally, municipalities make use of the cheapest housing within the affordable housing segment, as they claim that the housing cooperatives make available all their cheapest apartments for social housing (Madsen, 2018, interview). In this way, the municipalities negotiate with the housing cooperatives – instead of disposing of 25–33% of all new build, the municipalities have entire housing estates from the 1960s and 1970s at their disposal that offer low rental prices suitable for social housing. Subsequently, there is a dual market: one that provides affordable housing across the city and another geographically concentrated market that the municipalities use for the weakest groups in society (Madsen, 2018, interview).
COLLABORATION WITH PENSION FUNDS

To summarise, despite popular criticism that Copenhagen lacks sufficient affordable housing, the Planning Act of 2016 will continue to alleviate the accumulated political pressure from the lack of affordable housing in Copenhagen. The urban regeneration of the Paper Island (in Danish, Papirøen)\(^{15}\) is illustrative of how this works in practice. Copenhagen City & Port Development Corporation sold the Paper Island in 2017 to Danica Pension fund\(^{16}\). In total, 10,000 m\(^2\) were sold to Danica, of which Danica has to abide by the 25% affordable housing rule. In this particular example, KAB became the affordable and social housing partner of the Danica development. Danica conducted the development of the entire project, including the 25% affordable and social housing. However, KAB must follow stringent EU consignment rules, which are also imposed in Danica. These EU rules increase the project costs for Danica. Yet, Danica is obliged to maintain the price of the land and construction within a maximum of 24,000 DKK/m\(^2\) (3,770 USD) for the 25% affordable and social housing. In this way, less profit is extracted by Danica. KAB is only able to offer its tenants below-market rental prices for the affordable housing by keeping the costs low. Even though this may have led to less profits for Danica, Danica still considers the Paper Island a profitable business (Elmelund, 2018, interview). This is partly because Danish pension funds, such as Danica, are long-term investors looking for a return on investment within 20–30 years.

COLLABORATION WITH PRIVATE INVESTORS

Jens Elmelund points out that, in certain instances, KAB is used as a “market buffer”: “In markets that struggle and are in deep economic decline, we are asked to build affordable housing. Just by creating activity and investing, private investors get interested and follow suit.” In this way, KAB is able to go into declining neighbourhoods, engage in initial investments that can regenerate the neighbourhoods, and attract private investors and capital. In other cases, KAB will purchase a development project together with a private developer. “We will take the part of the plot facing East-West that is not as attractive as the sunnier South side of the plot that the private developer will take and develop into private apartments,” explains Jens Elmelund, indicating that, in the future, KAB will engage in many more of these types of joint investments (Elmelund, 2018, interview).

Currently, there is an issue concerning the inclusion of tenants into the broader society and the socio-economic composition of the tenants living in the affordable housing.

By incorporating 25% affordable housing into every new build, this will in part be resolved in the future, as the stock of affordable housing will expand with urban growth and affordable and social housing will become an integral part of the urban fabric, including being made available in new high-end developments. However, in order to reduce pressures on existing affordable housing estates, KAB has entered into a collaboration with the private property developer Nordic Real Estate Partners Ltd. (NREP)\(^{17}\). “The housing built in the 1960s and 1970s has very low density, and we are able to sell off land between the buildings to private developers, such as NREP,” says Jens Elmelund. As NREP builds units for private ownership, this both enhances the socio-economic mix of inhabitants in the existing affordable and social housing estates and it creates a more varied cityscape in the otherwise uniform housing estates of the 1960s and 1970s. Basically, such initiatives present constructive ways of addressing some of the challenges experienced in the “segregated housing” (Elmelund, 2018, interview).

\(^{15}\)http://denstoredanske.dk/Danmarks_geografi_og_historie/Danmarks_geografi/K%C3%B8benhavn/Papir%C3%B8en

\(^{16}\)www.danicapension.dk/en-dk/Customers/Pages/Customer.aspx

\(^{17}\)https://nrep.com
POLITICAL INTERFERENCE

THE BASIC FINANCE INITIATIVE

The National Building Fund is regulated by the national government. For instance, in 2017, the national government obliged the entire affordable and social housing industry to reduce administrative and operational costs by 1.5 billion DKK (236 million USD) by 2020, which amounts to cost reductions of 8% per year (Madsen, 2018, interview).

Similarly, the current deficit of 7 billion DKK stems back to the Fogh government (2001–2005), which withdrew 19 billion DKK (3 billion USD) from the National Building Fund in 2002. This scheme was called the Basic Finance Initiative. It required the National Building Fund repaying 25% of all the state loans upfront up until 2030 at an estimated interest rate of 4.3%, which amounted to a total of 19 billion DKK (3 billion USD). The withdrawal of the 19 billion DKK (3 billion USD) emptied all of its savings and left the National Building Fund with a deficit of 7 billion DKK (1.1 billion USD). In fact, the current market interest rate on mortgage loans is 2%, which means that the national government is charging and recuperating 2.3% more than the actual interest rate. Thereby, the National Building Fund is actually refunding 108%, rather than 100% of the 25% of state loans for 2002–2030 (Madsen, 2018, interview).

In this way, the Basic Finance Initiative, including providing state loans, is a net profitable business for the national government. In return for withdrawing the 19 billion DKK (3 billion USD) from the National Building Fund, the national government finances the National Building Fund’s current deficit of 7 billion DKK (1.1 billion USD). It follows that the current deficit of the National Building Fund was imposed by the national government rather than being a reflection of an insolvent business model of the National Building Fund and affordable and social housing as a whole.

