Promoting homeownership through targeted demand-side means
The Norwegian case

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Abstract

To provide every household the opportunity of affordable homeownership is a main goal in Norwegian housing policy. Currently the homeownership rate is around 80 percent, and only 4-5 percent of the housing stock consists of social rental housing. The leases of these dwellings normally have duration of three years, and it is desirable that tenants after this period relocate to the private rental market, or preferably purchase their own home. In order to achieve a high ownership rate demand-stimulating policy instruments, such as subsidized loans, investment grants and housing allowances, are essential. Local authorities manage and allocate these subsidies to the most disadvantaged applicants on behalf of the State Housing Bank.

There has been a concern from the central government to whether there is a sufficient degree of harmony and consistency between these policy instruments, and to what extent they individually, and in conjunction, are capable of promoting home ownership among low income groups.

A general microeconomic framework is developed in order to analyze how household’s creditworthiness varies with different housing policies. The Norwegian policy instruments are analyzed within the analytical framework, and are then compared with the corresponding UK and Irish government schemes for low-cost home ownership, such as Shared Ownership and Homebuy. We show by simulating the model that the current design of the Norwegian housing policy instruments is inapt to promote home ownership among low income households.

Finally we discuss to what extent the State Housing Bank by adopting the UK/Irish approach to low-cost home ownership, can enhance ownership rates among low income household further.

1 An earlier version was presented in Dublin 2008 (ENHR). Do not quote without consulting the authors.
1. Introduction

In many countries housing policy has changed from large general subsidies for new construction to targeted, income-related demand-supported instruments promoting home ownership. At the same time public budget constraints have reduced the overall subsidies to the housing sector (Turner and Whitehead 2002). Housing allowances schemes are held up as one of the most effective instruments related to housing consumption.

In Norway the Government made clear in its housing policy white paper (St.meld. nr. 23 “Om boligpolitikken”), that facilitating wider home ownership among disadvantaged groups in society is a key policy target. Start-up loan is a central instrument and an investment grant scheme is intended to cover part of the purchase price for those on permanent low incomes. These policy instruments are complemented by the housing allowance scheme enabling households to pay their annual housing expenses and continue to reside in the house. The central government wants these three instruments to work together offering recipients a “package of instruments” for promoting home ownership among disadvantaged groups on the housing market. Nordvik (2006) classifies these instruments as demand-side subsidies.

Social rental housing is offered for the most vulnerable and is classified as a supply side intervention. The role and size of the social rental sector varies between countries. In some countries the social rental sector is meant for ordinary people, while in other countries the sector is intended for vulnerable or low-income groups most in need for shelter. Kemeny (2003) makes a distinction between dual and unitary rental housing markets. Norway has a small residual social rental sector exclusively targeted to vulnerable groups as a temporary solution, normally on 3 years contracts. Turner and Elsinga (2005) mention USA, Australia, Belgium and Ireland as countries with a small separated social rental sector, targeted at those most in need. In these countries rents are subsidized and the degree of subsidisation is income dependent.

The social rental sector in Norway consist of about 94 000 dwellings, 4-5 percent of the total housing stock. Houses in the social rental sector in Norway are owned or are at the disposal of the local authorities. One third of the dwellings are permanent dwellings for elderly, others for young disabled, for employers in the municipalities etc. The “pure” social rented sector is less, estimated to about 1.5 percent of the dwelling stock (Dyb 2007). Houses in the social rental sector in Norway are owned or are at the disposal of the local authorities. More use of market based rents has increased the turnover in the social rental sector. In 2006 the turnover was 20 percent, which gives a mean residence time of 5 years.

The subsidies to the social rental sector consist of an investment grant of 20 percent of the costs or price of a house. Either the local authorities can build new dwellings or they can buy existing dwellings on the market for let. Housing allowances is given to the tenants following almost the same rules as for other tenures.

Owner occupation is associated with a range of advantages; capital gains when house prices rise, the ability to pass something on to children and low out of pocket costs when debt is paid down (Munro 2007). Ownership is also presumed to give independence and security.
Whitehead and Yates (2007) underline that the risk connected to home-ownership is greater the more the household’s wealth is concentrated in housing and the higher their borrowing requirement is. Owner occupation imply exposition for housing value variation over time, transaction costs for a good being in a particular location and timing difficulties associated with realising the asset.

Munro (2007) explains lower ownership rates among young people with increasing student indebtedness, high house price to earning ratios and an extended youth. Sandli (2008) shows that these generations delay owner occupation but will after some time reach the same ownership rates as the generations before them.

