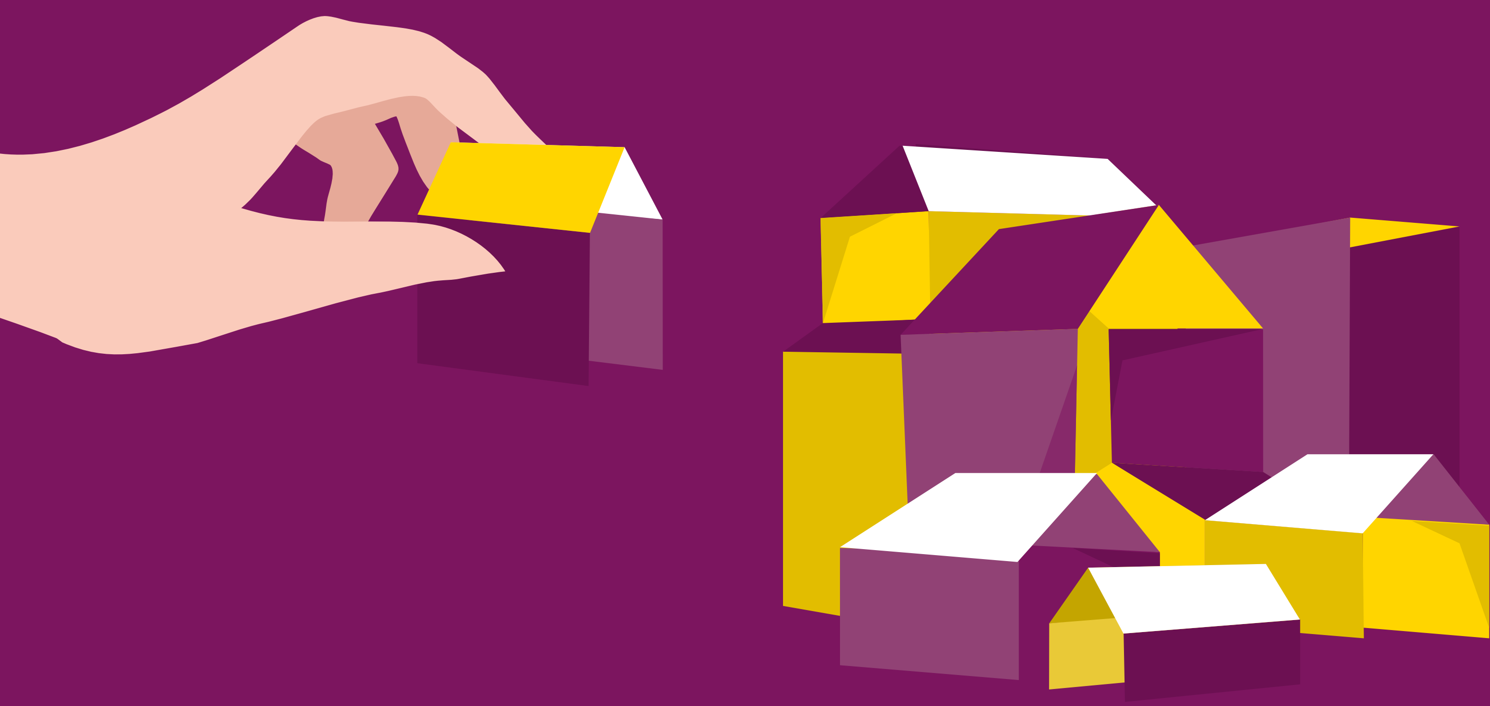
ROSA LUXEMBURG STIFTUNG

Matthias Bernt and Andrej Holm

SOCIALIZING HOUSING CUTS THE RENT

A brief study outlining the positive impacts of socializing Berlin’s housing stock



MATTHIAS BERNT is a senior researcher and acting head of the "Politics and Planning" research area at the Leibniz Institute for Research on Society and Space (IRS) in Erkner, Germany, as well as a private lecturer at the Institute of Social Sciences at Humboldt University in Berlin. His specific research interest focuses on the political control of urban development processes.

ANDREJ HOLM is a social scientist at the Humboldt University of Berlin. His research focuses on gentrification and housing policy. He is also active in the movement fighting for the right to housing in Berlin and is involved in numerous urban policy initiatives.

The authors would like to thank VALENTIN REGNAULT for preparing the maps.

IMPRINT
ONLINE-Studie 2/2023
is published by the Rosa-Luxemburg-Stiftung
Responsible: Loren Balhorn
Straße der Pariser Kommune 8A · 10243 Berlin · www.rosalux.de
ISSN 2749-3156 · Editorial deadline: December 2022
Editor: Armin Kuhn
Translation: Hanna Grześkiewicz und Ryan Eyers for Gegensatz Translation Collective
Proofreading: Loren Balhorn
Typesetting/Production: MediaService GmbH Druck und Kommunikation

INHALT

FOREWORD

The demand to socialize housing owned by large private landlords has captured the imagination of an entire city. What sparked this enthusiasm was the prospect of forcing market-oriented speculators out of Berlin. Even more important was the hope of finally being able to afford an apartment or to move in the city, as socializing housing promises lower rents. But can housing socialization deliver on this promise?

Those who oppose socialization strongly disagree: rents are still comparatively low at corporations like Deutsche Wohnen or Vonovia. To lower them any further would prevent investment in existing or new housing. Ultimately, this would be irresponsible towards the housing industry. This attitude is also widespread in the political sphere. Housing Senator Andreas Geisel of the Social Democratic Party (SPD) is not the only one to have repeatedly questioned the "sense" of socialization as a policy.

This study offers a clear answer: the socialization of housing can reduce rents without any risk to the housing sector. For more than 200,000 households owned by the city's six largest private housing corporations, rents could fall by an average of 16 percent if the apartments were managed similarly to state-owned housing companies –– with better maintenance and more affordable housing options for people on low incomes. Moreover, socializing housing would reclaim housing especially in neighbourhoods that are particularly affected or threatened by gentrification. This is something that could not be achieved with other policies such as new construction.

The "expert commission" appointed by the Berlin Senate recently presented an interim report of its deliberations on the implementation of the "Expropriate Deutsche Wohnen & Co." referendum, and discussions are now in the home stretch. More than 1 million Berliners voted in favour of expropriation. The commission has declared the socialization of housing to be possible in principle, notwithstanding a few detailed legal questions. The ball is now in the politicians' court. In a debate that is often ideological and highly emotional, this study demonstrates convincingly and factually that while socializing housing may not solve all of the city's housing problems, it can significantly improve social housing provision –– far more than through any other means.

Berlin, December 2022
Armin Kuhn, Fellow for Housing and Rent Policy
at the Rosa Luxemburg Foundation

SUMMARY

In Berlin, a majority of voters backed the socialization of housing owned by large housing corporations, defined as those owning more than 3,000 apartments in the city. Opponents of the project question not only the legal admissibility and financial viability, but also the "sense" of housing socialization. They claim that socialization would have no positive effect on the "easing" of the housing market, i.e. the availability of affordable housing.
This study refutes this claim. It shows:

– Socializing housing could result in a rent reduction of, on average, 45–160 euro per month (a reduction of about 16 percent) for more than 200,000 Berlin households. Alternatively, rents could be frozen, thus significantly slowing down rent increases in the longer term (the **rent price effect**).
– Socializing housing would make it possible to offer affordable housing to more people on low or medium incomes who hold a certificate of eligibility for social housing (*Wohnberechtigungsschein*/WBS). The effect would be much greater than the planned (but so far only partially realized) new construction of subsidized apartments (the **social supply effect**).
– Socializing housing can counterbalance the social division of the city in terms of urban space and it would expand the supply of affordable housing where it is most needed. This would slow down gentrification processes and counteract tendencies towards socio-spatial division (the **spatial integration effect**).

INTRODUCTION

On 26 September 2021, 59.1 percent of the Berlin electorate voted in favour of socializing large housing corporations. The "possibilities and pathways" towards a potential socialization of housing are currently being discussed by an expert commission appointed by the Berlin Senate. The debate has moved decisively towards the stage of legal feasibility and cost estimates. While this is happening, opponents of housing socialization continue to deny that it could improve social housing in the city. Housing Senator Andreas Geisel of the Social Democratic Party (SPD), for example, took a clear stand against the project in the *rbb* evening show on 15 December 2022. The "question of whether it makes sense" remains a present one, as the capital that would need to be raised to compensate the housing corporations that would be socialized "would no longer be available for new construction, climate-friendly renovation, or rent stabilization". Furthermore, "the question of whether it would actually contribute to easing the housing market remains ... open".

This is the backdrop against which this short study discusses the social effects of possible socialization of large housing corporations in Berlin. It shows that socializing housing is beneficial for Berlin's tenants and apartment seekers, and that it can indeed contribute to an easing of the housing market.

The scope of these benefits is dependent on the form that the socialization of housing takes: the price point of compensation to the housing corporations, for instance, or how the housing is managed following socialization, what the conditions are for housing allocation, and the price of rent. All these questions still remain open. Many variants are conceivable and ultimately all these factors depend on political decisions. However, in this study we proceed from the assumption that socializing housing is only justifiable if it includes public management of the housing being taken over. The conditions under which Berlin's state-owned housing companies rent out their apartments represent a minimum threshold, below which it would be difficult to justify the socialization of housing. In this study, the state-owned companies, therefore, act as a benchmark against which the possible effects of socializing large profit-oriented housing corporations can be measured.

When getting down to the finer details, different transition models present themselves. They are presented in this short study as two basic variants centred on the cost of rent. We refer to these variants as the "rent reduction model" and the "rent freeze model". What both of these models have in common is management according to the guidelines that currently apply to the state-owned housing companies. If the socialization of housing leads to other organizational forms, such as those proposed by the initiative "Expropriate Deutsche Wohnen & Co.", the calculation would have to be adjusted accordingly.

Based on the current rules followed by the state-owned housing companies, the benefits to Berlin's tenants afforded by socializing housing can be quite precisely measured. This is due to rental and management practices of the state-owned housing companies having been controlled already for some time by the cooperation agreement "Affordable Rents, New Housing Construction and Social Housing Supply" entered into with the state of Berlin, which contains detailed specifications on the price of rent, housing allocation, new construction, and tenant participation.[1] In addition, detailed descriptions of the letting and management policies of state-owned housing companies are available in the form of reports prepared by *Wohnraumversorgung Berlin.* It is clear that state-owned housing providers are supported by the state of Berlin through the allocation of land and the provision of earmarked subsidies in order to contribute to the easing of Berlin's housing market through new construction, acquisition, and energy-efficient renovation. Alongside this, the companies have been generating profits in the triple-digit millions for years. The fixed increases to rent set out in the cooperation agreement thus allow for a solid management of the housing stock.

On this basis, when comparing the practices of state-owned housing companies with the letting and management activities of the large profit-oriented housing corporations that each own more than 3,000 apartments in Berlin, i.e. those that would be affected by housing socialization measures, major differences become apparent. The housing corporations rent at a higher price point, they spend less money on maintenance, and they have more housing stock in high-priced locations. Management of their housing stock on the terms on which the state-owned housing companies manage their stock would therefore reduce rent prices, improve the housing situation, and make more affordable housing available where it is needed most.