One of the main objectives that Bent Madsen is fighting for is certainty vis-à-vis the politicians and political priorities. Bent Madsen acknowledges that the industry is obliged to continue the state loans: “Even though, before the last raid on our savings, we were quite capable of financing all future housing construction ourselves”. Bent Madsen also accepts that the industry must pay upfront 25% of all state loans: “All I want now is that we agree that this is the way forward. We must make an agreement that it is 25% of all state loans that must be paid upfront. Not suddenly one day 30%! And we must agree on a fixed interest rate of the state loans that are repaid upfront.” Concluding, Bent Madsen explains that it is almost impossible to run a business that is subject to such unpredictable and radical shifts (Madsen, 2018, interview).

THE “SEGREGATED HOUSING LIST” INITIATIVE

The national government’s recent political priority has been to create greater socio-economic diversity amongst the tenants in affordable and social housing
and to introduce harder sanctions on families who do not demonstrate a willingness and ability to integrate into Danish society. Every year, the national government publishes a “segregated housing list” containing the 25 most challenged social housing estates in Denmark. On the current segregated housing list are 60,000 tenants, of which two thirds have a non-Western background. A third of the tenants have been without work and outside the educational system for at least 4 years. Lastly, approximately 10% of non-Western men living in “segregated housing” have a criminal record (Regeringen, 2018).

However, the criteria for categorising an affordable and social housing area as “segregated housing” has changed over time. For instance, during the Fogh government (2001–2005), only six areas were categorised as “segregated housing”. “The national government has changed the criteria in order for approximately 25–30 areas to be on the ‘Segregated housing list’. If the issue appears big, national government is able to gain the public support they need to their policies,” explains Christian Høgsbro. AAB recently finished renovating the affordable and social housing area depicted below for a total of 400 million DKK (62.5 million USD) with the help of the National Building Fund.

However, since the renovations were completed, the estate has been added on the segregated housing list, which means that within half a year 60% of the housing estate must be:

1. Privatised
2. Densified
3. Torn down
(Høgsbro, 2018, interview).

The national policy proposing to ratify these depressing statistics recommends spending 20 billion DKK of tenants’ savings accumulated in the National Building Fund. Approximately half the savings are designated for renovations of the segregated housing estates, while the other half targets social activities. However, as this policy recommends investing funds from the National Building Fund, it has been highly criticised by the industry and political opposition (Madsen, 2018, interview). Hence, it remains unknown whether the policy will ever be implemented.

In order to ensure transparency and target investments, the National Building Fund has made an open access “Twin-tool” available online, enabling any user to access information concerning the rental price per m², maintenance costs, administration costs, etc. The general idea is that the tenants and the management of individual housing estates and cooperatives can compare and contrast their own performance with that of other estates and cooperatives. In addition to economic information, the Twin-tool contains socio-economic information, such as the crime rate of non-Western residents, unemployment, etc. While the economic numbers help to optimise the administration and strengthen the ability to self-govern in the individual housing estates and cooperatives, the socio-economic numbers inform the National Building Fund about where social activities should be targeted and with which efforts, including help with homework, job training schemes, etc. (Madsen, 2018, interview).

According to Bent Madsen: “In reality, it is only 4% of our tenants that live in the 25 housing estates on the national government’s ‘segregated housing list’. And out of these 4%, it is only 1% that you would call troublemakers. That means that the great majority of tenants living in our housing are good and law-abiding citizens.” Bent Madsen continues: “Instead of arousing a political debate on the 1% of tenants that are causing trouble, the government should use us as a growth engine.” In this way, in 2009, the National Building Fund conducted social work on 100 housing estates compared with only 80 housing estates in 2016, which is emblematic of a decline in the demand for social work. Along the same lines, 22% of youth living in the housing estates received their school diplomas in 2009 compared with 36% in 2016. “We see a very positive impact of our work in the social area, but the national government does not recognise this when they problematise our tenants,” suggests Bent Madsen (Madsen, 2018, interview).

DAB has two housing estates that are part of the Segregated Housing List. Niels Olsen, CEO of DAB, says: “As our housing estates are being sucked into this Initiative, we are thrown into a very insecure situation. The investment funds designated these properties are seized by the state. Thus, the planned investments cannot be made. We are suddenly part of a political play” (Niels Olsen, 2018, interview). Niels Olsen argues that DAB provides decent housing for a large proportion of the Danish population, and “this is not supposed to be a battle field”. Niels Olsen recommends meeting with the national government to share with them, how DAB and the other housing cooperatives work and what they do (Niels Olsen, 2018, interview).
In much the same vein, Ole Bønnelycke says, “10–15 years ago, national government and their civil servants possessed insights and knowledge on the affordable and social housing system in Denmark. Yet, today, no one understands how we operate and it is not helpful.” (Bønnelycke, 2018, interview).

**THE “FLEXIBLE LENDING” INITIATIVE**

Earlier attempts to diversify the socio-economic composition of tenants in affordable and social housing estates include “flexible lending”, introduced in 2005. The purpose of flexible lending is to allow municipalities to prioritise certain socio-economically advantaged segments of the population (e.g., people in employment, students) for housing allocation in parts of or entire housing estates. However, Skovgaard Nielsen et al. point out that municipalities can only refuse socially disadvantaged people if they are able to offer alternative accommodation. In this way, flexible lending aims to reduce housing segregation by allowing socio-economically advantaged tenants to have priority to socially deprived housing estates, while socially disadvantaged people are allocated housing elsewhere (Skovgaard Nielsen et al., 2017).

