Owner-occupiers and the quality of their dwellings

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Abstract:
Home-owners are in principal responsible for maintaining the physical quality of their dwellings. It is in their own interest to do this in an adequate manner, but all kinds of constraints can and do occur in practice. Lack of financial means and insufficient (technical or practical) knowledge are only two of the possible barriers. The quality of owner-occupied housing sector exceeds the individual interest, there are also general concerns to consider. Qualitative seriously substandard owner-occupied dwellings can have various negative effects on the neighbourhood. This paper is based on an on-going research project on the quality and maintenance situation of the owner-occupied sector in the Netherlands. Within this project almost 4.000 Dutch home–owners have recently been questioned about issues concerning the quality of their dwelling, the maintenance actions they undertake, the problems they encounter and the help or advise they would like to get. This paper presents the first results. The results especially will give insight in the way home-owners cope with maintaining the quality of their dwellings. Are they doing an adequate job or are interventions of the Dutch authorities (for parts of the sector) necessary?

Keywords:
home-owners, housing quality, housing stock, maintenance, policy instruments

1 Introduction

This paper deals with the physical quality of the owner-occupied sector in the Netherlands. During the last decades the owner-occupied sector has increased considerably. The principal view of the central government is that home-owners themselves are responsible for the quality and maintenance of their dwellings. Governmental support in general is not necessary. In a growing number of municipalities however the quality of the owner-occupied housing sector has become a matter of concern during the last years.

As this paper shows home-owners in general are perfectly able to maintain the quality of their dwellings. Nonetheless there are some 'problem segments', where the owners are not able (or willing) to invest in maintenance and repair. Especially local authorities observe that the physical quality of parts of the older owner-occupied stock is far from satisfying and partly seriously substandard. Various reasons to intervene can be named. In the first place local authorities have the statutory requirement (based on the Housing

Act) to supervise the housing quality. The building regulations establish an minimum level for existing dwellings. If a dwelling falls below that level the local authorities can summon owners to improve the situation. In general this only happens when the safety or health of the occupiers themselves and/or neighbours are endangered. Besides that the owner-occupied sector is of importance for the liveability of neighbourhoods. A row of dilapidated owner-occupied houses in a street could have serious negative effects on the neighbourhood. Municipalities can play a role to prevent that such problems occur. Furthermore national government and municipalities have established ambitious goals to reduce CO_2 emissions. In order to realise these ambitions the energy performance of the existing dwelling stock has to be improved on a large scale. To get the owner-occupiers on the move to invest in energy saving measures an important role is foreseen for local authorities. Because of these mix of reasons seven municipalities have decided to join in a research project that focusses on the question: "What is the quality of the owner-occupied sector and how can local municipalities act to improve the quality of the private owned housing stock"? This paper reports about the first findings of the research project. The paper starts in chapter 2 with a short overview of the owner-occupied housing stock. Chapter 3 elaborates on the 'problem segments' and the efforts local authorities undertake to intervene. Section 4 focuses on the overall perception on housing quality of the owner-occupier. In section 5 first conclusions are presented.

1.1 Research approach and methodology

The research project is being carried out by OTB Research Institute for the Built Environment (Delft University of Technology). Besides the seven municipalities the Dutch Stimulation Fund for Housing (SVn) and the Nicis Institute participate in the project. SVn administers funds that are provided by (local) authorities and invests (via low rented loans and revolving fund constructions) in the quality of the housing sector. The Nicis institute is the Knowledge Institute for Dutch Cities. The project focusses on the quality of the owner-occupied sector as a whole but also on the 'problem segments'.

Various research methods are used. In case studies in the seven municipalities the efficiency is explored of the policy instruments that are used to solve the quality backlogs in the 'problem segments'. Via desk research and in-depth interviews the extent of the problem and the (cost) effectiveness of the policies in each municipality are described and analysed. The interviews are being held with representatives from the municipal councils, service counters, financial organizations, Home-Owners' Associations, etc.
To get insight in the overall situation in the owner -occupied sector a general survey was recently carried in the seven municipalities. Via a multi staged sampling process owner-occupiers were in selected each municipality. A distinction was made between multi and single family dwellings and four construction periods (one pre-war and three post-war periods). Some 26.000 owner-occupiers were approached with the invitation to fill in an internet questionnaire. The questionnaire was divided in the following sections: characteristics of dwellings and occupants, perceptions of housing quality, operation of Home-owners' Associations, maintenance work and housing repairs in the recent past and near future and energy-use. Fifteen per cent of the owner-occupiers have completed the questionnaire.
With respect to contents the research project focusses solely on the situation in the Netherlands. In a later phase the results and insights will be placed in an international

perspective. Although emphasis lies on the results of the general survey, the paper touches also upon the 'problem segments' and the municipal instruments used to tackle the problems.

2 The owner-occupied sector

Table 1 gives an overview of the developments in the Dutch housing stock over the last forty years.