Bramley and Morgan (1998) question whether low cost home ownership (LCHO) mechanisms to assist those on the margins into home ownership are sustainable and if their interests might be better served through the provision of rented alternatives. Some of the initiatives encourage social rented tenants who are in work to move into owner occupation in other areas, thus increasing the concentrating of economically inactive household in the social rental sector (ibid). In Ireland Morris et al. (2007) point out that universal support for housing were abolished during the 1980s and the remainder reoriented towards enabling low income households to purchase a home. Widespread arrears on mortgage held by scheme participants cast doubts on the sustainability of the home ownership they facilitate (ibid.).

The Office of the Auditor General of Norway (2008) has investigated help for the disadvantaged on the housing market. The investigation sheds light on the extent to which the central government and the municipalities ensure that the disadvantaged on the housing market receive sufficient help. Important issues include how effective social housing policy instruments are, how the municipalities discharge their responsibility for the practical implementation of housing policy in relation to the disadvantaged and how the State Housing Bank discharges its duties in this context. One of the conclusions is a missing knowledge about those who are not qualified for a house in the social rental sector and who cannot afford to buy a house in the owner occupied sector. One assumes they find accommodation in the private rental sector, a sector where the supply is dominated of owners letting out parts of the house where they live themselves. Home-ownership is a central goal, but only obtainable for household with sufficient incomes for paying the yearly housing expenses.

The State Housing Bank has questioned if the existing instruments have been effective. Housing allowances seem to be given to households with low incomes and high housing expenses in all tenures, most often to elderly in the rental housing sector. Only 5 percent of all households in Norway are eligible. Start-up loans and individual investment grants seem to be arranged for households at a higher income level. An important question raised is if these instruments are designed so that they are of little help for vulnerable groups wishing to be home-owners. Home ownership is then obtainable only for household on higher income levels. The residual Norwegian social rental market does not to a sufficient degree catch up household who cannot be home-owners, and a too large proportion of the disadvantage groups are probably not offered suitable accommodation.
On commission of the State Housing Bank NIBR in 2008 evaluated today’s instruments for promoting home ownership and outlined possible changes in the rules for achieving a better interaction among the instruments (Barlindhaug and Astrup 2008). In this paper we expand the perspective looking at the Norwegian instruments in a broader context.

In section two of the paper a more detailed description of the Norwegian instruments designed for promoting home ownership will be outlined. In section three our model will be presented and in section four our evaluation of the housing policy instruments will be outlined. Included in this part will be a discussion of the alternatives for changing the instruments. A general model for targeted housing policy instruments is presented in section five. In this general model the ownership rate will vary between zero and 100, where zero means being a tenant in the social rental sector and 100 an ordinary home-owner. In section six we expand the discussion introducing shared ownership or interest free loans as possible new instruments in the Norwegian setting.

2. An overview of Norwegian housing policy instruments

In this section we will present a brief overview of Norwegian housing policy instruments in regard to home ownership promotion. In addition we will describe the criteria for access to the social rented sector. There are mainly two policy instruments that are intended to be home ownership promoting; start-up loans and individual investment grants. In addition a tenure neutral housing allowances scheme is helping low-income households to obtain or maintain a suitable house. Home ownership is also favourable treated in income and wealth taxation. There is no taxation of imputed rent and the assessed value of the house is set to about one third of the market value.

One may apply a local authority for a start-up loan as full or supplementary finance to facilitate entry into the housing market. Start-up loans are primarily intended for first-time buyers who can’t access the private mortgage market. The local authorities are funding those loans from the State Housing Bank on market conditions. In case of repossessions, loss is shared between the local authority and the State Housing Bank, with the first 25 percent of the loss covered by the local authority. The terms of the start-up loan for the receiver are based on market conditions but the interest level is not adjusted to compensate for the higher risk that is incurred. Given eligibility, the household will receive a loan that is compatible with the constraint of affordability.

Investment grant for house purchase can be provided in connection with start-up loan to first time buyers. The objective is to financially assist especially disadvantaged households to obtain home ownership. The grants are available to households with permanently low incomes who would not otherwise qualify for a start-up loan. There are not any clearly specified rules or guidelines which suggest exactly which households qualify for the grant, or the extent of the grant. On average the grant constituted 22 percent of the purchase price in 2007.
If the house is sold after 10 years the grant will not have to be repaid, however if the house is sold before 10 years parts of the grant have to be repaid depending on how long the household has resided in the house before sale. 10 percent of the grant will become the household’s equity for each year before an eventual sale.

Housing allowances in Norway is tenure neutral, and payments on the principal are considered as eligible housing expenses. The Norwegian housing allowance scheme is designed in accordance with the housing gap scheme, see Kemp(2007).

\[(1) \quad B = a(EH - bI)\]

B is housing allowance entitlement, \(a\) is a fraction that is usually less than 1, EH is eligible housing expenses, \(b\) is the household contribution rate and \(I\) is income. The eligible housing expenses are supposed to represent the housing expenses of the household and are partly based on actual expenses and partly on templates for various housing expense components. In the social rental sector the fraction covering the gap between the recipients’ eligible housing expenses and the household’s contribution is 80 percent, against 70 percent in other tenures.