**CONCLUSION**

As AAB has 1.5 billion DKK (250 million USD) in stocks and shares that represents their capital stock, and every month, they receive 110 million DKK (18.3 million USD) in rent, Christian Høgsbro explains the challenge of moderation that is required by the board of directors, consisting entirely of the tenants: “With such an abundance of fiscal resources, it is difficult to explain to the individual housing estates that they have to save for several decades for a building renovation. Many of the tenants, naturally, want to use this capital to reduce the rent level.” (Høgsbro, 2018, interview). The board of directors of AAB meet once a month, and by managing the cooperative they essentially oversee the housing democracy across all of AAB’s estates. In turn, KAB, AAB, and other housing cooperatives are overseen by Copenhagen municipality and the National Building Fund, of which Christian Høgsbro (e.g. CEO of AAB) is the chairman of the board for the latter, while Jens Elmelund (e.g. CEO of KAB is the second in command of the National Building Fund.

The affordable and social housing sector is governed by the interaction between several key stakeholders (Skovgaard Nielsen et al., 2017):

• The state defines the general framework, including legislation, targets, prices, and interest rates;
• The municipalities manage the local housing policies and conduct zoning and planning;
• The housing cooperatives, such as AAB, KAB, and DAB, run the housing estates and build new housing if the municipalities have approved it;
• The tenants manage the day-to-day operations of the housing estates and have a democratic say at the housing estate and cooperatives.

“We are not party political, but we are housing political in the sense that we always protect the interests of the tenants living in affordable and social housing.”
Niels Olsen,
CEO of DAB

Niels Olsen explains that DAB and the other housing cooperatives protect the interests and funds of the tenants in the best interest of the broader society: “Even if you are wealthy and do not need our services, you are interested in supporting us, because we have found a way to provide decent affordable housing for people that would otherwise not have access to housing of this standard and at this price. If we were not here, it would eventually create massive tension in society.” As is evident from the quote, DAB is a value-driven organisation characterised by a certain attitude towards people. “We really seek to behave decently at all times, because at the end of the day, we manage the most important things in people’s lives: their homes and their money.” Niels Olsen continues: “In order for us to behave decently, we have to provide housing of decent quality. But these days, quality is being tested by price increases in the construction industry and pressure from national government to cut costs at all times.” (Niels Olsen, 2018, interview)
FINANCING THE INCLUSIVE CITY

Concluding, this report has explored how cities can provide affordable and social housing with a shortage of fiscal resources and a multitude of conflicting political demands. The Danish model of affordable and social housing offers an answer to this question. It is characterised by the following key enabling features:

• The industry is run by privately owned and privately managed cooperatives.

• Once state loans and mortgages are repaid after 40 years, each housing estate, cooperative, and the National Building Fund accumulate vast savings deposits from the tenants’ rent.

• The savings are spent on renovating and expanding the housing stock. There is a strong sense of solidarity that allows savings to be spent on a needs basis across the whole industry.

• The savings are also spent on social activities that in part help to strengthen the housing democracy, which is a system where tenants are elected to be managers at the level of individual housing estates and housing cooperatives.

• The housing estates and cooperatives are both owned and managed by the tenants, even though a professional CEO is in charge of the daily management of the cooperatives.

• There is an inseparable link between the costs of land, construction, administration, and operations and the rental price paid by the tenants, which ensures that tenants, cooperatives, and the industry as a whole strive for cost-efficiency. If the costs increase, the rent will increase.

• National government fixes the cost of land and construction. Thereby, it is possible for the rental prices to remain relatively low.

• National government fixes the interest rate paid on the mortgages at 3%. Any surplus goes towards the savings of the National Building Fund. Any deficits are loan-financed and guaranteed by the national government.

• The Danish Building Defects Fund ensures that the housing stock is adequately insured and maintained.

Lastly, Bent Madsen expresses how the Danish model works: “The whole industry of affordable and social housing in Denmark is privately owned and managed. We are all membership-driven organisations that rely on the private contributions of our tenants. In this way, we are working with the private savings of our tenants,” and he continues, “Therefore, rightly, most tenants in affordable and social housing do not view themselves as tenants. They view themselves as private owners of the cooperatives, which is exactly true to what they are. For this reason, it is not OK that national government empty the savings, whenever they feel like. It is not their money. It is the money of the tenants” (Madsen, 2018, interview).

This latter part of the Bent Madsen’s comments exemplifies the principle weakness of the model: the whole industry is closely intertwined with the national government and, thus, impacted by politics and shifts in political priorities. It makes the industry vulnerable to sudden and unpredictable changes in the modus operandi. In this way, the most recent political initiative has left the National Building Fund with a massive deficit that effectively prevents the industry from severing its ties with national politics, despite having the governance and finance capacity to operate free from political interference.
AFFORDABLE AND SOCIAL HOUSING IN OTHER COUNTRIES

The following section is authored by Luise Noring, Assistant Professor at Copenhagen Business School and Founder of City Facilitators & Laura Prisca Ohler, Research Analyst at City Facilitators.

AFFORDABLE HOUSING IN THE US

The US strategy of privatising the affordable housing market, which was adopted in the 1970s and 1980s, has turned it into “an expensive band-aid over a gaping hole, left by the absence of a public sector alternative” (Gowan, 2017).