This study highlights the above-mentioned benefits of socializing housing in detail by utilizing three key methods:

1) We analyse the effect that socialization could have on rents and show that rent could be significantly reduced for more than 200,000 households;
2) We examine the social supply effects of socialization and show that more people searching for an apartment who are entitled to social housing through possessing a *Wohnberechtigungsschein* (WBS) could actually acquire an affordable place to live;
3) We shed light on the effects of the socialization of housing on social segregation and show that expropriation of large housing corporations could counteract the socio-spatial division of the city.

All in all, socializing housing could facilitate the implementation of the public sector mandate in Berlin's constitution to "promote the creation and maintenance of adequate housing, especially for people with low incomes" (§28[1], Constitution of Berlin). The socialization of housing therefore makes sense.

To evidence this assessment, we proceed as follows: in the first chapter, we take a look at the large housing corporations operating in Berlin and their letting and management strategies. In the second chapter, we calculate the rent effect of a socialization of housing for existing tenants, as well as for new tenants and apartment seekers. Based on this, we then examine the effect that a socialization of housing would have on the quantity of supply for households with a WBS. We conclude with a consideration of the socio-spatial implications of housing socialization and a brief summary.

1 See Senate Deparment for Urban Development and Housing, "Kooperationsvereinbarung 'Leistbare Mieten, Wohnungsneubau und soziale Wohnraumversorgung'", https://www.stadtentwicklung.berlin.de/wohnen/wohnraum/wohnungsbaugesellschaften/de/kooperationsvereinbarung.shtml, last accessed 30 January 2023.

1 HOUSING CORPORATIONS IN BERLIN: STOCKS AND RENTS

FINANCING MODELS

Over the last two decades, market-oriented — and in some cases internationally active — corporations have become important players in urban housing markets. Made possible by sales of municipal, cooperative, and company-owned housing, listed corporations have also bought up extensive housing portfolios in almost all of Germany's larger cities in the last two decades, which has led them to become a decisive factor in determining the structure of housing markets.

In the early 2000s, the business models of private equity firms, real estate investment trusts (REITs), and real estate funds were often still characterized by "opportunistic" strategies (meaning those that take advantage of favourable opportunities). Characteristic of that time were quick resales, outsourcing, poor maintenance, and a rent structure aimed at low-income and welfare recipients. Following the entry of listed corporations onto the market, this business model gradually changed. Today, the focus is on increasing the value of the respective acquired real estate portfolio, in a way which makes it possible for high dividends to be paid to the company's shareholders. Scholars therefore also speak today of the housing sector's "financialization 2.0".[2]

The following practices are typical, although their ratios are mixed and matched by the individual corporations:

- Valuation gains: The corporations' potential market value is increased through a higher balance-sheet valuation of the housing stock in annual business reports. This also increases the collateral available for borrowing. The further growth of the company is thereby essentially financed from within, as the balance sheet-related increases in value become collateral for new loans. An example of this is the company Vonovia, for which by 2021 the balance-sheet value of the real estate portfolio had increased 9.5-fold since the IPO in 2013, even though the housing stock only grew 3.5-fold.[3] As a result of this speculative valuation practice, the overall price trend on the real estate market is driven upwards.
- Gains in efficiency: Corporations seek to reduce costs through standardization, automation, and digitalization. As a rule, this is at the expense of the quality of services provided. Listed housing corporations have consequently often been in the press for neglected repairs, problems with reachability, and faulty billing.
- Insourcing: Some corporations have shifted the provision of housing-related services internally, increasingly having them carried out by their own subsidiaries. This goes hand in hand with wage dumping that occurs if the corporations do not adhere to industry-standard collective agreements — on the other hand, this makes high additional profits possible.[4]
- Modernization: Corporations pursue modernization as a form of investment that simultaneously increases the balance sheet value of the housing portfolio while also boosting rental income. In doing so, the corporations focus on measures whose costs can be passed on to the tenants through modernization charges, while the expenses for repair and maintenance are kept low.
- Maximum use of the scope for rent increases: In order to increase their balance-sheet value, corporations make maximum use of the possible scope for rent increases. In addition to modernization-related rent increases, especially in the case of new leases and rent increases in existing properties, rent prices are regularly demanded at least at the upper end of what is legally possible. In a company's annual report, this practice is referred to as a "business model (of) creating value through rent increases".[5]

In summary, it is evident that the profit-oriented housing corporations pursue different business models –– but all models are at the expense of the tenants. Their business activities are primarily oriented towards the yield expectations of the financial markets and the interests of shareholders, not towards long-term portfolio management and the goal of affordable rents.

---

2 See Gertjan Wijburg, Manuel B. Aalbers and Susanne Heeg, "The Financialisation of Rental Housing 2.0: Releasing Housing into the Privatised Mainstream of Capital Accumulation", Antipode 50, pp. 1098–1119, 2018; Daniela Gabor and Sebastian Kohl, My Home Is an Asset Class: The Financialization of Housing in Europe, Brussels 2021.

3 Daniel Zimmermann, "Geschäftsmodelle börsennotierter Wohnungskonzerne am Beispiel von Vonovia. Expertenkommission zum Volksentscheid 'Vergesellschaftung großer Wohnungsunternehmen'", hearing of December 2022 titled "Bewirtschaftung von Wohnimmobilien und Auswirkungen einer Vergesellschaftung auf den Berliner Wohnungsmarkt", Berlin.de, http://www.berlin.de/kommission-vergesellschaftung/, last accessed 26 January 2023.

4 Kurt Unger, "Mieterhöhungsmaschinen: Zur Finanzialisierung und Industrialisierung der unternehmerischen Wohnungswirtschaft", *PROKLA: Zeitschrift für Kritische Sozialwissenschaft,* 2/2018, pp. 205–225.

5 Adler Group, *Geschäftsbericht 2021,* Senningerberg (Luxemburg): Adler Group, 2022, p. 92.

SIZE OF HOLDINGS IN BERLIN

The amount of stock managed by institutional investors in Berlin is considerable — but its exact size is still unknown, as there is insufficient available data concerning the ownership structures on Berlin's housing market. On top of that, the Berlin state government has so far not even granted access to land register data to the expert commission it itself appointed. The discussion regarding the socialization of large housing corporations is therefore based on estimated data.

The most detailed study on the extent of the stocks to be affected housing socialization was presented by Christoph Trautvetter.[6] It shows that of the approximately 2 million apartments in Berlin, at least 330,000 apartments are managed by financial market and stock market-oriented corporations. The "big six", which are Adler/ADO, Grand City Properties, Heimstaden/Akelius, Vonovia, Deutsche Wohnen, and Covivio, together own around 222,000 apartments in Berlin. The number of apartments they manage has increased by 15 percent in the last six years alone. In addition, there are other holdings in the hands of companies such as TAG Immobilen AG, BGP Investment, Pears Global Real Estate, and others, about whose size little is known. With these companies included, Trautvetter and Bonczyk estimate the size of the portfolios to be socialized to be at approximately 250,000 apartments.[7] In light of this, it becomes clear that large, private for-profit housing corporations have an influence on Berlin's housing market comparable to the state-owned housing companies. Concentration processes have also been observed in recent years, with corporations merging, selling portfolios, or reallocating them to specialized sub-companies. The profit-oriented corner of the market is in constant flux.

In this brief study, we have limited ourselves to examining the six corporations with the largest portfolios in Berlin, for which data of sufficient quality and depth is available. Companies that will also be affected by housing socialization, but for which little data is available, are excluded. The study makes cautious assumptions and the actual effects of socialization tend to be underestimated. Table 1 below provides an overview of the scope and development of the stocks examined for the years 2016–2021.

Table 1: Size of the housing portfolios of the six largest listed corporations in Berlin

	2016	2017	2018	2019	2020	2021	Increase since 2016
Adler/ADO	17,701	20,649	22,202	16,255	19,864	19,830	12%
Grand City Properties	6,270	8,276	8,141	7,580	7,821	8,025	28%
Heimstaden/Akelius	12,313	12,781	14,301	15,121	15,552	18,577	51%
Vonovia	32,454	38,664	41,943	42,241	43,171	45,838	41%
Deutsche Wohnen	110,673	114,289	115,612	115,740	114,191	113,202	2%
Covivio	13,421	15,771	17,155	15,813	15,843	16,711	25%
Total	**192,832**	**210,430**	**219,354**	**212,750**	**216,442**	**222,183**	**15%**

Source: Companies' annual reports

LETTING AND MANAGEMENT STRATEGIES

For a discussion of the letting and management strategies of the market-oriented corporations, it is important to note that there are marked differences between the individual corporate portfolios and choice of management strategy.

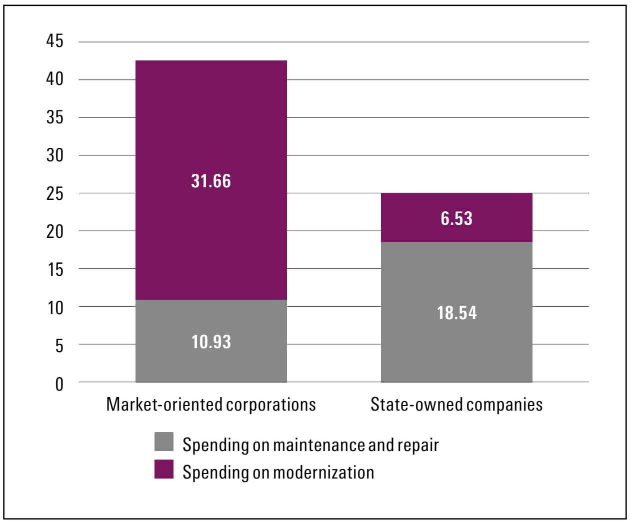
Looking at the structure of company expenditures, it nevertheless becomes clear that the lion's share of portfolio-related expenditures of all companies is accounted for by modernization measures, which have a flow-on effect on rent. On average, maintenance expenditures are about half the amount spent by the state-owned housing companies on their apartments. Tenant complaints and occasional reports in the media about heating failures, dilapidated balconies, and dirty staircases find their financial expression here. The share of modernization costs is much higher in profit-oriented companies: here, all corporations measure several times higher than the state companies. Particularly striking here is Heimstaden/Akelius, where high modernization standards seem to be the norm (see

6 Christoph Trautvetter, *Who Owns the City? Analysis of Property Owner Groups and Their Business Practices on the Berlin Real Estate Market,* edited by the Rosa-Luxemburg-Stiftung, Berlin: Rosa-Luxemburg-Stiftung, 2021.

7 Christoph Trautvetter and Sophie Bonczyk, *Profitmaximierer oder verantwortungsvolle Vermieter? — Große Wohnungsunternehmen mit mehr als 3.000 Wohnungen in Berlin im Profil,* study conducted by the Rosa-Luxemburg-Stiftung and DIE LINKE representatives in Berlin's state parliament, Berlin: Rosa-Luxemburg-Stiftung, 2020.