There are maximum ceilings for the eligible housing expenses (EH) which vary with household size and region. The household contribution rate (b) varies with household size and increases strongly with income. A major concern of the government and the State Housing Bank is to what degree housing allowances, in its current form, are apt to home ownership promotion among low income household.

In Norway rental market contracts has an unlimited length of stay unless something else is stated. Contacts with a length of stay for a period of 3 years are allowed. The same statutory regulations are ruling the private- and the social rental sector. In this sense the two rental housing markets are integrated. In praxis the local authorities is restrictive entering into contracts with an unlimited length of stay and do not want the houses in the social rental sector to be permanent residences.

In most municipalities the residence time in the social rental sector is intended to be maximum 3 years. During this period some tenants are offered help to be homeowners, others are helped into the private rental market while some are offered a new 3 years contract in the social rental sector.

Rent setting principles is decided by the local authorities within the statutory regulation for the whole rental housing sector in Norway. According to Medby and Langsether (2007) only 1 out of 3 municipalities use marked based rent setting principles. These rents are partly covered by the tenant, partly by the state housing allowances scheme and partly through local housing allowances schemes and social security benefits. In municipalities with below-market rents more of the rent is covered by the households themselves.

In the largest municipalities rent setting in the social rental sector is mainly based on market principles (Barlindhaug and Medby 2007). During a three years period the rent level can be regulated in correspondence with the inflation rate. After these three years both owner and tenant
can claim the rent to be set to a level which reflects the market rent on both new and old contracts for similar accommodation in the particular area.

Why should there be a social rental housing in municipalities using marked based rent setting principles? Some groups do not get access to the private rental marked, either because of discrimination, but important as well is a downscaling of institutions where people with drug and/or mental health problems often where housed. To function in ordinary houses they need follow-up services. The concentration of marginalized groups in the social rental sector results in large expenses for upgrading the houses when tenants move. The private rental sector is more reserved letting out houses for household belonging to these marginalized groups. Local authorities are to a certain degree compensated for these extra expenses when receiving the investment grant, constituting 20 percent of the construction cost or purchase price of a house.

Statistics from the State Housing Bank show that 5955 households were receiving a start-up loan in 2007. 18 percent of these also got an investment grant, but only 5 percent received help from all three instruments, start-up loan, investment grant and the housing allowance scheme. A central part of the discussion in the paper will be to ask whether it is possible to introduce new more efficient instruments that better fulfil the goal of higher home ownership rates among vulnerable groups.

3. Affordable homeownership in the Norwegian housing market

In order to analyze the interconnections between the policy instruments more clearly we have given a formal representation of each instrument, and fitted them together into a model of affordability. The purpose of the model is to identify income thresholds, where a household can access home ownership, for given parameters of the policy instruments.

Gabriel et.al (2005) denotes affordability as an individuals capacity to exercise choice in the marketplace while Maclennan and Williams (1990) state that affordability is concerned with securing some given standard of housing at costs which does not impose, in an eye of government, an unreasonable burden on household income.

We adopt the ‘residual measure’- approach to affordability. The residual measure focus on the income remaining after housing costs are met and consider whether housing is affordable in the context of current income levels and essential household expenses (Gabriel et.al 2005). The assumption underlying this approach is that households should be able to afford both housing and non-housing expenses.

The starting point for our model is the budget constraint for individual households. We introduce a concept; economic margin (EM) as income after tax minus housing expenses and expenses on non-housing consumption (Vatne 2006). All variables are measured in nominal terms and related to the first year of occupation.
where:
EM: Economic margin
I: Gross income, taxable and non-taxable incomes
T: Tax
H: Housing expenses (net)
NH: Non-housing expenses

Whitehead (1991) points out that the definition of affordability usually focuses on the relation between housing expenditure and income. One could presume that H should not exceed more than for example 20 percent of the income (I). This is the same as to say that NH in (2) should as a minimum constitute 80 percent of the income minus tax T. In this paper we have approached affordability by choosing certain household dependent minimum expenses for other consumption than housing and combined these with household housing minimum standards in square meters.

Housing expenses is an out of pocket concept. For renters it is the gross rent minus housing allowances if qualified for the scheme. Owners pay nominal interests on loans, amortisation, maintenance costs, municipal duties, insurance etc. Also owners can qualify for housing allowances and H is an expression for gross housing expenses minus housing allowances.