Before the financial crisis hit a decade ago, the US housing market experienced an unregulated boom, effectively overproducing residential facilities. Between 1959 and 2007, the average production of housing units per year was around 1.5 million. Although 1.3 million new dwellings were built in 2017, an overall shortage was recorded, as too few dwellings were erected relative to the existing need, especially in the social housing market (Irwin, 2018). Fast forward to the present day where those born during the 1990 birth rate spike are now approaching their 30s, settling down, starting families, and venturing into the residential real estate market that has limited resources. This surge in demand has yet to be effectively reacted upon with an increase in supply (Stanley, 2017).

Affordable housing in the US is scarce, with nearly 50% of all tenants spending up to 30% of their gross income on rent (ibid.). The Joint Center for Housing Studies (Harvard.edu, n.d.) published data stating that there was an increase of 9 million tenants looking for accommodation since the 2008 financial housing crisis, which was consequently driving up prices nationwide in the US (Harvard.edu, Factsheet, 2017). Due to a market focus on the luxury housing market in metropolitan areas, no contractors or housing developers have addressed the shortage or ubiquitous surge in demand for affordable housing (Harward, Americas Rental Housing, 2017).

As shown by the red line in Figure 5, the share of tenants experiencing the cost burden as “severe” has increased significantly since the millennium began, with the otherwise stagnating share rising in 2008 once more and then hitting its peak in 2011. The number of severely burdened renters spiked in 2011, reaching approximately 11 million, and remained at that level even until 2016. As a result, the number of homeless people increased in Los Angeles alone by 26% in 2016 (The U.S. Department of Housing, 2017). Presently, the trend is a slow descent, although the share still represents only close to half the eligible people.

Extremely low-income (ELI) households are people who earn less than 30% of the median income in their area. From an overall population of 327 million Americans, 11.8 million are categorised as ELI households, making them around 3.6% of the population. The US state offers these households two million housing units (US Population per Year, 2018), (Urban Institute, 2017).
Key Stakeholders
Enterprise Community Partners\textsuperscript{18}, originally Enterprise
Foundation, was founded by James W. Rouse as
a philanthropic institution aiming at financing,
constructing, and in general advocating affordable
housing. Since its foundation in 1982, the non-profit
organisation has invested approximately 29 billion
USD in building 470,000 homes for low- and middle-
income households.

The Local Initiatives Support Corporation (LISC)\textsuperscript{19} is
an American non-profit organisation that provides
innovative solutions to challenges and opportunities
for under-resourced neighbourhoods through public
policy leadership. The initiative was established
in 1980 and has since invested approximately 20
billion USD in their core focuses: affordable housing,
education, economic development, financial stability,
health, safe neighbourhoods, community leadership,
policy, and research. These investments have
benefited nearly 7 million American citizens

The congressionally chartered non-profit Neighborhood Reinvestment Corporation
(NeighborWorks America)\textsuperscript{20} has created “places of
opportunity” for almost 40 years. NeighborWorks
provides financial and technical training for
community-based revitalisation efforts. Currently, the
initiative supports 245 network organisations helping
individuals, families, and communities to thrive
through comprehensive approaches to affordable housing and community development. In 2017, these
network members received 8 billion USD to invest
in their communities. This non-profit organisation
is pivotal on the US market for training community-
development and affordable-housing professionals.

Funding and Policies
The Campaign to Restore National Housing
Rights (CRNHR)\textsuperscript{21} is an NGO advocating adequate
housing for everyone while leading the discourse on
considering affordable housing. Their work is
dedicated to exposing what they see as the systemic
problems in US housing policies that have caused
the rise in homelessness. Their initiatives encompass
education, human rights advocacy on affordable
housing, workers’ rights, and urban development.

The US Department of Housing and Urban Development (HUD)\textsuperscript{22}, the nation’s largest housing
agency, administers the Section 8 of the Housing Act
of the 1937 voucher program. This program is locally
administered by public housing agencies (PHAs).
The Housing Choice Voucher program pays a large
share of rents and utilities for about 2.1 million
US households. Furthermore, it provides financial
support when purchasing a home. The maximum
allowed voucher is 2,000 USD a month\textsuperscript{23}. However,
the program covers merely 22% of all ELI-eligible
households. The US Department for Agriculture
Section 515 program covers 2.5 % of people qualified
as ELI, while 21% are living in market-rate dwellings,
effectively leaving 54% in urgent need of housing
assistance (Peterson, 2017).

The Low-Income Housing Tax Credit (LIHTC)\textsuperscript{24} is
granted to companies working on constructing
affordable housing. LIHTC contributes to as much
as 90% of all new affordable housing. Included in
the LIHTC mandate is the strategy of “inclusionary
zoning”, which requires metropolis administrations
to dedicate some of their housing fraction to
affordable units (Bagli, 2017).

However, in 2017 the program provided only 300
USD per rent-burdened household. Moreover,
the initiators of the program are associated with
allegations of corruption, resulting in a decrease
from 70,000 new units per year to less than 60,000
(Gowan and Cooper, 2017). Another factor that has
to be taken into consideration is that affordability
requirements under LIHTC become void after 15 to
30 years (Peterson, 2017).