Table 9 in Appendix 2).[8] Figure 1 shows expenditures related to modernization and repair of the six large real estate corporations compared to the state-owned housing companies. It is clear that all profit-oriented companies spend less money on repairs and significantly more money on modernization that can subsequently be recouped via increased rents.
While the six large real estate corporations spent an average of 10.93€/m² per year on repairs and maintenance in recent years, the state-owned housing companies spent an average of 18.54€/m² per year to keep their portfolios in good condition. The proportional investment in modernization measures that can be transferred on to rents is the opposite. Here, the six largest real estate corporations invested an average of 31.66€/m² per year in recent years.
The ratio of expenditure related to maintenance and modernization investments between the six large property corporations and the state-owned housing companies is inversely proportional. Whereas 74 percent of expenditure of the profit-oriented corporations on existing stock is accounted for by modernization measures, this figure is only 26 percent for the state-owned housing companies. The ratio is reversed when it comes to expenditure on maintenance. For measures that may not be passed on to tenants, the large real-estate corporations spend only about a quarter of their stock-related expenditure — whereas for the public housing companies, this share is three quarters of total expenditure.
Similar differences can be observed in the structuring of rents. In this context, Vonovia and Deutsche Wohnen hold a large proportion of their apartments in privatized settlements of municipal and/or social housing. Due to the location, housing quality, and the income structures prevailing in these areas, the possibilities for rent increases are more limited in these stocks. Accordingly, the share of modernization expenditure towards the total costs is lower. The situation is different for Heimstaden/Akelius, for example, which tend to have older inner-city building stock, and thus considerable rent increases.
The management strategies of the companies are reflected in their respective rent prices. Figure 2 shows that the rents for existing tenants of the six large real estate corporations in Berlin — despite an already high starting value — rose by an average of 3.9 percent per year between 2016 and 2021. The increase was thus higher than that of the state-owned housing companies, and exceeded that of the local comparable rent.
The rental price dynamics of the individual companies show significant differences. While rents in Covivio's

Figure 1: Comparison of stock-related expenditure, 2016 to 2021 (in euro/m² p. a.)

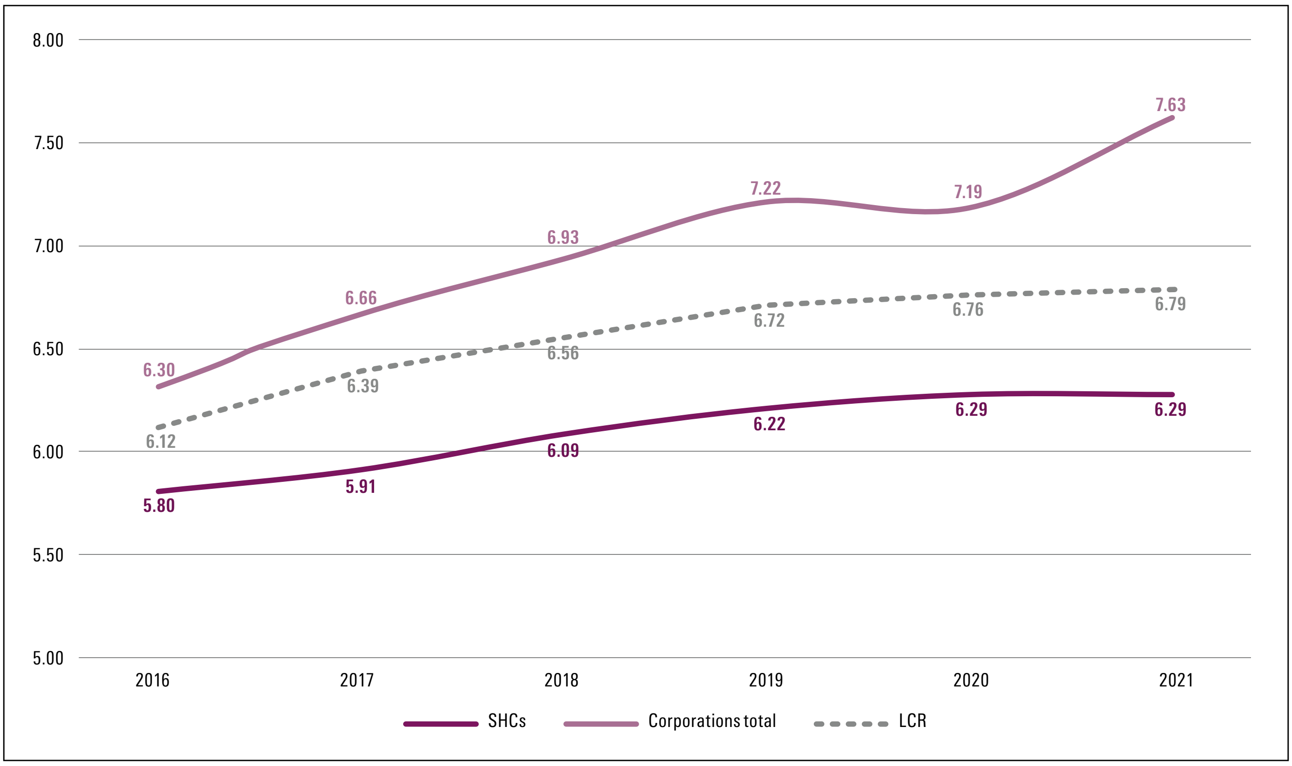


Source: Companies' annual reports

stock increased by an average of only 2.1 percent per year between 2016 and 2021, the average annual rate of increase in ADO/Adler Group's stock was 7.4 percent per year (see Table 6 in Appendix 2). At Heimstaden/Akelius, the average rent is currently (2021) already at 9.36€/m2 due to aggressive "out-modernization" and re-letting — this is about one third more than the local comparable rent and almost 50 percent more than the rent at the state-owned housing companies.
A similar picture emerges for lettings to new tenants. Here, too, the rents of the housing corporations are significantly higher than the local comparable rent and the rents of the state-owned housing companies when new tenancy agreements are signed. The *Mietpreisbremse* ("rent brake") that is in force in Berlin, which is supposed to limit expensive new leases (to a maximum of 10 percent above the local comparable rent), seems to not be of much concern for the corporations. New contract rents were significantly above the orientation values of the *Mietpreisbremse* as well as above the new contract rents of the state-owned housing companies. Over time, the gap has grown to be even larger.
The six large market-oriented corporations also show an enormous internal differentiation in rents agreed on in new contract. While Vonovia's new contract rents of 8.08€/m² for its former non-profit and public housing stock are only slightly above the guideline values of the *Mietpreisbremse,* Heimstaden/Akelius and Grand City Properties, with their larger inner-city housing stock, exceed the limit of 10 percent, in some cases significantly (see Table 7 in Appendix 2).

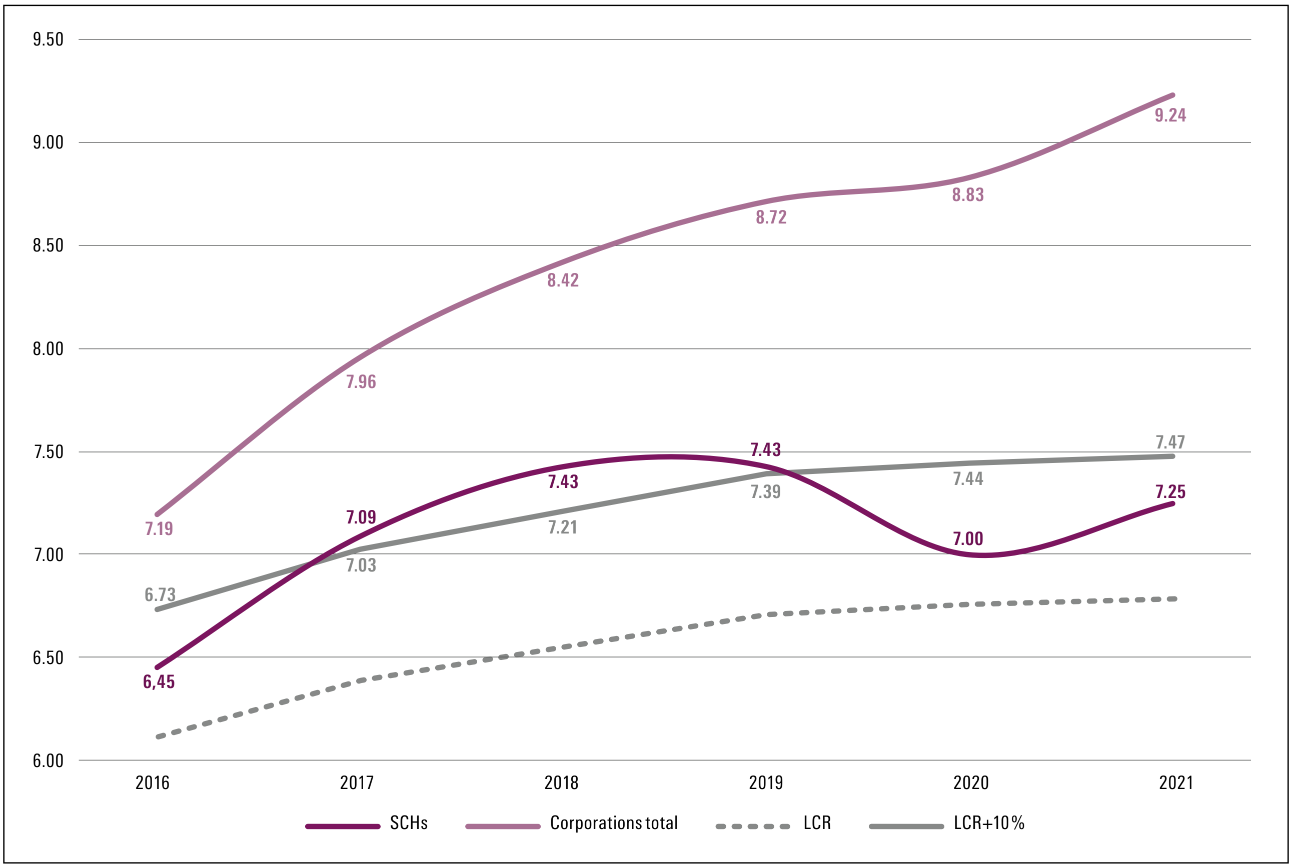
8 This is particularly important as high modernization costs also enable high rent increases. Until 2018, 11 percent of modernization costs could be set against yearly rent. Since then, this amount has been reduced to a maximum of 8 percent or 3€/m2 within six years. This allows for rapid rent increases. Table 10 in Appendix 2 shows the average modernization-related rent increases over time for the different corporations being examined.

Figure 2: Comparison of rent price development (euro/m², net base rent)



SHCs = State-Owned Housing Companies, LCR = local comparable rent (Mietspiegel [rent index] rent level)
Source: Companies' annual reports

Figure 3: Rent prices for new rental contracts, comparison (euro/m², net base rent)



Source: Companies' annual reports

The management strategy of the housing corporations in Berlin compared to the state-owned housing providers can be reduced to a simple formula: less expenditure on maintenance and higher rents for existing tenants and for new lettings. The contrast with the activities of the state-owned housing companies, which are obliged by the cooperation agreement with the Berlin Senate to orient themselves towards affordable rents, is obvious. As can be seen in Figures 1 to 3, they rent their apartments more cheaply (both to existing tenants and when newly renting out apartments) and spend more money on maintenance. Their contribution to new construction is also proportionally much greater.