The yearly housing expenses (H) for a household having a start-up loan, an investment grant and who is receiving housing allowances can be expressed as;

\[
H = P \cdot e_1 \cdot i_1 + P \cdot e_2 \cdot i_2 + A + D - B
\]

where \(i_2 = 0\) and \(e_1 + e_2 = 1\)

H: Housing expenses
P: House price
\(e_1\): Share of the house price financed with a mortgage
\(e_2\): Share of the house price financed with an investment grant
\(i_1\): Mortgage interest rate
\(i_2\): Interest rate on investment grant, \(i_2 = 0\)
A: Amortisation the first year
D: Maintenance etc.
B: Housing allowances

H could be lowered both by reducing \(e_1\), by setting A=0 or by introducing an indexed mortgage system where only the real interest rate are paid and the inflation part added to the existing debt. When house prices follow inflation, the debt in percent of the market price will then not fall over time. Owners can then accumulate wealth by paying nominal interest rates in
an inflation economy with constant real house prices, by amortization or by capital gains if real house prices increase. For many household this can be viewed as a form of “forced” saving.

If the economic margin EM is less than zero, the household will have negative cash flow or has to reduce non-housing expenses if housing consumption is given. When credit institutions consider giving a loan to a household entering the housing market, they demand a budget implying a positive economic margin.

A main goal in housing policy directed towards low-income households is to secure these household with a decent dwelling and that non-housing consumption should not fall under a minimum level. An important aspect in the design of housing policy instruments for low income groups is to account for regional and urban price variation, in a way that they are not forced to move to low-priced areas either inside the urban areas or to low-priced rural areas.

Acquisition of a decent and affordable dwelling can be a question both about a minimum housing consumption for different household types and the price of housing. The concept decent housing can be quite complex. In our model we use space standards outlined by HATC Limited (2006) as an approximation in order to make the concept of decent housing analytical tractable. For a chosen dwelling standard in square meters the price of the dwelling will vary with housing markets. In urban areas housing prices can be twice of those in some rural areas. Based on space standards and house price statistics we estimate a purchase price for every household category, depending on household size and region. The question then is not whether a household can attain home ownership, but simply whether a household can afford to own a decent home. Thus the question of affordability hinges on adequate standards for both consumption and housing.

In order to give a formal representation of the determination of the affordability constraint, that is the maximum amount a household can borrow for a given household income, we use a residual measure. In Barlindhaug and Astrup (2008) four different measures for such minimum consumption levels are introduced. Minimum consumption budgets are used by credit institutions and local authorities when households are applying for a mortgage. In these minimum levels of consumption housing expenses are not included, and the same levels can be used in all local housing markets. One of the four minimum consumption levels is used in repossession situations, where there is a voluntary and compulsory debt settlement for private individuals (the Debt Settlement Act). In such cases households have to live on a minimum consumption level for 5 years. Another minimum consumption level is the governmental recommended rates for social security benefits which have to be paid to vulnerable households by the local authorities.

In our evaluation we apply a measure for adequate standards of living that is normatively determined by the Norwegian Institute for Consumer Research (SIFO). This measure provides us with a minimum expenditure on consumption other than housing. This minimum subsistence scale does not give room for replacing durable goods while the normal SIFO budget standard does that. Using SIFO minimum, not including replacement of durable goods, have to be used with caution and should not be advised for long-term low-income households,
one of the investment grant’s eligibility criteria. With regard to single parents, we made
certain assumptions as to the child maintenance sum paid by the non-resident parent.

Gabriel et al. (2005) states that supporters of residual measures argues that this approach
provides information that is more accurate for different household types than ratio measures,
as for example housing expenses in relation to income. A criticism is that residual measures
depend on subjective judgements as to what counts as necessary household expenses.

Variable interest rate loans are most common in Norway. Therefore credit institutions take
into consideration an add-on interest rate on about 3 percent in case of a future rise in interest
rates. In conventional lending practices some credit institutions use a thumb rule for giving a
mortgage, for example that the loan should not exceed more than 3 times the household’s
income.

To identify scheme inconsistency and the impact of policy changes, we construct a model
with a finance module, a housing allowance calculation module and a module that calculates
net income, net housing expenses and a minimum amount for subsistence expenses. As a rule,
this relationship is denoted by the term “economic margin” and we show how the economic
margin varies with income.
As eligibility for a start-up loan is indicated by a positive economic margin, we should be able to work out the minimum income level to service a start-up loan in the presence of a housing allowance and an investment grant.

To represent adequate housing for different household categories space standards outlined by HATC Limited (2006) are used. These standards are presented in table 1.
Table 1: Minimum house size in square meters after household type

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<th>No children</th>
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<tr>
<td>Young disabled</td>
<td>60</td>
<td>-</td>
<td>-</td>
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<tr>
<td>1 adult</td>
<td>35</td>
<td>50</td>
<td>63</td>
</tr>
<tr>
<td>2 adults</td>
<td>50</td>
<td>63</td>
<td>73</td>
</tr>
</tbody>
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Source: HATC Limited (2006) and the Norwegian State Housing Bank (for young disabled)

House prices vary between regions. Only four regions are represented in our model. The definitions of the regions are in accordance with the regional variation in the ceilings for eligible housing expenses. One of the regions is Oslo with the highest price level. Combining space standards with regional prices, table 2 shows minimum purchase prices for different household types in four different regions for year 2007.