The Housing Opportunities for People Everywhere
(HOPE VI)\textsuperscript{25} program was initiated in 1992 and
provides grant money from HUD to local housing
authorities to demolish and reconstruct run-down
dwellings with mixed-income, lower-density homes
(Tracy, 2008). The Rental Assistance Demonstration
(RAD)\textsuperscript{26} program sells these new homes to private
developers, resulting in a severe decrease of public
housing units by 60,000 in the years from 2006 to
2016. Special support is granted to disabled, frail,
elderly individuals whose income is below 50% of the
area’s median. Social services provided to HOPE VI
eligible people include housekeeping, transportation,
home-delivered meals, health care, and counselling
(US Department of Housing, n.d.)
The current administration under Donald Trump abandoned Federal Housing Administration (FHA) insurance premiums introduced under the Obama administration. These ensured insurance premiums at 0.25% on every household mortgage. This meant savings of up to 500 USD per average income household. Letting go of these insurance premiums especially influenced the home-owner families with a low income (Foster, 2017).

**Conclusion and Recommendations**

Although the US federal government has many initiatives for social housing in place, throughout this research incomplete information on the collective performance of these federal, state, and local programs was found. The accessibility of this information is also essential to provide transparency to the public on government spending. If the government-wide performance of rental assistance is accessible, the performance of all social housing assisting initiatives could be assessed and improved based on coherent figures. Furthermore, all stakeholders, which includes political decision makers, involved in the construction and financial support of affordable housing are hampered in setting priorities and resources due to the lack of consistent performance data. The Secretary of the Department of Housing and Urban Development, in cooperation with the Rental Policy Working Group, could achieve a comprehensive data collection of federal, state, and local rental assistance programs (US Government Accountability Office, 2015).

According to Gowan et al., the current deficit of social housing dwellings could be met by creating 10 million municipal homes in 10 years (Gowan et al, 2017). Forbes calculated that since the financial crisis, the US has built half as many affordable and social housing units as it needs. Thus, a rate of construction above the current rate is needed for a period of at least four years, which equates to 1.7 million housing starts per year (Yun, 2016). Furthermore, Gowan et al. (2017) propose the implementation of solidarity rents for wealthier tenants, which could maintain a self-sustaining municipal housing development. By providing capital grants to municipalities who construct mixed-income housing developments, the overall supply of affordable housing would increase. On top of that, the Faircloth Amendment should be repealed because it is limiting the number of units for which local public housing authorities can receive federal subsidies.

Many US cities find themselves in a catch-22 when financing affordable and social housing: They either attract private investment capital or they spend scarce public finances on providing affordable and social housing in order to get people off the streets. However, the latter means that other equally pressing investments are not conducted. Illustrative of the dilemma is the growing economies of the US West Coast cities experiencing both significant increases in the number of foreign investments in housing and an increase of homeless. Over the past decade, Seattle has experienced a 56% increase in rental prices, which has been accompanied by a 40% increase in homelessness (Anderson, 2018, interview).

In general, socio-economic inequality is growing in the US, as it has been for several decades. This means that large segments of the population cannot access housing and, as a result of this, they are marginalised from the labour market and society at large. In Philadelphia, out of a population of 1.6 million, 400,000 lived below the poverty line in 2015. In Los Angeles, out of a population of 3.9 million, 873,600 were living in poverty in 2015 (Project HOME, 2018).

Concluding, according to the Strategic Plan for 2014–2018 published by the US Department of Housing and Urban Development, three central objectives will be met in 2018:

- End homelessness;
- Promote advancements in economic prosperity for residents of HUD-assisted housing;
- Promote the health and housing stability of vulnerable populations (US Department of housing, 2014)

However, what is unique in the US system is the large focus on the luxury market. The housing industry is suffering an increase in mortgage rates, lack of social dwellings, and scarce housing opportunities in urban areas, while the luxury market is booming.

**AFFORDABLE HOUSING IN THE UK**

The Grenfell Tower fire in June 2017 restarted the conversation around the inadequacy of the UK’s social housing provision. In 2017, the total number of social housing properties declined by 11%, and approximately 40,000 fewer social houses were...

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28 www.hud.gov/sites/documents/FRCLTH-LMT.PDF
29 https://projecthome.org
rented in 2016/17 than the year before. Private social dwelling developers in particular reduced their investments from 300,000 to 231,500 housing units during 2016/17. Additionally, more than 10,000 fewer properties were let for social rent by local authorities. Since the financial crisis in 2008, the number of homes let for social rent dropped from 366,820 to 334,602 (Agerholm, 2018).

The term “affordable housing” denotes housing provided with public subsidies and is used to describe housing of any tenure that is deemed affordable to a particular household or group via an analysis of housing costs, income level, and other needs. Social housing rents in the UK are in general approximately half that of the market rents (Wilson and Barton, 2018).

A 2014 research study by the Resolution Foundation on ways of coping with high housing costs in the UK found that in order to afford the cheaper options on the market, 17% of middle-wage households would have to spend on average a third of their disposable income to pay their monthly mortgage. The situation is more severe in London, where a modest income household has to spend more than a third of their income on housing (Gardiner et al., 2014). Figure 6 illustrates this trend by comparing housing affordability of working-age households in 1994–95 and 2013–14. Overall, the graph shows that although there has been a spike in households who spent less than 5% of their income, the rest of the graph has moved further to the right. This indicates that there has been a steep rise in households who spend, for instance, more than a third of their income on rent. Likewise, 970,000 (6%) of households are spending more than half of their salary on rent or mortgage payments. An amount that has doubled since 1994–95 (Judge, 2016).