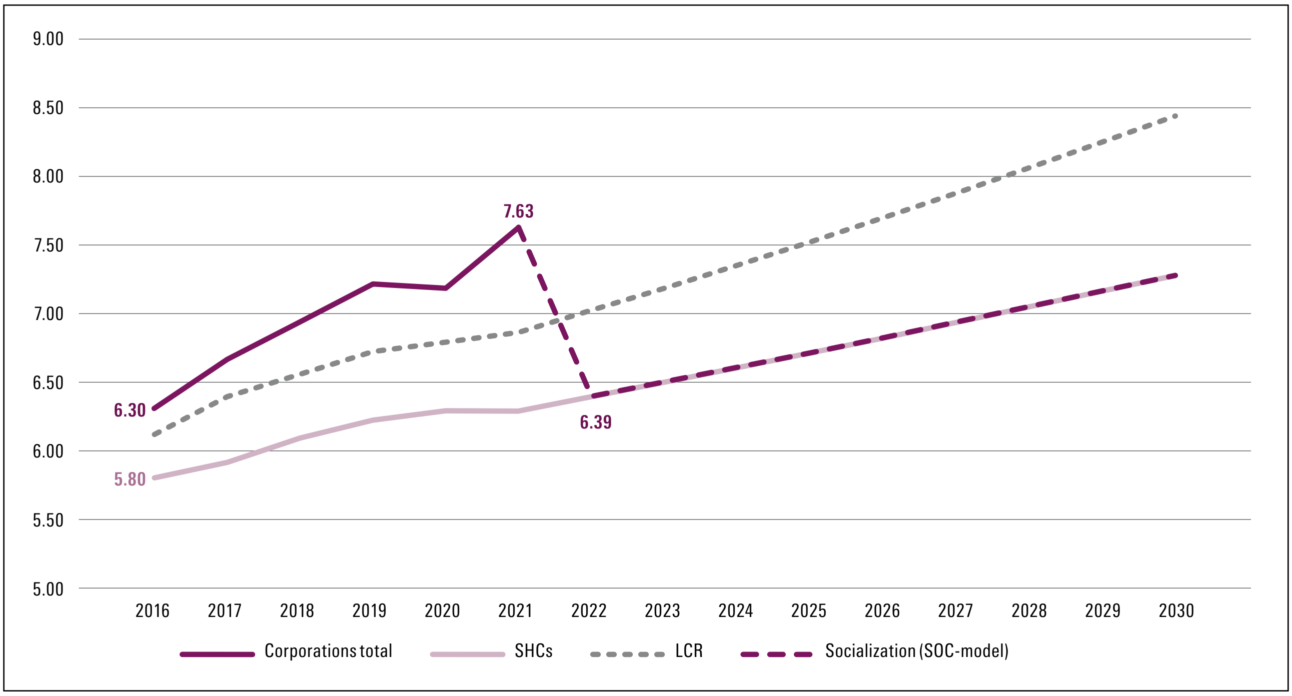
2 SOCIALIZING HOUSING LOWERS RENTS

Assuming that rental structures after housing socialization will be based on the conditions that currently apply to the state-owned housing companies, there is considerable potential for reductions to rents. In principle, two different approaches are conceivable: the "rent reduction model" and the "rent freeze model". They can also be combined (rents could be frozen overall, for example, and only reduced for low-income households). Both models also assume a continuation of the trend forecast for 2023 onwards, meaning it is assumed that both the housing corporations and the state-owned housing companies will increase their rents on average at the same rate as they have done in the years since 2016. Since the actual development of rents in the future is unknown, this is a model calculation based on average past developments.

In the first model (the rent reduction model), the excessively high rents for all socialized apartments would be lowered to match the level of comparable apartments managed by state-owned housing companies, and only rising slowly from that level as a starting point. This would entail a rent reduction from an average price point of 7.63€/m² to 6.39€/m².[9]

It is unquestionable that a reduction in rent prices would be a significant relief for the tenants in socialized properties. Based on data from the annual reports of the corporations, the following average relief can be calculated:

Figure 4: Changes in rent prices in socialized housing stock (rent reduction model)



Source: Companies' annual reports and trend forecast

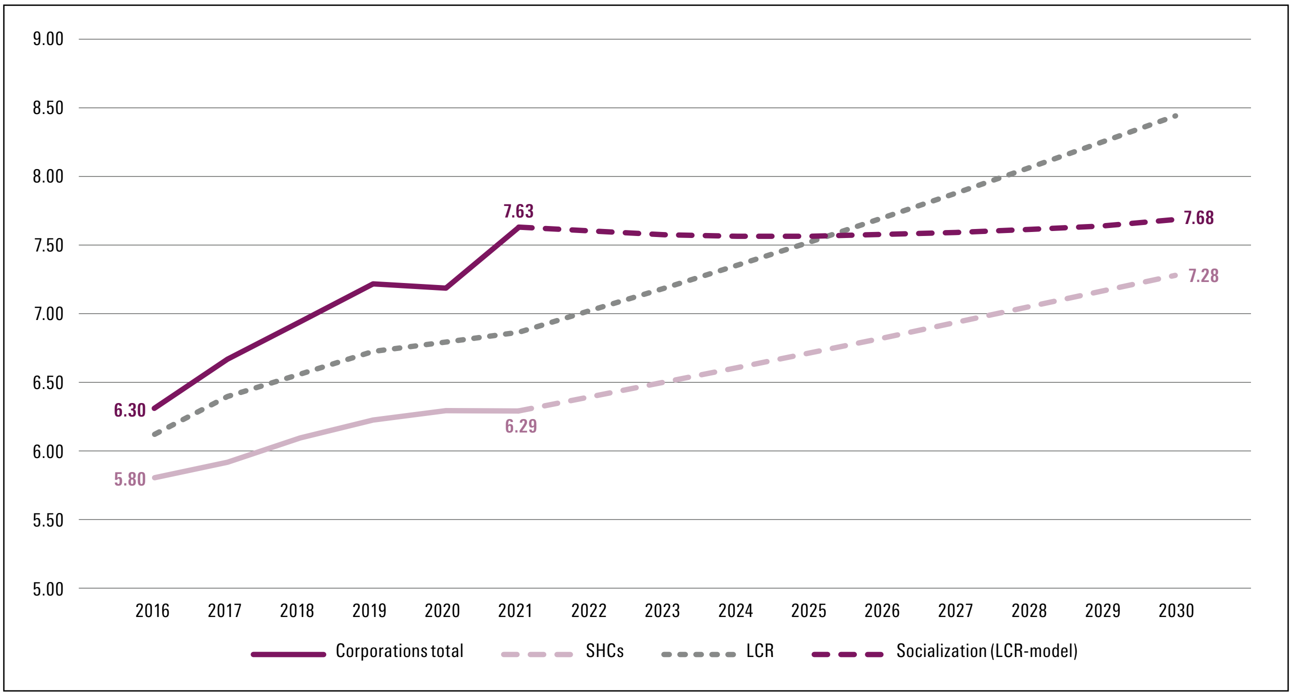
9 The effort required for the administrative implementation of rent reduction is not discussed here. It depends on the chosen rent structure model and would require special consideration if implemented.

Table 2: Rent relief following housing socialization

Company	Housing stock in Berlin (2021)	Average apartment size in m²	Average rental price per m² (2021)	Reduction to… per m²	Difference per m²	Relief per apartment per month
Adler/ADO	19,830	69	8.71 EUR	6.39 EUR	2.32 EUR	159.88 EUR
Grand City Properties	8,025	72	8.70 EUR	6.39 EUR	2.31 EUR	166.11 EUR
Heimstaden/Akelius	18,577	64	9.36 EUR	6.39 EUR	2.97 EUR	189.87 EUR
Vonovia	45,838	64	7.10 EUR	6.39 EUR	0.71 EUR	45.26 EUR
Deutsche Wohnen	113,202	59	7.15 EUR	6.39 EUR	0.76 EUR	44.67 EUR
Covivio	16,711	68	8.20 EUR	6.39 EUR	1.91 EUR	122.89 EUR
Total	222,183	63	7.63 EUR	6.39 EUR	1.24 EUR	78.02 EUR

Source: Companies' annual reports and trend forecast

Figure 5: Changes in rent prices in socialized housing stock (rent freeze model)



Source: Companies' annual reports and trend forecast

On average, rent relief per household would amount to 936.20€ per year. This corresponds to an average rent reduction of about 16 percent of the net base rent.

In the second model (the rent freeze model), no rent reductions would be made immediately.[10] The rents of households that already pay a higher rent price would be frozen until their rents have reached the level of comparable apartments managed by the state-owned housing companies. Exactly at which point in time this would be reached depends on the future specifications of the cooperation agreement stipulated by the state of Berlin. Here, too, there will be a long-term price-dampening effect that will increase over time and keep the socialized apartments affordable in the long term — assuming an increase in the general local comparative rent of 2.3 percent per year. In addition, in the rent freeze model new rentals are to be oriented towards local baseline rents, so that in the long term the rents would gradually decrease as a result of fluctuation.

In all of the possible variants, the more than 220,000 households living in housing stocks managed by the housing corporations would be receive signifi-

10 One argument in favour of this approach would be distribution policy considerations. In light of the high initial rents in parts of the housing stock to be socialized, households that could afford higher rents would also benefit from a rent reduction.

cant financial relief, at least in the medium term. The relief would also have a lasting effect and –– since the rents charged after socialization would be included in future rent indexes –– would also have a net rent-reducing effect on the overall market beyond the socialized apartments. It is difficult to imagine that new construction could have a similar impact in the medium term.

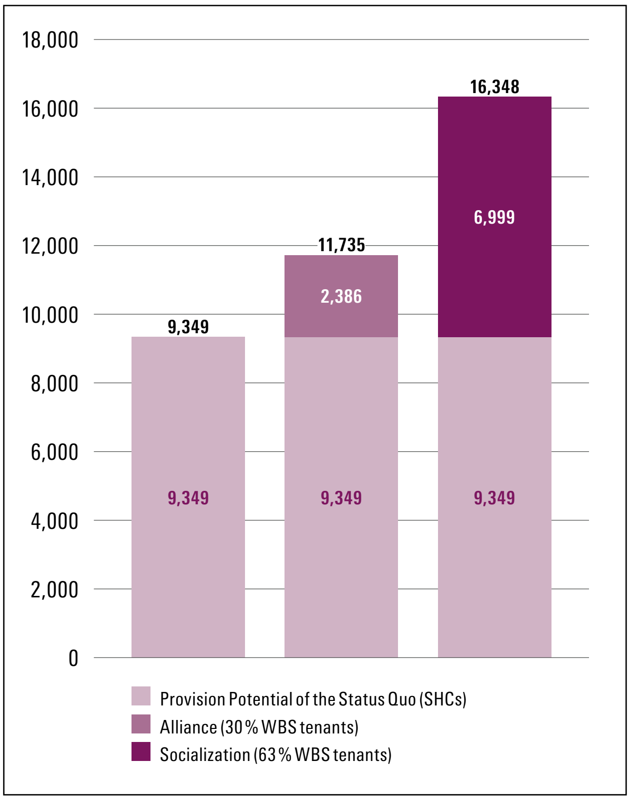
3 SOCIALIZING HOUSING HELPS PEOPLE LOOKING FOR A HOME

Socializing housing would not only benefit existing renters, but also facilitate improved provision of affordable housing for those currently seeking a home.