Table 2: House prices in NOK 1000 after household type and region. 1 EURO=8 NOK

<table>
<thead>
<tr>
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<th>No children</th>
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<tr>
<td><strong>Region 1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>1 adult</td>
<td>1386</td>
<td>1903</td>
<td>2314</td>
<td>2222</td>
</tr>
<tr>
<td>2 adults</td>
<td>1903</td>
<td>2314</td>
<td>2607</td>
<td></td>
</tr>
<tr>
<td><strong>Region 2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>1 adult</td>
<td>1212</td>
<td>1654</td>
<td>2000</td>
<td>1923</td>
</tr>
<tr>
<td>2 adults</td>
<td>1654</td>
<td>2000</td>
<td>2242</td>
<td></td>
</tr>
<tr>
<td><strong>Region 3</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 adult</td>
<td>1008</td>
<td>1363</td>
<td>1503</td>
<td>1574</td>
</tr>
<tr>
<td>2 adults</td>
<td>1363</td>
<td>1503</td>
<td>1684</td>
<td></td>
</tr>
<tr>
<td><strong>Region 4</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 adult</td>
<td>893</td>
<td>1199</td>
<td>1305</td>
<td>1377</td>
</tr>
<tr>
<td>2 adults</td>
<td>1199</td>
<td>1305</td>
<td>1455</td>
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</tr>
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</table>


The model in figure 1 works like this: First we start in the housing allowances module choosing region and household type. The house price is then given according to table 2. Then we move to the finance module. The purchase price is in our examples financed with a start-up loan and an investment grant. The investment grant’s share of the purchase price will have three alternatives; no investment grant, 20 percent and 40 percent investment grant.

Given the maintenance cost, the interest rate and the down payment profile on the start-up loan, we can sum up the gross housing expenses. We apply a discount rate of 6.5 per cent, as per the recommendations of the State Housing Bank in the beginning of 2008. The loan term is set at 20 years as an annuity loan.

We then return to the housing allowances scheme. According to the rules of the scheme housing allowances for all income levels for the chosen household and region are now
computed. The housing allowances scheme will not be outlined in detail here, but presenting the rules for a single parent household will help understanding the changes that later will be done in the scheme for improving integration between the three main housing policy instruments.

![Graph showing the housing allowances scheme for single parent households in municipalities with the lowest ceiling for eligible housing expenses.](image)

*Figure 2: Housing allowances scheme - single parent with 1 child, living in municipalities with the lowest ceiling for eligible housing expenses. Investment grant: 20 percent of the purchase price.*

This household consist of 1 single parent with one child with 105 000 NOK in yearly eligible housing expenses. The ceilings for eligible housing expenses for a 2-person household in these municipalities is NOK 55 000, substantial lower than the actual eligible housing expenses. The household contribution rate is 16.5 percent of the income for incomes under 130 000 NOK, and increases from this income level with 0.3 percent points for every NOK 1000 income increment. At an income level of NOK 242 000 the household contribution rate is 50 percent of the income. In this example housing allowances will be given to households with incomes lower than NOK 175 000 corresponding to 70 percent of the gap between (the ceiling for) maximum eligible housing expenses and the households own contribution.

In Barlindhaug and Astrup (2008) changes in the housing allowances system were done by a) increasing the ceiling for eligible housing expenses, b) increasing the income level where progression in the household contribution rate starts, c) reducing the progression in the household contribution rate. All these changes increase the maximum income level where housing allowances is given.

Finally we move to the housing budget module where the economic margin for all income levels is computed for three different alternatives for the investment grant.
4. How do the Norwegian housing policy instruments interact?

A main goal in Norwegian housing policy is to promote homeownership, also for low-income households and if possible also for homeless people. The challenge is then to design the instruments so they purposely interact with each other. Both Østerby (2007), ECON (2005) and The Office of the Auditor General of Norway (2008) find that the housing allowance scheme has other target groups than those in position for buying their own home. Some households have too high incomes to be qualified for social rental housing and housing allowances and too low incomes to serve a start-up loan. Those households probably can be located in the private rental market, but statistics or research in this field is missing.

The purpose of NIBRs review was to improve scheme interaction, and to encourage local authorities to make greater use of the schemes for home ownership promotion among disadvantaged groups. The review focuses on the opportunities existing housing policy schemes give to help disadvantaged people into owner occupation. One of the main purposes of the review was to explore possible incongruities affecting policy mechanisms for different groups in different housing markets.

It is necessary to identify which factors are involved when households that are eligible for housing allowances do not qualify for start-up loans, also when they are receiving generous investment grants. How can policy be improved to ensure coordination between the various schemes?