**FIGURE 6. MILLIONS OF WORKING-AGE HOUSEHOLDS BY HOUSING COST TO INCOME RATIO, 1994–95 AND 2013–14**

Source: Judge (2016).
Overall, housing benefit covers just 55% of the housing costs of non-working, private renting millennial families at age 25 in the UK. To put that into perspective, 77% of generation X families received housing benefits at age 25 in the UK. (Judge et al., 2018). Studies predict that there is a need for additional housing in England of between 232,000 to 300,000 new units annually – a level not experienced since the late 1970s (Paliament UK, n.d.). Other studies, however, conclude that the affordable housing market is slowly increasing in comparison to 2016. Figure 7 visualises this improvement by illustrating the overall net number of newly erected homes from 2000 to 2017. Supported sales that have been subsidised by policies, such as Help to Buy, reveal a clear rise. As a result, house building picked up, with a 20% increase in comparison to 2016 (Collinson, 2017).

Key Stakeholders
Crisis is a UK charity organisation for homeless people. For the last 50 years, their work encompassed advocacy, educational support, and campaigning to end homelessness.

The Joseph Rowntree Foundation is an independent social change organisation working to reduce poverty in the UK through research, advocacy work, and collaboration with political decisions makers.

The Home Builders Federation (HBF) was founded in 1948 and is the representative body for the home building industry in England and Wales. Combined with the HBF’s member companies, the organisation represents approximately 80% of all new homes built in England and Wales.

Shelter is a London-based housing charity aiding vulnerable people every year through financial and legal advisory support. In 2017 alone, the charity helped 38,850 people. Chief executive of Shelter, Polly Neate, addresses the current housing unit shortage by stating: “With rising numbers of working people unable to afford their rent, more than a million on council waiting lists and rising numbers of homeless families stuck in temporary accommodation, we very obviously need to urgently increase the number of social homes available”. (Agerholm, 2018, §12)
Funding and Policies

According to the UK Housing Review, the public housing sector is the largest provider of affordable housing since 2011. However, the supply of new housing continues to fall behind the general growth of new households in England. In Scotland, Wales, and Northern Ireland, there has been a sufficient supply of affordable housing units, contrasting England noticeably. There is a considerable lack of social rental housing in England due to an emphasis on investment programmes and the conversion of properties to Affordable Rents (Inclusionary Housing, n.d.). The Affordable Rents policy in England substitutes for lower levels of capital grant. In comparison, in Scotland and Wales the legislation on the right to buy will soon end (Wilcox et al., 2015).

The “Right to Buy” policy introduced under Margaret Thatcher in 1980 gave the working class the opportunity to own their own home and thus improve their financial circumstances. However, critics claim that it created a sub-market for the sale of public assets and caused distorted house prices, substantially contributing to the housing crisis. Right to Buy offers tenants who resided in their homes for up to three years a 33% discount on the market value of their home. Since the policy’s introduction, and up until 2014, more than 1.8 million council homes were sold at a discount. In 2012, David Cameron increased the discount available to council tenants for first-time buyers (Foster, 2015). Concurrently, England experienced a post-war low in the construction of new houses with only 135,500 newly built homes (Wheeler, 2015).

The “Help to Buy equity loan” lends first-time home builders or buyers up to 20% of the overall cost. Loan fees will not be requested until five years have passed. This means that the home owner receives a 5% cash deposit and a 75% mortgage rate. The purchase price must not exceed 600,000 GBP.

Last year, the Department for Communities and Local Government released a new white paper entitled “Fixing our broken housing market” (Department for Communities and Local Government, n.d.). Central changes presented in the white paper include the introduction of new ways of assessing housing needs and increasing the local council’s share of responsibilities. Every local council will be forced to publish projections for local house building, and developers will be forced to use, or risk losing, planning permission once granted (Collinson and Elgot, 2017). An additional investment of 7.1 billion GBP will be invested in affordable homes programmes run by housing associations and local authorities. Furthermore, small and medium-sized building companies will be assisted and encouraged to expand, including support for off-site construction, where parts of the building are assembled in a factory. They will also push the initiative “build to let”, where private companies build large-volume rental flats for tenants. Communities Secretary Sajid Javin (Gov.uk, 2017) underlined the urgency for change by stating: “We have doubled the housing budget to deliver a million more homes, including hundreds of thousands of affordable ones. (…) But fixing the broken housing market will require a much larger effort. (…) The government is actively removing barriers to build-out.”

Moreover, the government decided to change their strategy of providing socially rented homes, which are currently available to families at about 50% of the market rate, to instead prioritising the construction of “affordable” homes, aiming to curb the shortage. They can be rented at up to 80% of market value (Agerholm, 2018).

Dan Wilson Craw, the Director of Generation Rent, an organisation that advocates affordable privately rented homes, criticises the white paper by claiming that:

“Until the government builds enough to overcome the housing shortage, high rents will continue to stifle living standards. Renters on stagnant wages need homes that cost no more than a third of their income, not ones let at 80% of the market rent, with a sticker that says ‘affordable’” (Collinson and Elgot, 2018, §33).

Conclusion and Recommendations

“Fixing the challenge is that on average 12,000 housing units are sold every year. But only 2,000 units are built every year.” Abigail Davies, associate director of Savills, continues “In part the debt threshold of the municipalities impedes municipalities to replace one housing unit sold by a new housing unit” (Savills, 2018). In addition, most cities are experiencing growing populations. The municipalities are entitled to sell the housing units at a discount. In addition, they are

38 www.ukhousingreview.org.uk
39 www.politics.co.uk/reference/right-to-buy
41 www.helptobuy.gov.uk/equity-loan/equity-loans
42 www.generationrent.org
required to funnel a large part of the revenue back to national government. This means that in effect the municipalities are running a deficit business:

1. They are required to sell to the tenants at a discount;
2. They are required to funnel the revenue of the sales back to national government;
3. They experience a debt threshold, which makes it difficult for the municipalities to access loans.