In 2021 around 969,000 households in Berlin had the right to a *Wohnberechtigungsschein* (WBS 180),[11] a certificate of eligibility for social housing. Also in 2021, 45,608 of the households in possession of a WBS were unable to find housing options that met the WBS criteria. In May 2022, the number of such WBS-entitled households had risen to 49,834.[12] In recent years, the annual number of approved WBS applications has been between 40,000 and 45,000. Going forward, due to current acute housing needs we will base our considerations on an assumed number of 50,000 new WBS holders per year.

Between 2016–2021, on average 9,349 apartments have been made available to WBS holders annually by the state-owned housing companies,[13] providing for roughly a fifth of those on the waiting list. In addition to this, as part of the "Bündnis Wohnungsneubau und bezahlbares Wohnen in Berlin" (Alliance for New Construction and Affordable Housing in Berlin) the housing providers represented in this alliance who possess over 3,000 apartments have pledged to give 30 percent of newly vacated apartments to WBS holders (up to the WBS 180 federal income threshold) per year. From the six large real-estate groups examined in this study, only Vonovia with its 160,000 apartments (which includes the holdings of Deutsche Wohnen) is part of the agreement. Whether and to what extent the agreement will actually be implemented is unknown, because the state of Berlin does not have the requisite ability to conduct oversight and the housing companies themselves do not report on such matters.[14] Assuming that Vonovia upholds its side of the agreement and implements it in full, and based on a presumed fluctuation rate of 5 percent (this approximately corresponds to the average fluctuation in holdings among the providers examined in this study since 2016, and is a rough measure of the past five years), an additional 2,836 of those seeking housing with a WBS could be provided with an apartment. This, however, would still leave almost three in four WBS holders unprovided for.

Figure 6: Socialization's Potential to Increase Provision for WBS Holders



Source: Companies' annual reports

What effect would a socialization of the 222,000 apartments currently owned by the major real-estate groups examined in this study have on the provision of affordable housing?

Assuming that the distribution of the apartments that become vacant (including with respect to

11 WBS 180 is an expansion of the *Wohnberechtigungsschein* system. It means that potential WBS recipients may have an income that is 80 percent higher than the value designated in § 9 Paragraph 2 of the *Wohnraumförderungsgesetz.*

12 Drucksache 19/12259, pp. 3 and 5.

13 See Wohnraumversorgung Berlin AöR 2018, 2019, 2020a, 2021a, 2022.

14 See Drucksache 19/14022.

socialized properties) is conducted according to the existing quotas in place for the state-owned housing companies, socializing housing would lead to 63 percent of new rentals being allocated to WBS holders. With a presumed yearly fluctuation of 5 percent, that would correspond to 6,999 apartments per year. With respect to the aforementioned alliance and their holdings, socialization would make an additional 4,613 apartments available to WBS holders. The potential increase in provision would thus rise to 16,348 apartments annually (without taking growth in new construction into account). Even in this scenario, however, the larger proportion of WBS holders would remain unprovided for –– although waiting times would certainly be significantly reduced.The effect of housing socialization on the provision of housing for households in possession of a WBS corresponds almost exactly to the proposed funding for new construction prioritized by some sections of the Berlin Senate. The plan is for 5,000 affordable homes to be built each year, a large proportion of which is to be made available via the state-owned housing companies. The number of homes currently actually constructed is far below this figure. It is worth noting that the effect of new construction would be permanent, since an increased inventory of affordable housing in general would mean that apartments that could be allocated to WBS holders would become free each year. In a model calculation, the cumulative "effect on provision" would be almost 150,000 apartments by 2030.[15] This would, at least on paper, exceed the number of households in possession of a WBS.

4 SOCIALIZING HOUSING WOULD COUNTERACT SEGREGATION

For around a decade, Berlin's state government has been undertaking considerable efforts to remedy the lack of affordable housing in the city through both the municipalization of existing housing stocks and new construction projects. A long-standing problem in this matter that has so far received scant attention is the spatial distribution of the newly created affordable housing. The current state-owned housing stock as well as new construction projects are concentrated in Berlin's peripheries, with particular emphasis placed on major housing projects to the east of the city. The location of previous new builds has also contributed to the reinforcement of unequal distribution. The district of Steglitz-Zehlendorf, for instance, has only about a tenth of the number of state-owned housing stock as compared to the borough of Lichtenberg—and is also only building a tenth of the prescribed subsidized housing. Municipally owned and subsidized housing is disproportionately occupied by low-income households, which reproduces the socio-spatial division of the city, which is also evident on the private housing market.

Socializing the housing corporations observed in this study would counteract these tendencies. Table 3 compares the current stock held by state-owned housing companies by borough with the number of new builds for subsidised housing and the hypothetical increase in housing stock for the state-owned providers should socialization occur.

15 The assumption here is that the number of households that qualify for a WBS would be gradually reduced by the existence of apartments that are available for rental. This is based on a statistical model that neither takes into consideration future arrivals nor changes to income.

Table 3: Distribution of state-owned housing stock relevant to cooperative efforts, subsidized new construction, and housing stock levels relevant to expropriation, distributed by Berlin district[16]

District	State-owned housing companies' housing stock (2020)	Construction of subsidized housing stock (2014-2021)	Housing stock potentially affected by expropriation*	Increase in percentage with SHCs in 2021 = 100 %)
Charlottenburg-Wilmersdorf	15,555	277	19,881	228
Friedrichshain-Kreuzberg	24,331	795	9,748	140
Lichtenberg	57,771	3,313	15,784	127
Marzahn-Hellersdorf	40,722	3,265	12,875	132
Mitte	28,636	931	21,801	176
Neukölln	21,332	700	19,357	191
Pankow	35,514	1,033	16,085	145
Reinickendorf	26,308	522	21,305	181
Spandau	21,702	1,372	32,244	249
Steglitz-Zehlendorf	6,133	328	16,645	371
Tempelhof-Schöneberg	23,156	1,079	13,319	158
Treptow-Köpenick	31,755	2,465	10,449	133
Combined	**332,915**	**16,080**	**209,493**	**163**

*These figures are only comprised of the roughly 209,000 apartments owned by the corporations that can be definitively located on a map within a given district based on their postal code. This means that it presents an underestimate of the expected effect of housing socialization.

Sources: WVB 2021, p. 28, IBB 2022, p. 57; own calculation

What is clear from this is that socialization would lead to the proportion of state-owned — and therefore affordable –– housing to increase particularly dramatically in districts in which their housing stock is currently lowest. In Charlottenburg-Wilmersdorf, for instance, it would more than double in comparison to 2021, and in Steglitz-Zehlendorf it would more than triple. Increases in the East Berlin "Plattenbau districts" of Lichtenberg and Marzahn-Hellersdorf would be very small in comparison –– districts which up until now have been the focal point of both state-owned housing stock as well as the construction of subsidized new builds.

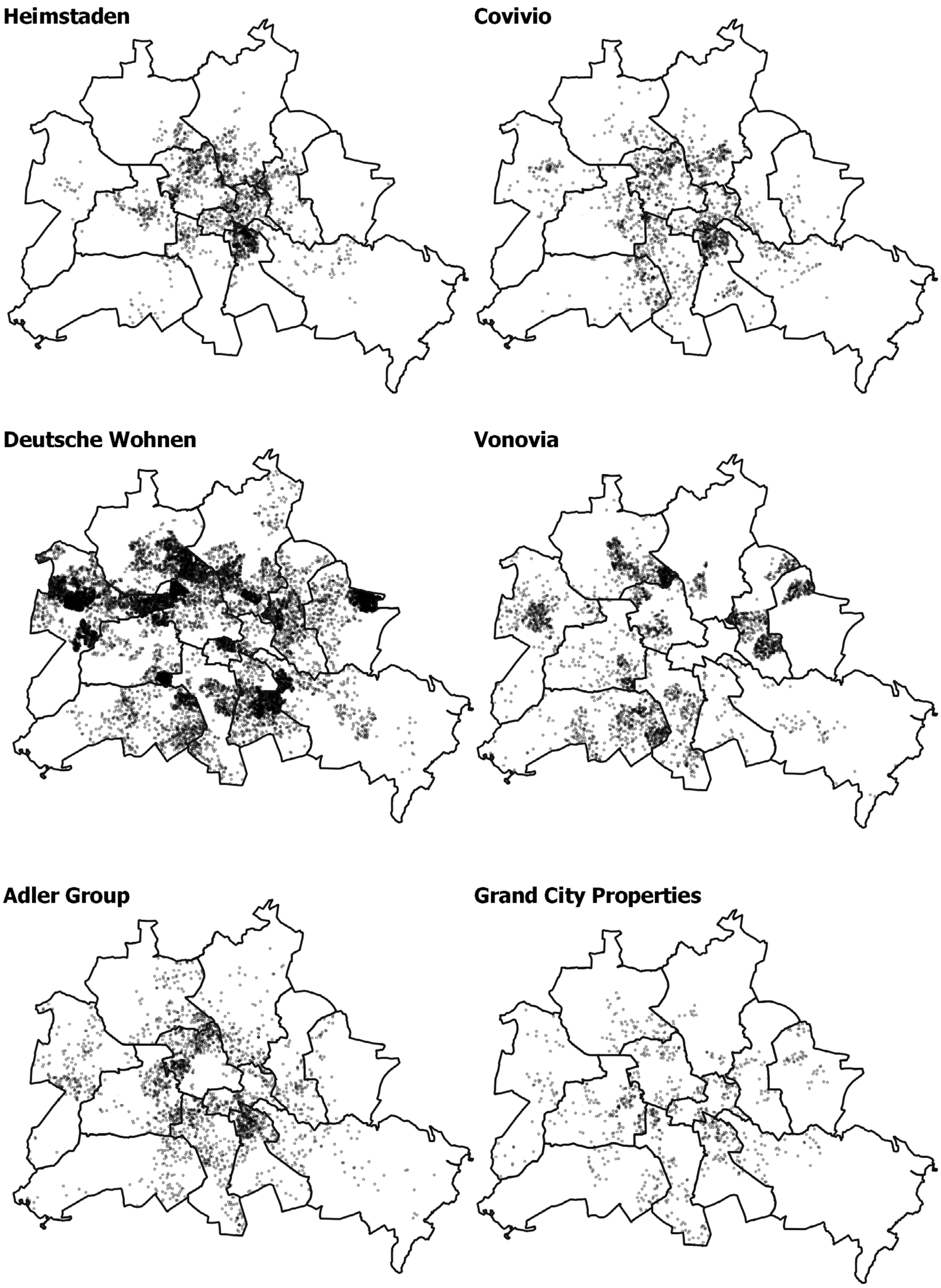
A more detailed spatial consideration (see maps 1 to 4) only substantiates this assessment. Covivio, the Adler Group, and Heimstaden/Akelius have concentrated their holdings primarily in Berlin's founding inner-city districts. Almost half of the 55,000 housing units these companies are in possession of are located within the S-Bahn Ring, the overground train line that encircles the city. Their stock is often located in areas in which a high proportion of households with low incomes shaped the character of these districts and which now feel the effects of gentrification most keenly. As things currently stand, local political figures can do little to counter the displacement of low-income residents from these districts. This is because the regulatory instruments previously applied as a countermeasure were weakened by decisions at a federal level (key word: *Vorkaufsrecht,* or "option to buy"), and state-owned holdings are often insignificant in the areas most affected by gentrification.