We focus on the affordability problems, given the current design of the schemes. We also show how the interaction between the schemes can be improved when changing central parameters in the housing allowances scheme. Here we only show results for one household type, a single parent with one child purchasing a dwelling in the region with the lowest house price level. In figure 3 we present the three alternatives for the share of the investment grant together with the level of housing allowances for different income levels. In our example housing allowances does not vary with the investment grant share. The reason is that the ceiling for maximum eligible housing expenses is effective in all alternatives. This means that the eligible housing expenses never is lower than the maximum eligible housing expenses.
Figure 3 shows that housing allowances is given up to an income level of NOK 174 000. When the household is receiving an investment grant of 40 percent of the purchase price, the household must have an income of NOK 200 000 to achieve a positive economic margin. If the investment grant is reduced to 20 percent of the purchase price this household must have NOK 230 000 in income to serve the loan. Figure 3 clearly show lack of interaction between the three central housing policy instrument in a situation where low-income households wish to be home-owners. Household with incomes higher than NOK 174 000 do not receive housing allowances, but must have NOK 200 000 to serve housing expenses on a start-up loan constituting 60 percent of the purchase price. We find only a minor level of scheme coordination, a conclusion which remains valid even when house prices are significantly overestimated.

The disparity between the highest income that qualifies for a housing allowance and the income required to service a start-up loan is particularly evident for couples without children and families with two adults. It remains valid also when 40 per cent of the purchase price is awarded as an investment grant. We only find scheme interaction in a narrow income range for young, single individuals and disabled young adults. Young, single individuals falls within the housing allowance’s target group only if the income comprises social security benefits or public assistance.²

Extending maturity from 20 to 30 years reduces monthly repayment considerably. As far as loans and credit ratings are concerned, a 30-year term could be justified. It would reduce the

² In the National Budget for 2009 it is proposed that a household will be qualified for housing allowances independent of the type of incomes and independent of household composition. The detailed proposal will be presented on November 6th 2008.
saving component of payment of housing expenses while leaving room to temporarily halt payments should the household go through a particularly difficult period. Many recipients of the start-up loan will see their earnings grow with time, making it less onerous to repay the loan. Extending the maturity date has a small positive impact on the interaction effect for single individuals and single parents with one child, but the effect is larger for the young disabled.

It is not until extended maturity is combined with changes in the housing allowance scheme that we see substantial interaction benefits. There are several ways to increase the highest income for eligibility for the housing allowance. Higher ceilings for eligible housing expenses and changes in the parameters for calculating the households own contribution, and both in combination, occupy a central position when the rules governing the housing allowance scheme in the model are changed. In Barlindhaug and Astrup (2008) examples are given of changes in the housing allowance rules resulting in higher inter-scheme coordination.

In the example with the single parent with one child we have increased the income where the progression in the households own contribution starts from NOK 130 000 until NOK 170 000. The progression rate is reduced from 0.3 to 0.1. These rule changes in the housing allowances scheme combined with a prolonged repayment time of 30 years, give full interaction of the three housing policy instruments for this household type.

![Graph](image)

*Figure 4: Economic margin and housing allowances. Interaction between start-up loan, investment grant and housing allowances. Single parent with 1 child, living in municipalities with the lowest ceiling for eligible housing expenses. Income level where progression starts is 170 000 and the progression rate is reduced from 0.3 to 0.1*

Housing allowances are now given to an income level of NOK 231 000. Even those who are not given an investment grant will at an income level of NOK 220 000 receive a small amount
of housing allowances and can serve a start-up loan constituting 100 percent of the purchase price.

In addition to improving interaction between schemes in a start-up phase, changing the housing allowance parameters also increases the housing allowance entitlements of current recipients regardless of tenure, and makes it easier for other owners and renters to access the housing allowance scheme.

5. A general model for affordable housing

I the following section we present a general expression for housing expenses the first year after occupation, dependent on the existence and size of different possible housing policy instruments. The Norwegian housing policy instruments can be seen as a special case of this expression. Rent setting principles in the social rental sector is supposed to be market based.

\[
H = P \cdot e_1 \cdot i_1 + P \cdot e_2 \cdot i_2 + A + \left[ r \cdot (1 - e_1 - e_2) - S \right] + D - B
\]

Where

H: Housing expenses
P: House price
\(e_1\): Share of the house price financed with a mortgage
\(e_2\): Share of the house price financed with an investment grant or an interest free loan
\(i_1\): Mortgage interest rate
\(i_2\): Interest rate on investment grant/interest free loan, \(i_2 = 0\)
\((1 - e_1 + e_2)\): Share of the house owned by the local authority
\(r\): Marked rent on the house (exclusive maintenance)
\(r(1 - e_1 + e_2)\): Local authority’s market rent on the local authority’s share
A: Amortisation the first year
S: Individual subsidy on the local authority’s rent
D: Maintenance etc.
B: Housing allowances