In conclusion, housing prices in the UK are on the rise and the market remains unequipped for the expected increase in demand occurring once the millennial generation enters the housing market. The Grenfell Tower incident sparked a nationwide debate on the availability, quality, and affordability of social housing. Politicians seem to have acknowledged the demand and have subsequently begun discussing solutions as well as implementing chosen ones.

On the local level, municipal authorities and other public landowners must change their approach of land usage to support the creation of affordable dwellings. At the national level, there must be a continued focus on the development of a purpose-built rental market that can offer higher quality, more secure renting and encourage shared ownership (Gardiner et al., 2014). These measurements are essential in order for low- and middle-income families to get a foothold on the housing ladder. Otherwise, when considering previous developments, the majority will be long-time renters or tenants reliant on a part-rent, part-buy product (ibid.).

AFFORDABLE HOUSING IN GERMANY

Since 2006, social housing is the responsibility of Germany’s 16 federal states (Bundesländer). Each state follows different programmes and funding schemes. On the federal national level, executive decisions concern rent regulation and housing allowance to households (Housing Europe, 2010). In the local sphere, authorities are in charge of ensuring affordable accommodation for those in need. From 2014 to 2017, there was an overall shortage, mainly in urban areas, of one million residential units in Germany (Kofner, 2017).

Germany faces an ever-growing demand of housing with a limited availability of housing, especially in Hamburg, Munich, and Frankfurt. Furthermore, prices for owner-occupied residences rose by 30% and tenant leases likewise rose by 15%. Social and cooperative dwellings make up a mere 6% of aggregated available housing (Deutsche Bank, 2017). Deutsche Bank conducted a study on housing policies in Germany and concluded that there is a nationwide lack of about 5.6 million social housing units. Currently, only 1.4 million are vacant (ibid.). This makes the share of social housing on the market in Germany one of the lowest in the European Union (Deutche Bank, 2017). Overall, the number of dwellings losing their status as social housing by far outnumber the number of social dwellings newly approved by public funding agencies (Kofner, 2017).

The legislation that regulates affordable housing access states that social housing is provided to households who are unable to procure adequate accommodation themselves due to having incomes below the German average. These families receive housing benefits (Wohngeld), which are calculated by comparing the number of family members, the gross annual family income, and the rent or mortgage payment (Kofner, 2017). In big cities, as much as 35% to 50% of households are eligible for a subsidised rental apartment (Pestel Institute, 2018). From 2020, the recent reduction in social housing is set to continue due to a new regulation that will stop the Federal Government’s transfer payments of up to 1 billion EUR to the provinces for the promotion of affordable housing (Statista, 2018).

Figure 8 illustrates this decline and lists previous spending on social housing from the beginning in 1990. The graphic shows a continuous decline in the construction of social dwellings, ending with a current number of 1.15 million social units in 2018.
Key Stakeholders

The private rental sector (PRS) accounts for almost 80% of rentals and for around 44% of the total housing market. Individual private proprietors, rather than property companies and financial institutions, dominate the German PRS (Kofner, 2017). Approximately 40% of all social rental housing stock is owned by public and cooperative housing organisations. The cooperatives are associations whose raison d’être is to support their members economically and socially, in this case by providing affordable housing. More than 85% of their properties are privately financed through their owners’ membership. According to the German Statistical Office, the total number of houses in 2016 amounted to 41,703,347 (Statistisches Bundesamt, 2017). The social housing sector represents only 3.3% of the accumulated German housing market, while it comprises 6% of the rental housing market (Statista, 2018).

Among the key stakeholders in the German social housing market are, for example, the housing company Sahle Wohnen, which owns about 21,000 apartments nationwide. It specialises in investing in existing and erecting new publicly subsidised apartments. About two thirds of their flats are qualified as social housing.

Die Sozialbau is a municipal housing company that has built, in cooperation with other sub-contractors approximately 8,500 apartments and private homes with subsidiaries since its foundation in 1956. More than 16,000 people currently live in homes managed by Sozialbau.

Funding

Every municipality and province follow their own unique social housing provision. Therefore, there are no centralised records. At the national level, public subsidies in the form of grants or tax relief cover the gap between the perceived and the actual rental cost. However, public subsidies decrease progressively as the rent increases (Housing Europe, 2010). The system is meant to grant temporary subsidies for social housing at moderate profits. Those subsidies are repaid after a certain period (usually 20 to 30 years). Subsequently, owners are free to rent out their apartments at normal market conditions (Immobilien, n.d.).

A major real estate company in Germany, Dr Lübke & Kelber AG, conducted a study with more than 1,000 companies in the real estate industry. Their survey concluded that promoting too many investment and building companies, investing in publicly subsidised social housing construction, is perceived unfeasible because of the fixed rent, allegedly problematic tenant clientele, and lengthy terms of the subsidy programmes.
The biggest issue is regarding the low-income return (Kwasniewski, 2017). The most prominent players in the industry proposed a shift from object promotion to subject promotion by, for example, financing poorer households and individuals with needs through direct payments, so-called “housing benefit”. Consequently, investors would not have to agree to subsidy conditions and rent restrictions (ibid).