Against this backdrop, socializing housing would greatly expand the Berlin state's ability to intervene in this sector. The inner-city housing stock of state-owned companies would grow considerably, from around 80,000 to 120,000. In a number of areas with below-average incomes that are facing significant threats of gentrification, the number of state-owned homes would more than double per postcode. This would affect, for example, districts like Moabit (in postcodes 10551, 10555, and 10557), Kreuzberg (in postcodes 12043, 12045, 12049, and 12053) and almost all of North-Neukölln (in postcodes 12043, 12045, 12049, and 12053). In addition, real-estate corporations like Heimstaden/Akelius, Adler/ADO, and Covivio often have a serious presence and heft on a given area, and have attracted major attention through their drastic rent increases. From this perspective, too, socializing housing would make sense, as it would significantly slow rent increases in inner-city areas affected by gentrification, and in some cases even reverse them. In the densely populated inner-city areas currently subject to intense

16 This statistic does not reflect the summer 2021 purchase of around 10,500 apartments by the state-owned housing companies from Vonovia/Deutsche Wohnen (aka the "Vonovia deal"); this deal included, for instance, housing stock in Steglitz-Zehlendorf (the "Thermometer Settlement") and in Neukölln (the "High Deck Settlement").

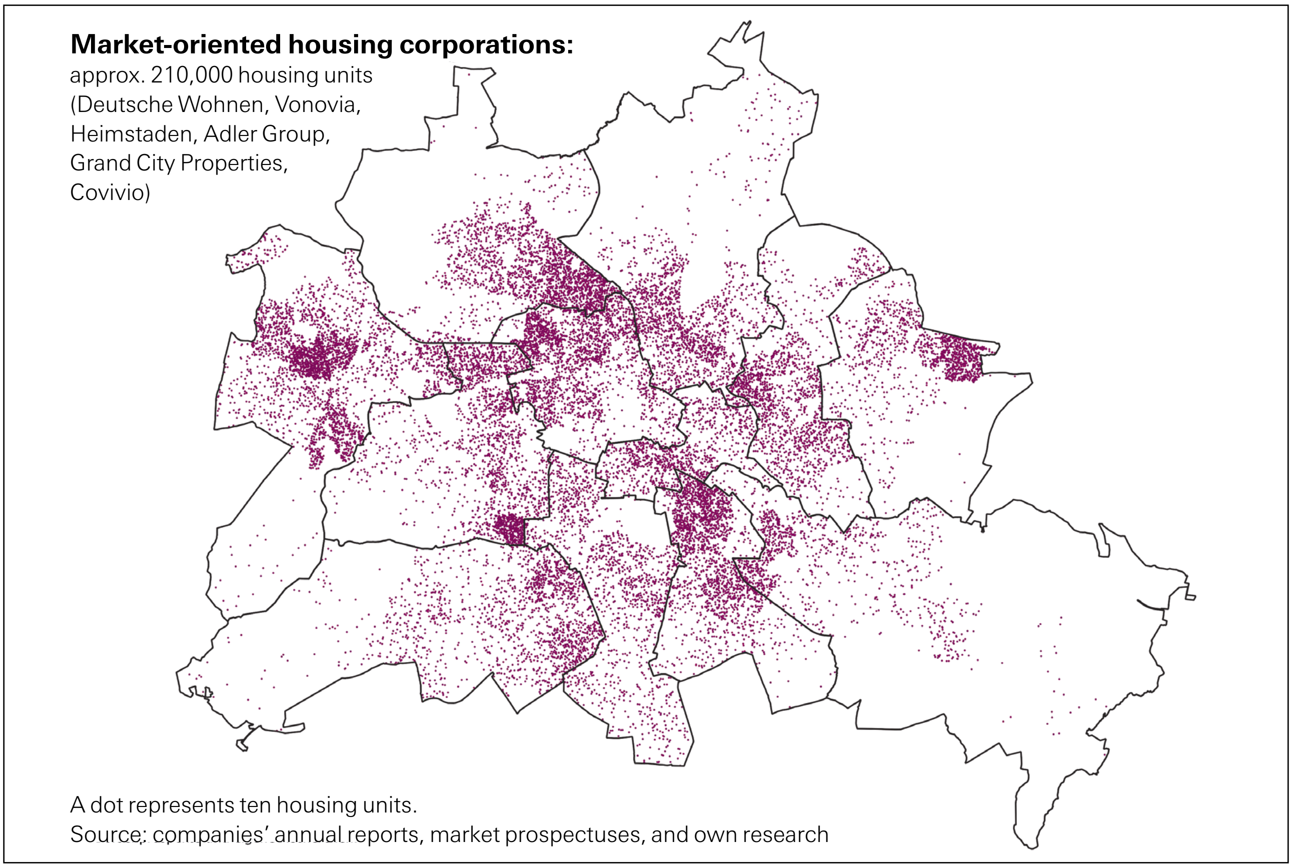
valorization, in which there is little space to realize the construction of new builds, an expansion of public housing stock through a process of socialization becomes a significant instrument with which to counter the expulsion of existing residents. In such places, more affordable housing could be offered in prime locations and thereby push back against the enforced socio-spatial division of the city of Berlin by redistributing state-owned housing stock and upcoming subsidized new builds.

Map 1: Urban distribution of housing stock for the major market-oriented housing corporations

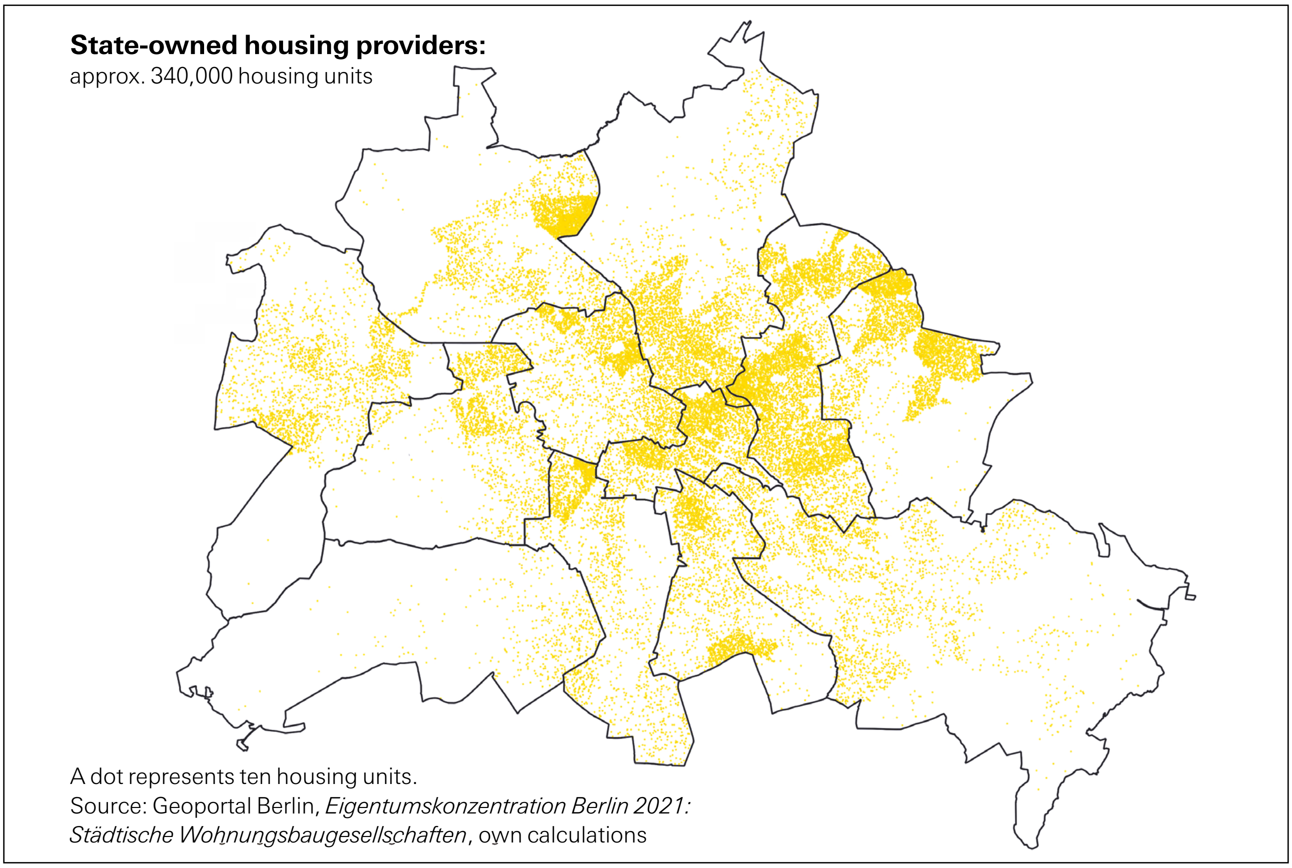


A dot represents ten housing units.
Source: companies' annual reports, market prospectuses, and own research

Map 2: Urban distribution of housing stock for the major market-oriented housing corporations (total)

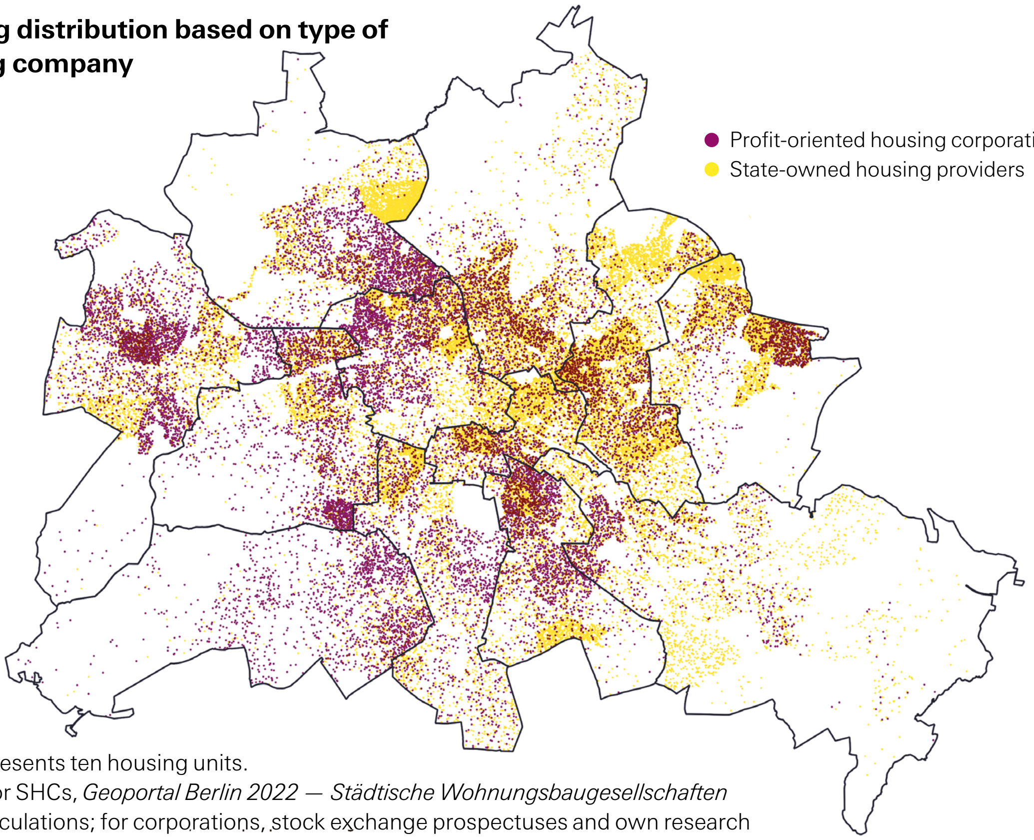


Map 3: Urban distribution of housing stock among the state-owned housing companies



Map 4: Urban distribution of publicly held housing stock following socialization

Housing distribution based on type of housing company



A dot represents ten housing units.
Source: for SHCs, *Geoportal Berlin 2022 — Städtische Wohnungsbaugesellschaften* & own calculations; for corporations, stock exchange prospectuses and own research

5 SUMMARY

This brief study shows that socializing private, profit-oriented housing corporations in Berlin would have positive effects in three areas: firstly, it would have a reducing effect on rent prices; secondly, it would enable quicker provision of housing to low-income households; and thirdly, it would work to counteract socio-spatial segregation in Berlin. However, housing socialization should not be seen as a silver bullet that would solve all housing issues. It is not the only social lever to be pulled in a socially minded politics of housing, but it does have the potential to be very effective. From a social housing provision perspective, it is thus an instrument that should be utilized. Such a measure would not mean that the subsidizing of new builds and better regulation of rents would be rendered unnecessary; in the medium-term, however the anticipated effects of these two respective policies would be lesser than the impact of socialization. Socializing housing thus appears as both an appropriate *and* necessary measure to deliver more affordable housing. Politicians are called upon to act.