The policy instruments which will be described here is the following four; start-up loan, investment grant, rent subsidy and housing allowances. In a system with shared ownership a rent subsidy, S, will often be used instead of an investment grant, that is e_2=0. We assume that the household pays the whole maintenance cost (D), independent of the size of e_1. In the case with shared ownership housing expenses (HS) can be expressed as in (5):

\[
HS = P \cdot e_1 \cdot i_1 + A + \left[ r \cdot (1 - e_1) - S \right] + D - B
\]
In Homebuy $i_2=0$ and the share $e_2$ is the interest free loan’s share of the purchase price, not an investment grant, as in the Norwegian example shown later. Housing expenses in the Homebuy case (HH) will be:

\[
HH = P \cdot e_1 \cdot i_1 + P \cdot e_2 \cdot i_2 + A + D - B
\]

where $i_2 = 0$ and $e_1 + e_2 = 1$

Whitehead and Yates (2007) define shared equity products as enabling the main purchaser to reduce their outgoings at the expense of giving up rights to part of the equity in their home. The risks associated with home ownership are then shared between the owners (legal entities). These products are describes by how they are financed, how the value is allocated and the nature of transfer rights between the primary and the secondary owner.

Munro (2007) claims that LCHO (Low Cost Home Ownership) schemes have been too small in scale to influence ownership rates among excluded households. The schemes have lacked a strategic focus, suffer from a lack of widespread understanding and one of them, Conventional Shared Ownership (CSO), is complex, risky and offering poor value for money.

Bramley et al. (2002) found that these schemes do not extend home ownership significantly among those who cannot afford it, except in London and the South East. About half of the purchasers would have bought anyway. An evaluation of the French upfront subsidy to ownership shows that 85 percent of the beneficiaries would have moved and purchased a dwelling even in the absence of the subsidy (Gobillon and Blanc 2008). The upfront subsidy was given as an interest free loan to first-time buyers mainly for new construction.

Norway has not any form of shared ownership, but a system resembling the UK Homebuy scheme. The investment grant can be seen as an interest free loan which is written down during a period of ten years. If the household move after 5 years half of the investment grant has to be paid back to the municipality. The State Hosing Bank has a yearly investment grant budget which is distributed among the municipalities after certain criteria where the house price level is one important.

A special case of the general expression is a social rented dwelling where $e_1$, $e_2$ and $A$ equal 0. The house is then fully owned by the local authority. Housing expenses (HR) can be expressed as in (7) and the house can be seen as belonging to the social rental sector.

\[
HR = (r - S) + D - B
\]

In Norway the local authorities are allowed to set market rents in the social rental sector in the same way as in the private rented sector. In (7) a market rent is used and the housing expenses now consist of the market rent minus in individual cases some form of subsidy from the local authority, plus maintenance costs minus housing allowances. Only half of the households living in social rental housing in Norway are receiving housing allowances. The rules for the housing allowances scheme are such that it is a benefit for the local authority to use market
rents. 80 percent of a rent increase is paid by the state housing allowances scheme. There is
evertheless a ceiling for how high the eligible housing expenses in the housing allowances
scheme can be.

In Norway 31 of about 430 municipalities in addition to the housing allowances have a
municipal housing allowances scheme. Some local schemes are only for renters, others only
for renters in the social rental sector, others also for homeowners. The municipalities in
addition pay social security benefits for covering housing expenses. S in (7) can be an
expression for these local subsidies for housing consumption in the social rental sector.

6. Discussion

We have so far shown that Norwegian housing policy instruments do not interact to promote
home ownership for households at the margins of affordability. There is a major gap between
income thresholds for the start-up loan and the housing allowances scheme, even for
investment grants of 40 percent of the purchase price. In this section we will be addressing the
policy implications of this established insight. Should the Norwegian government simply give
up its ambition of affordable home ownership for disadvantaged households, and if not, what
policy changes should be made?

We will not debate extensively here the merits of owner occupation as a tenure. The
governmental ambitions for increasing affordable home ownership seems to be based
unrealistic assumptions, spurred by unprecedented and continuous rise in house prices since
1993. The house price expectations of both the Government and the State Housing Bank are
fairly adaptive; it is a widespread notion that future housing price movements will continue in
similar fashion to resemble the past 15 years. Thus housing investment is regarded to have
high return and low risk, and as a consequence the inherit risk involved in owner occupation
is not fully appreciated, in particular for low income households. This view of the housing
market in turn gives rise to the belief that owner occupation is an efficient instrument for
fighting poverty and increasing social justice. No schemes have been implemented to deal
with the possible sustainability problems that can occur by bringing marginal purchasers into
owner occupation. To a certain degree the housing allowances scheme can act as a safety net
when interest rates rise or incomes fall. An assumption is that eligible housing expenses are
not far above the ceiling for the same expenses and that incomes are not too high.