Banks

KfW (Kreditanstalt für Wiederaufbau) is the world’s largest national development bank and Germany’s third largest bank in terms of total assets. Founded as a consequence of the Second World War in 1948 to rebuild the German economy, KfW is a national public sector development bank that pursues a business model based on a state mandate. All investment decisions are legally supervised by the Federal Ministry of Finance. KfW stimulates German middle-sized businesses and start-ups through loans and equity investments. Among the targeted investments are infrastructure projects, social housing construction, energy-saving technologies, and municipal infrastructure. In 2012, KfW provided more than 17 billion EUR to small and medium-sized enterprises. KfW supports the social integration of refugees in particular. In 2016, the bank supported municipalities with 1.5 billion EUR interest-free for the construction of housing facilities for refugees (KfW, n.d.).

Die Landesbausparkasse (LBS) is a public-sector building society and associated with the Savings Bank Finance Group. LBS is sponsored by federal provinces and savings bank organisations. The organisation grants loans to people who want to purchase or build houses. With 36.4% of the market share, LBS is the largest bank specialising in real estate investments (LBS, n.d.).

Policies

The new coalition from February 2018 between the Social Democratic Party of Germany (SPD) and the Christian Democratic Party (CDU) agreed to invest 2 billion EUR to further support social housing in 2020/2021. The statement was accompanied by the requirement that: “Social housing construction must at least be maintained at the current level” (Koalitionsvertrag, 2018). In terms of the overall construction of housing, the new government published the following statement: “We want to push the construction of 1.5 million new apartments and privately-owned homes. (...) Further tax incentives will be introduced for privately financed new residential construction” (Koalitionsvertrag, 2018).

This new regulation is very generic and does not list specific housing projects that will benefit from this additional spending. Nevertheless, it is a step in the right direction. Another positive sign is the construction boom, which started in 2017. In the past year, 365,400 new apartments were approved for construction, translating into an increase of 21.6%. This approval rate is the highest since 1999. The trend is especially discernible in cities where growth is occurring at an unprecedented pace. Despite the construction boom, rents in cities are likely to remain high due to the increasing costs of building caused by, amongst other things, stricter energy requirements (Müller, 2017).

Another new initiative that is to be implemented is the so-called “construction money for children”. These funds are allocated to support young families who want to buy or build a new house. Families with a gross annual income less than 75,000 EUR are eligible for this benefit. For families with children, the limit is raised by 15,000 EUR per child. When purchasing an apartment or house, 1,200 EUR per child a year will be paid by the government over a period of 10 years (e.g., 36,000 EUR for three children). This initiative will be implemented via the state’s business development bank KfW and is due to commence later this year. Federal Building Minister Horst Seehofer estimates that up to 200,000 families could benefit from the new initiative (Zeit Online, 2018).

The new coalition also plans to tighten the “rental price brake”, which came into effect in June 2015. The regulation aims to hinder rents from increasing (Fabricius, 2016). According to the regulation, rents for a dwelling may not surpass 10% of the rate for a similar local apartment. This rental price break is implemented in areas with a “tight housing market”, which are determined by the Länder (Bundesministerium der Justiz, n.d.). Current housing markets that are eligible are Berlin, Munich, Leipzig, and Frankfurt/Main, where landlords surcharged rents of up to 45% in recent years (ibid.). Furthermore, if the province decides to adopt the law, landlords will be obligated to disclose the previous rent to potential tenants. Previously, landlords were not required by law to inform the new tenants. Now, new renters can monitor whether or not landlords comply with the maximum increase of 10%. According to the leader of the SPD Andrea Nahles, these changes are also meant to commence this year: “Finance Minister Olaf Scholz has already initiated the necessary changes in the cabinet” (Zeit Online, 2018).

46 www.kfw.de/KfW-Group
47 wwwlbs.de
Unique System Characteristics
A unique trait of the German housing system is that it is the country with the lowest property ownership rates in Europe. Approximately 43% of citizens rent their homes. In comparison with the other 27 EU countries, Germany has the second lowest home ownership rate with 52%. Much smaller economies, such as Romania (95%) or Poland (81%), show a higher preference for property ownership (Eurostat n.d.).

Another unique feature of Germany’s current social housing system is the sudden spike in demand for social dwellings due to the unanticipated intake of approximately 1 million refugees and migrants between 2015 and 2018. In 2015, Germany received large numbers of refugees during the refugee and migration crisis that overwhelmed Europe. Considering the intake of approximately 1 million refugees and migrants, one of the highest intakes in the EU in terms of total number and relative to the population, Germany needs to build even more affordable apartments to meet the demand of social housing (Oberhuber, 2016).

Conclusion and Recommendations
All in all, first steps are on the way that are intended to make the housing market fairer, create more social housing units with a predicted investment of 2 billion EUR, and support families with middle- and low-incomes to start building their first-owner homes.

Nevertheless, the German social housing market is insufficient and not transparent due to local differences caused by the deregulation to the federal states. Since every city or states has the legislative freedom of managing their social housing policies individually, a common national record of performance and actions cannot be found. The creation of a government ministry that manages, records, and collects all actions and legislative regulations of all 17 federal states could help by conducting a supply and demand analysis of the housing market in each area.

Additionally, current regulations and policies laid down in the coalition agreement do not address the demand for housing units for refugees (Süddeutsche Zeitung, 2018).
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