BIBLIOGRAPHY

Adler Group, *Geschäftsbericht 2020,* Senningerberg (Luxemburg): Adler Group, 2021.
Adler Group, *Geschäftsbericht 2021,* Senningerberg (Luxemburg): Adler Group, 2022.
ADO Properties, *Geschäftsbericht 2016,* Senningerberg (Luxemburg): Ado Properties, 2017.
ADO Properties, *Geschäftsbericht 2017,* Senningerberg (Luxemburg): Ado Properties, 2018.
ADO Properties, *Geschäftsbericht 2018,* Senningerberg (Luxemburg): Ado Properties, 2019.
ADO Properties, *Geschäftsbericht 2019,* Senningerberg (Luxemburg): Ado Properties, 2020.
ADO Properties S.A., *Geschäftsbericht 2016*, Senningerberg (Luxemburg): ADO Properties S.A., 2017.
ADO Properties S.A., *Geschäftsbericht 2017, Senningerberg* (Luxemburg): ADO Properties S.A., 2018.
ADO Properties S.A., *Geschäftsbericht 2018,* Senningerberg (Luxemburg): ADO Properties S.A., 2019.
ADO Properties S.A., *Geschäftsbericht 2019,* Senningerberg (Luxemburg): ADO Properties S.A., 2020.
Akelius, *Annual Report and Sustainability Report 2016,* Stockholm: Akelius, 2017.
Akelius, *Annual Report and Sustainability Report 2017,* Stockholm: Akelius, 2018.
Akelius, *Annual Report and Sustainability Report 2018,* Stockholm: Akelius, 2019.
Akelius, *Annual Report and Sustainability Report 2019,* Stockholm: Akelius, 2020.
Akelius, *Annual Report and Sustainability Report 2020,* Stockholm: Akelius, 2021.
Akelius, *Annual Report and Sustainability Report 2021,* Stockholm: Akelius, 2022.
Berlin-Brandenburg Agency for Statistics: *Fortschreibung des Wohngebäude- und Wohnungsbestandes in Berlin am 31. Dezember 2021, Statistischer Bericht F I 1 — j/21,* Berlin: Berlin-Brandenburg Agency for Statistics, 2021.
Berlin House of Representatives, *Drucksache 19/12259* (Antwort auf die Schriftliche Anfrage des Abgeordneten Niklas Schenker (LINKE): Wie viele Berliner*innen haben Anspruch auf einen Wohnberechtigungsschein (WBS)?)
Berlin House of Representatives, *Drucksache 19/14022* (Antwort auf die Schriftliche Anfrage der Abgeordneten Katrin Schmidberger (Grüne): Bündnis Wohnungsneubau und bezahlbares Wohnen in Berlin I — Wird das Wohnungsbündnis des Senats umgesetzt und kommen die Vereinbarungen bei den Mieter*innen an?)
CBRE, *VALUATION REPORT — Vonovia Q4 2015 — Residential Portfolio*, Essen: CBRE, 2016.
Covivio, *Universal Registration Document 2019*, Metz: Convivio, 2020.
Covivio, *Universal Registration Document 2020,* Metz: Convivio, 2021.
Covivio, *Universal Registration Document 2021,* Metz: Convivio, 2022.
Deutsche Wohnen, *Geschäftsbericht 2016,* Berlin: Deutsche Wohnen, 2017.
Deutsche Wohnen, *Geschäftsbericht 2017,* Berlin: Deutsche Wohnen, 2018.
Deutsche Wohnen, *Geschäftsbericht 2018,* Berlin: Deutsche Wohnen, 2019.
Deutsche Wohnen, *Geschäftsbericht 2019,* Berlin: Deutsche Wohnen, 2020.
Deutsche Wohnen, *Geschäftsbericht 2020,* Berlin: Deutsche Wohnen, 2021.
Deutsche Wohnen, *Geschäftsbericht 2021,* Berlin: Deutsche Wohnen, 2022.
Foncièr des Région, Reference Document 2016, Paris: Foncièr des Régions, 2017.
Foncièr des Régions, Reference Document 2017, Paris : Foncièr des Régions, 2018.
Gabor, Daniela, Kohl, Sebastian "'My home is an asset class': The Financialization of Housing in Europe", The Greens/EFA, 2021, https://www.greens-efa.eu/en/article/document/my-home-is-an-asset-class, last accessed 26 January 2023.
Geoportal Berlin, *Eigentumskonzentration Berlin 2021: Städtische Wohnungsbaugesellschaften,* Berlin: Geoportal Berlin, 2021.
Grand City Properties (2017): Consolidated Annual Report 2016, Luxemburg: Grand City Properties, 2017.
Grand City Properties, *Consolidated Annual Report 2017,* Luxemburg: Grand City Properties, 2018.
Grand City Properties, *Consolidated Annual Report 2018,* Luxemburg: Grand City Properties, 2019.
Grand City Properties, *Consolidated Annual Report 2019,* Luxemburg: Grand City Properties, 2020.
Grand City Properties, *Consolidated Annual Report 2020,* Luxemburg: Grand City Properties, 2021.
Grand City Properties, *Consolidated Annual Report 2021,* Luxemburg: Grand City Properties, 2022.
Heimstaden, *Annual Report with Sustainability Report 2017,* Malmö: Heimstaden, 2018.
Heimstaden, *Annual Report with Sustainability Report 2018,* Malmö: Heimstaden, 2019.
Heimstaden, *Annual Report with Sustainability Report 2019,* Malmö: Heimstaden, 2020.
Heimstaden, *Annual Report with Sustainability Report 2020,* Malmö: Heimstaden, 2019.
Heimstaden, *Annual Report with Sustainability Report 2021*, Malmö: Heimstaden, 2022.

Investitionsbank Berlin, *IBB Wohnungsmarkbericht 2021*, Berlin: IBB Berlin, 2022.
Schlossberg, Marc, "GIS, the US Census and Neighbourhood Scale Analysis", *Planning, Practice & Research*, vol. 18, nos. 2–3 (2003), pp. 213–217.
Trautvetter, Christoph/Bonczyk, Sophie, *Profitmaximierer oder verantwortungsvolle Vermieter? — Große Wohnungsunternehmen mit mehr als 3000 Wohnungen in Berlin im Profil*, study conducted by the *Rosa-Luxemburg-Stiftung* and DIE LINKE representatives in Berlin's state parliament, Berlin: Rosa-Luxemburg-Stiftung, 2019, www.rosalux.de/fileadmin/rls_uploads/pdfs/Studien/Studien_3-19_Profitmaximierer.pdf, last accessed 26 January 2023.
Trautvetter, Christoph, Christoph Trautvetter, *Who Owns the City? Analysis of Property Owner Groups and Their Business Practices on the Berlin Real Estate Market*, edited by the Rosa-Luxemburg-Stiftung, Berlin: Rosa-Luxemburg-Stiftung, 2021, https://www.rosalux.de/fileadmin/rls_uploads/pdfs/Studien/Studien_6-2021_Who_Owns_The_City.pdf, last accessed 26 January 2023.
Unger, Knut, "Mieterhöhungsmaschinen: Zur Finanzialisierung und Industrialisierung der unternehmerischen Wohnungswirtschaft", *PROKLA: Zeitschrift für Kritische Sozialwissenschaft*, vol. 48, no. 2 (2018), pp. 205–225.
Vonovia, *Geschäftsbericht* 2016, Bochum: Vonovia, 2017.
Vonovia, *Geschäftsbericht* 2017, Bochum: Vonovia, 2018.
Vonovia, *Geschäftsbericht 2018*, Bochum: Vonovia, 2019.
Vonovia, *Geschäftsbericht 2019*, Bochum: Vonovia, 2020.
Vonovia, *Geschäftsbericht 2020*, Bochum: Vonovia, 2021.
Vonovia, *Geschäftsbericht 2021*, Bochum: Vonovia, 2022.
Wijburg, Gertjan/Aalbers, Manuel B./Heeg, Susanne "The Financialisation of Rental Housing 2.0: Releasing Housing into the Privatised Mainstream of Capital Accumulation", *Antipode*, vol. 50, no. 5 (2018), pp. 1098–1119.
Wohnraumversorgung Berlin (AöR), *Leistbare Mieten, Wohnungsneubau und soziale Wohnraumversorgung: Bericht zur Kooperationsvereinbarung 2017*, Berlin: Wohnraumversorgung Berlin (AöR), 2018.
Wohnraumversorgung Berlin (AöR), *Leistbare Mieten, Wohnungsneubau und soziale Wohnraumversorgung: Bericht zur Kooperationsvereinbarung 2018*, Berlin: Wohnraumversorgung Berlin (AöR), 2019.
Wohnraumversorgung Berlin (AöR), *Leistbare Mieten, Wohnungsneubau und soziale Wohnraumversorgung: Bericht zur Kooperationsvereinbarung 2019*, Berlin, Wohnraumversorgung Berlin (AöR), 2020(a).
Wohnraumversorgung Berlin (AöR), *Wirtschaftlich solide — sozial orientiert: Bericht über die wirtschaftliche Lage der sechs landeseigenen Berliner Wohnungsunternehmen im Jahr 2019*, Berlin: Wohnraumversorgung Berlin (AöR), 2020(b).
Wohnraumversorgung Berlin (AöR), *Leistbare Mieten, Wohnungsneubau und soziale Wohnraumversorgung: Bericht zur Kooperationsvereinbarung 2020*. Berlin: Wohnraumversorgung Berlin (AöR), 2021(a).
Wohnraumversorgung Berlin (AöR), *Wirtschaftlich stabil — sozial orientiert: Bericht über die wirtschaftliche Lage der sechs landeseigenen Berliner Wohnungsunternehmen im Jahr 2020*, Berlin: Wohnraumversorgung Berlin (AöR), 2021(b).
Wohnraumversorgung Berlin (AöR), *Leistbare Mieten, Wohnungsneubau und soziale Wohnraumversorgung: Bericht zur Kooperationsvereinbarung 2021*, Berlin: Wohnraumversorgung Berlin (AöR), 2022.
Zimmermann, Daniel, "Geschäftsmodelle börsennotierter Wohnungskonzerne am Beispiel von Vonovia. Expertenkommission zum Volksentscheid 'Vergesellschaftung großer Wohnungsunternehmen'", hearing of Dezember 2022 titled "Bewirtschaftung von Wohnimmobilien und Auswirkungen einer Vergesellschaftung auf den Berliner Wohnungsmarkt" Berlin.de, http://www.berlin.de/kommission-vergesellschaftung/, last accessed 26 January 2023.