Given the policy target of extending owner occupation to low income households, what would
be an efficient way of doing so? Should the Norwegian government change the parameters on
its current instruments or should it adopt new instruments, in particular some form of an
equity loan scheme?

One can argue that the Norwegian housing investment grant scheme is poorly designed, both
for efficiency and equity purposes. The main goal for the Norwegian housing policy is to
extend owner occupation to low income groups, not contributing to asset accumulation. The
proceeds of equity transfers from the investment grant could alternatively be used to assist
additional households into owner occupation. Also its distributional properties are clearly
unjust. The conditions of eligibility are vague, and thus there is an intrinsic arbitrariness in the
distribution of the grant. Further the distributional profile of the grant is large grants to few
households and not small grants to many households. Thus insignificant income differences
can become decisive for whether a household qualifies for a substantial grant or not.

The investment grant scheme could be replaced with an equity loan scheme. A well known
example on equity loan is the British Homebuy scheme, where the buyer receives an interest
free loan equivalent of 30 percent of the purchase price, see Jackson (2001) for in-depth
discussion of the Homebuy scheme. In our model this is basically a variant of the more
general shared ownership scheme, where the rental part is fully subsidised.

One can also question the benefit of tenure neutrality as it manifests itself in the current
Norwegian housing allowance scheme. Payments on the principal are considered eligible
housing expenditure. Within a given budget there is clearly a tension between extending
owner occupation to new households and equity transfers to households already in home
ownership. Since equity transfers to established households are not a policy goal, one can
argue that this implies that payments on principal should not be eligible expenditure. The
same logic can be applied to nominal interest payments, where households in a situation with
constant real house prices will save the discrepancy between nominal and real interest rate.
Thus both the Norwegian housing allowances scheme and the investment grant scheme suffer
from the same shortcoming, namely that they indiscriminately supports established home
owners as well as households that aspires home ownership.

The Norwegian housing policy has considered full ownership as the only alternative tenure to
renting. In section 4 we saw that full ownership is not a feasible option for many low income
households in the current policy regime. If the Norwegian Government insists on extending
owner occupation to lower income groups, then the shared ownership scheme might be the
most efficient way of doing so. Shared Ownership is a tenure where the household purchases
a proportion of the dwelling and rents the remainder. The household can over time increase its
ownership share, usually to full ownership (Whitehead and Yates (2007)).

In what way could a shared ownership scheme enhance affordable and sustainable home
ownership in Norway? Households with low incomes have a higher default risk at it is
usually harder for them to accommodate changes, such as unemployment, illness or higher
interest rate. Shared ownership shares the risk of price variation and it also give a protection,
inversely correlated with ownership share, against rise in interest rate because the rental part
will not be directly affected.

Obviously the extent to which Shared ownership enhances affordable home ownership hinges
the choice of subsidy arrangements. Shared ownership without a rent subsidy reduces risk, but
do not necessarily enhance affordability. However, with the use of shallow rent subsidies,
additional households can be assisted into owner occupation (Whitehead and Yates 2007;
Yates1992). Compared to the Norwegian system with investment grant and a tenure neutral
housing allowance, it is easier to use subsidies on the rental part of the shared ownership to
directly increase affordability without simultaneously misallocating resources to private asset
accumulation.
A further argument for shared ownership relates to social justice. In Norway only people with very low incomes get housing allowances and social housing, and people with sufficiently high income for home ownership gets generous tax benefits. However, low income household in the private rental market get no governmental support. By easing access to home ownership using shared equity schemes, one can revert tendencies of polarisation and marginalisation (Yates 1992).

7. Conclusion

Home ownership among disadvantaged groups in society is a central policy target in Norway. Start-up loan is a key instrument and an investment grant scheme is intended to cover part of the purchase price. These policy instruments are complemented by the housing allowance scheme enabling households to pay their annual housing expenses and continue to reside in the house. The central government wants these three instruments to work together offering recipients a “package of instruments” for promoting home ownership among disadvantaged groups on the housing market.

Norway has a small residual social rental sector consisting of about 4-5 percent of the total housing stock, and exclusively targeted to vulnerable groups as a temporary solution, normally on 3 years contracts. Houses in the social rental sector in Norway are owned or are at the disposal of the local authorities. More use of market based rents has increased the turnover in the sector.

We show that only the most vulnerable are offered a house in the social rental sector and that the housing allowances scheme reaches a lower income segment than those qualified for a start-up loan and an investment grant. One anticipates that those who have too high incomes for receiving housing allowances and too low incomes to be home-owners find occupation in the private rental market.

Only a major change in the housing allowance scheme can improve the interaction of the three main instruments for increasing home ownership among low income groups. As an alternative we discuss the possibilities for introducing some form of equity loan schemes in Norway, both for increasing access to owner occupation, but also for reducing or sharing the risks connected to home ownership for low income households.
References