Table 1. Development of the housing stock by tenure (in %)

(Source: ABF Research B.V. Syswov 2011)

	1971	1980	1990	2000	2010
Owner-occupied	35,1	40,7	45,3	52,5	59,3
social rented	37,1	37,9	38,5	35,8	31,7
Private rented	27,8	21,4	16,2	11,7	9,0
Total	100,0	100,0	100,0	100,0	100,0

Until some decades ago the importance of the Dutch owner-occupied sector lagged behind those in neighbouring European countries. In the meantime this situation has changed. The last decades showed a remarkable growth of the owner-occupied housing stock. In the last forty years owner-occupation grew from some 35% up to almost 60% at present. The private rental sector declined from 28% to 9% at present. The last two decades the relative importance of the social rented sector decreased from 38% to almost 32%. The growth of the owner-occupied part was the combined result of a strong absolute as well as relative increase of new construction (the lion share of newly built housing construction has been owner–occupied) and of the selling out of rented dwellings. In the same time the production of rented dwellings dropped while demolition of social rented dwellings showed a steady increase.
There are huge local differences in ownership proportions. Especially in the larger municipalities the relative importance the owner-occupied sector is far lower than the Dutch average. In the municipalities that participate in this research project 40% to 50% of the housing stock is owned by the occupiers.

The owner-occupied sector in terms of age and dwelling type is diverse. Table 2 gives information on the age of the owner-occupied and rental housings sector in categories. The table shows that the owner-occupied stock is relatively young.
None the less - as is the case throughout Western Europe - the Dutch housing stock is ageing. After the mass construction following WW II the addition of new dwellings has now dropped to (far) less than 1% annually. Though the Dutch housing stock is still relatively young – over three-quarter of the stock was produced in the fifty years after WW II – the ageing process is continuing. In 1973 almost 60 per cent of the housing stock was less than 25 years old. In 2010 this percentage has changed to 30.

Table 2. Age of the owner-occupied stock compared with the rental housing stock (in %)

(Source: ABF Research, Syswov 2011)

	Owner-occupied stock		Rental housing stock	
	N	%	N	%
Pre war	931.906	21,9	542.347	18,6
1946-1970	902.041	21,2	1.000.519	34,3
1997-1990	1.320.973	31,0	977.691	33,5
After 1990	1.099.699	25,9	397.260	13,6
Total	4.254.619	100,0	2.917.817	100,0

The owner-occupied stock consists predominantly (85%) of single-family housing. In the rental housing stock singe-family houses and multifamily houses are represented proportionally.
Again there are important local differences. In some municipalities that participate in the research project (e.g. The Hague) a large part of the owner-occupied stock is pre-war and situated in multifamily houses. In the Netherlands owners of apartments in multifamily houses must co-operate in an Owner-Occupiers' Association. The joint owners are responsible for maintaining the physical quality of the common parts of the building (e.g. façade, roof, staircase and elevator). According to the Apartments Act and the Housing Act apartment owners in an Owner-Occupiers' Association should appoint an administrator, meet at least once a year to discuss maintenance and reserve funding for (future) maintenance and major repairs.

3 Problem segments and policy instruments

From 1901 on (the year the first Housing Act came into force) local authorities have been active guarding the quality of the owner-occupied housing stock. In the 1970's and 1980's the quality of private housing became a political issue on a national level. Especially the quality of the pre-war housing sector was a point of concern. Extensive maintenance backlogs in the owner-occupied sector were improved with government funding. Based on the Urban Renewal Act and financed by the Urban Renewal Fund large scale urban renewal projects were developed with subsidy schemes for owner-occupiers. Besides the subsidy track, some local authorities bought private dwellings and renewed them.
Since this approach proved to be successful, the (predominantly pre-war) Urban Renewal assignment was considered to be completed (MVROM, 1992), the Urban Renewal Act was withdrawn, and the Urban Renewal Fund came to an end.

Until the year 2000 the quality of the Dutch Housing stock was monitored with 5 yearly Qualitative Housing Surveys. The last survey (held in 2000) showed that the Dutch owner-occupied stock in general was in a relatively good state. This was the sign for the national government to end its active involvement in the owner-occupied housing sector. The problems were solved and the minister responsible for the housing sector explicitly pointed out that taking care of the quality is the responsibility of the owner

(MVROM, 2003 en 2006; Dekker, 2005). All the same in recent years some subsidy and VAT reduction programs have been installed to promote energetic saving measures in the owner-occupied sector. A goal often combined to support the struggling building sector in these times of economic crisis.

3.1 Problem segments

Housing quality of the owner-occupied stock also has not been on the agenda of most local authorities the last decade. In most cases this can be explained because they did or do not see the need. Others however have argued that municipalities have lost the sight on the quality of the housing stock (Goudriaan and Ten Napel, 2004). In 2005/2006 research was carried out for a broad consortium of organizations in the construction and real estate sector. They showed concern about the quality development of the privately owned housing stock and the fading governmental attention. That research has shown that - although in general the situation in the owner-occupied sector was relatively good - there were some 'problem segments' where attention is needed (Meijer and Thomsen, 2006). As this on-going project proves the need for attention has not diminished. A growing number local authorities see the need to pay attention to the quality situation in some parts of 'their' owner-occupied housing sector. Even though many local authorities miss actual and exact information about the physical housing quality, the following trouble spots can be identified.