APPENDIX 1

SOURCES AND METHODS

This study is based on a comparison of basic data on the management of housing between market-oriented corporations with large housing portfolios (> 3.000 housing units) in Berlin and the state-owned housing companies (SHCs).
In a 2019 official cost estimation conducted by the Berlin Senate with respect to the public referendum "Deutsche Wohnen & Co. enteignen" (Expropriate Deutsche Wohnen & Co.), the number of housing units among the companies that would be affected by socialization amounted to 243,000 in total. Ten companies in total are listed. Since the Senate's cost estimate of 30 September 2018, there have been large-scale structural changes in the major market-oriented corporations: Vonovia has taken over Deutsche Wohnen, ADO Properties was acquired by the Adler Group, and the Swedish company Heimstaden purchased the German holdings of Akelius.
For the study presented here, housing stock levels from the six market-oriented corporations that currently possess the largest housing stock levels in Berlin were brought together, coming to a total figure of around 222,000 housing units. The study thus delivers a wide-reaching, though not exhaustive, overview of the city's rental structure and the business activities of possible candidates for expropriation.
The essential dataset for this study comprises the annual company reports issued by the housing corporations, which can be publicly accessed on their websites. An extensive list of sources can be found in this study's bibliography.
Information on the spatial spread of respective holdings is available for almost 210,000 housing units. The information provided here in map form is based on itemized lists of holdings in company documents broken down according to precise addresses or at least postal code zones, on research from several initiatives, as well as on housing inventory maps found in company documents that can be hand-selected and arranged according to postal code zones.
Because of the temporal difference between the data that forms the basis of the maps and the current information provided by company reports, the maps for some of the companies differ in their depiction from the respective company's current holdings. The holdings of Vonovia, in particular (before its purchase of Deutsche Wohnen), appear in only partially complete form. The Adler Group's holdings on the maps are slightly overestimated, as they have sold housing blocks in recent years that still appear on the maps. More detail about the data presented here and on the maps concerning the housing stock levels of the housing companies can be found in Table 5 in Appendix 2.

Table 4: Overview of available data concerning the extent and spatial distribution of corporations' housing stock

Corporation	Housing stock 2021	Housing stock represented on the map	Spatial allocation	Sources
Deutsche Wohnen SE	113,200	113,600	List of precise addresses	Deutsche Wohnen, 2020
Vonovia SE	45,800	30,600	List of precise addresses	CBRE, 2016
Adler Group S.A.	19,800	22,200	Hand-selected postal codes	ADO, 2019
Covivio S.A.	16,700	16,700	Hand-selected postal codes	Covivio, 2022
Heimstaden/Akelius	18,600	18,600	List of precise addresses	Stop Heimstaden Stopp Akelius Vernetzung
Grand City Properties S.A.	8,000	7,800	Hand-selected postal codes	Grand City Properties, 2021
Combined	222,100	209,500		

The maps concerning the holdings of the state-owned housing companies were generated on the basis of data from the Berlin-Brandenburg Agency for Statistics concerning the occupancy concentration of publicly owned housing companies[17] and the total number of housing units per planning area,[18] arranged by postal code zones using a "spatial split" process.[19]
The data concerning the average rents for current tenants and newly rented apartments was primarily taken from the corporations' annual reports. In some years, only percentages were given regarding the increase in rental prices, in which case the value presented in the tables was calculated based on these percentages and the values of the previous year. For Covivio S.E., only data for the median rent of existing tenants was provided, meaning that these holdings were not taken into account when calculating new rental agreements occurring across the corporations. Figures concerning new rental agreements for Heimstaded/Akelius were no longer declared in their 2020 and 2021 reports, Accordingly, data concerning them is based on the complete documentation of all of their housing offerings in Berlin during this time period. Prices per square metre were calculated using the base rent prices and floor space provided in the properties' listings. The calculation of yearly values was made using an average calculation of the per-square-metre price, regardless of the size of the listing.
Data concerning maintenance and modernization costs were extracted directly from the companies' annual reports. For some corporations, only total figures for the respective costs were provided, meaning that the annual expenditure per square metre was calculated using the basic data on the total usable floor space of the housing stock.
All information concerning company-wide developments of all corporations studied is based on average calculations weighted based on size. This includes the use of the total living space of the companies' holdings in Berlin as a weighting factor.

APPENDIX 2

DATA

Table 5: Housing stock according to the number of housing units per real-estate corporation, 2016 to 2021

Corporation	2016	2017	2018	2019	2020	2021	Increase from 2016 to 2021
SHCs	295,806	301,009	306,929	322,918	332,084	339,246	15%
Adler/ADO	17,701	20,649	22,202	16,255	19,864	19,830	12%
Grand City Properties	6,270	8,276	8,141	7,580	7,821	8,025	28%
Heimstaden/Akelius	12,313	12,781	14,301	15,121	15,552	18,577	51%
Vonovia	32,454	38,664	41,943	42,241	43,171	45,838	41%
Deutsche Wohnen	110,673	114,289	115,612	115,740	114,191	113,202	2%
Covivio	13,421	15,771	17,155	15,813	15,843	16,711	25%
Total	**192,832**	**210,430**	**219,354**	**212,750**	**216,442**	**222,183**	**15%**

Source: Companies' annual reports

17 Geoportal Berlin, *Eigentumskonzentration Berlin 2021: Städtische Wohnungsbaugesellschaften*, Berlin: Geoportal Berlin, 2021.
18 Berlin-Brandenburg Agency for Statistics: *Fortschreibung des Wohngebäude- und Wohnungsbestandes in Berlin am 31. Dezember 2021, Statistischer Bericht F I 1 — j/21*, Berlin: Berlin-Brandenburg Agency for Statistics, 2021.
19 Schlossberg, Marc, "GIS, the US Census and Neighbourhood Scale Analysis", *Planning, Practice & Research*, vol. 18, nos. 2–3 (2003), pp. 213–217.

Table 6: Average rent per euro/m² (base rent) according to company, 2016 to 2021

Corporation	2016	2017	2018	2019	2020	2021	Increase p. a.
SHCs	5.80	5.91	6.09	6.22	6.29	6.29	1.6%
Adler/ADO	6.09	6.42	6.70	7.50	7.30	8.71	7.4%
Grand City Properties	6.80	7.20	7.60	8.30	8.20	8.70	5.1%
Heimstaden/Akelius	7.22	7.63	8.06	8.64	8.89	9.36	5.3%
Vonovia	6.05	6.35	6.62	6.84	6.63	7.10	3.3%
Deutsche Wohnen	6.11	6.46	6.70	6.95	7.07	7.15	3.2%
Covivio	7.40	7.80	8.00	7.70	7.10	8.20	2.1%
Total	**6.30**	**6.66**	**6.93**	**7.22**	**7.19**	**7.63**	**3.9%**
	6.12	6.39	6.56	6.72	6.76	6.79	2.3%

Source: Companies' annual reports

Table 7: Average rental price for new contracts in euro/m² (base rent) per company, 2016 to 2021

Corporation	2016	2017	2018	2019	2020	2021	Increase p. a.
SHCs	6.45	7.09	7.43	7.43	7.00	7.25	2.4%
Adler/ADO	7.91	9.04	9.42	10.91	9.03	9.45	3.6%
Grand City Properties	7.94	8.45	8.95	9.44	10.31	10.19	5.1%
Heimstaden/Akelius	12.58	14.83	16.42	14.66	18.16	18.90	8.5%
Vonovia	6.57	6.98	7.38	7.79	7.88	8.08	4.2%
Deutsche Wohnen	7.66	8.62	9.11	9.16	9.10	9.46	4.3%
Covivio	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	**7.19**	**7.96**	**8.42**	**8.72**	**8.83**	**9.24**	**5.1%**
OVM +10%	6.73	7.03	7.21	7.39	7.44	7.47	2.3%

Source: Companies' annual reports

Table 8: Repair costs in euro/m² p. a. per company, 2016 to 2021

Corporation	2016	2017	2018	2019	2020	2021	Average p. a.
SHCs	17.15	16.90	17.50	19.25	20.50	19.93	18.54
Adler/ADO	6.80	6.50	7.50	8.60	6.30	5.20	6.82
Grand City Properties	5.30	6.10	6.40	6.30	5.60	5.50	5.87
Heimstaden/Akelius	11.00	10.00	9.00	9.00	10.00	32.00	13.50
Vonovia	12.84	13.35	14.10	15.30	18.94	16.40	15.15
Deutsche Wohnen	9.63	10.52	10.14	9.92	10.39	10.26	10.14
Covivio	8.00	7.70	11.20	13.70	16.60	6.90	10.68
Total	9.66	10.09	10.44	10.96	11.97	12.43	10.93

Source: Companies' annual reports

Table 9: Expenses for modernization measures in euro/m² p.a. per company, 2016 to 2021

Corporation	2016	2017	2018	2019	2020	2021	Average p.a.
SHCs	7.44	7.68	6.74	5.08	5.51	6.75	6.53
Adler/ADO	21.20	22.60	31.70	26.10	24.40	21.80	24.63
Grand City Properties	11.10	12.40	13.90	14.90	14.10	16.00	13.73
Heimstaden/Akelius	103.00	99.00	114.00	156.00	138.00	148.00	126.33
Vonovia	18.39	27.50	29.64	31.65	29.11	18.66	25.82
Deutsche Wohnen	15.29	22.85	30.91	35.53	25.76	25.26	25.93
Covivio	16.00	17.40	26.10	23.50	9.00	13.70	17.62
Total	21.93	27.25	34.84	40.65	32.63	32.66	31.66

Source: Companies' annual reports

Table 10 Legally permissible levies applied for modernization measures in euro/m² per month per company, 2016 to 2021

Corporation	2016	2017	2018	2019	2020	2021	Total 2016 to 2021
SHCs	0.07	0.07	0.06	0.03	0.04	0.05	0.32
Adler/ADO	0.19	0.21	0.29	0.17	0.16	0.15	1.17
Grand City Properties	0.10	0.11	0.13	0.10	0.09	0.11	0.64
Heimstaden/Akelius	0.94	0.91	1.05	1.04	0.92	0.99	5.84
Vonovia	0.17	0.25	0.27	0.21	0.19	0.12	1.22
Deutsche Wohnen	0.14	0.21	0.28	0.24	0.17	0.17	1.21
Covivio	0.15	0.16	0.24	0.16	0.06	0.09	0.85
Total	0.20	0.25	0.32	0.27	0.22	0.22	1.48

Source: Companies' annual reports