The quality backlog is relatively great in pre-war (single-family) dwellings in smaller municipalities and in multifamily houses (built before 1945 and in the period 1945-1970) which predominantly are located in larger municipalities (Meijer and Thomsen. 2006).
The (pre-war) single family houses can be found in relative sparsely populated areas, where the economy is shrinking. In these areas the demand for owner-occupied houses is low or almost absent. Under these circumstances the current owners are not prepared - but more important often not financially able - to invest in the upkeep of their dwellings. The houses that already are in a bad state of repair deteriorate further.
The maintenance backlogs in pre-war and early post-war multifamily housing in the larger municipalities are caused by a combination of several factors. In the recent past many apartments haven been individually sold (by housing associations or private investors) to the renters. The starting quality of these dwellings was already low and most of the buyers belong to a lower-income group. To worsen things the Owner-Occupiers' Association in which the buyers should co-operate carrying out maintenance on the communal parts of the multifamily house was (and is) in most cases not functioning. This means: no co-operation, no proper communal management, no meetings to plan future maintenance and no reserve fund for common repairs and maintenance.
These two segments need attention in terms of improving the physical quality. The strong increase in the percentage of elder people could influence the maintenance quality of the Dutch owner-occupied stock in the near future on a more general level. In general the population is getting older and owner-occupiers stay far longer in their dwellings. These occupants are reluctant or find it more and more difficult to invest in the maintenance of their dwelling. The current economic crises could also have a negative effect. The value of owner-occupied housing is declining and average incomes

are falling off. This makes is it not attractive (or sometimes impossible) to invest in the dwelling.

As mentioned briefly before in section 1 the national government and municipalities have established ambitious goals to improve the energy performance of the Dutch housing sector. In the owner-occupied sector the potential for energy saving is huge (Meijer et al, 2009). More than 60% of the owner-occupiers believe that it is quite feasible to lower the energy use (either by taking measures or by changing behaviour). Around 25% up to 30% has the opinion that more energy saving is not possible and the remaining 10% has no idea.

Of an entirely different order are problems with rotten wooden pile foundations. An estimated 750,000 dwellings (especially in the western parts) in the Netherlands are built on a wooden pile foundation. The number of residential buildings with (hidden or acute) foundation problems has been estimated at about 200,000 up to 250,000. This could be doubled in in the coming decades if no adequate measures are taken. At least half of these will have to be provided with a new foundation. The repair costs vary from € 45,000 up to € 60,000. Many owner-occupiers face (and probably will face) this problem. These are expenses they can impossibly afford. Help and support (from authorities and or housing associations) is needed to tackle the problems.

3.2 Policy instruments

On a national level some regulatory steps have been taken special aimed at owner-occupied multifamily housing. In 2008 the Apartment Act has been changed and from that time on Owner-Occupiers' Associations are statutory obliged to have a maintenance fund. When an apartment is sold it is obligatory to provide information about outstanding balances (from the other owners) and current contents of the maintenance fund. No legal arrangements have been made about the height of the fund or planning of major repairs. In 2011 the Housing Act has been changed in order to give municipalities the power to act to activate non-functioning Owner-Occupiers' Association. In the case of imminent major maintenance backlogs it is possible for local authorities to intervene.

To stimulate energy saving measures in the built environment the covenant More with Less has been negotiated between the government and stakeholders in the construction industry and both the social as owner-occupied housing sector (2008/2009). One of the instruments is that owner-occupiers could get subsidy to determine the energetic performance of a dwelling and the measures that could be taken to better the situation. This subsidy program has stopped in 2011.

In the meantime more and more local authorities have developed specific instruments to tackle the problems as mentioned above. In some cases the instruments are specifically aimed at Owner-Occupiers' Association Act and in other cases on certain types of repair (e.g. the façade or energy saving measures). In many cases local authorities aim at combined results. For instance when foundations are being replaced or restored it is also logical to take measurements to improve the energy performance (e.g. insulating the ground floor). The case study research that is being carried out in this project analyses the effectiveness and efficiency of the instruments local authorities have brought into action. In general these instruments are aimed at stimulating the owners through

communication and financial incentives. The overall effectiveness and efficiency of these instruments seems to be rather low. Local authorities invest relatively large financial and personal efforts whereas the yields are low. In depth analyses of the results will in the near future be reported in separate papers and articles.
In the next chapter the 'problem segments' are left behind and attention will be paid to the situation in the owner-occupied sector in general.

4 Home-owners and the quality of their dwellings: overall view

This section presents the first results of the survey that has been carried out in this project. The survey was conducted (end of last/beginning this year) under owner-occupiers in the seven participating municipalities. In total almost 3.800 questionnaires were returned.

4.1 Considerations in advance

The results presented in this chapter are based on a work in progress. These general results so far have been presented only to the local authorities. The data is representative on a municipal level; no further breakdowns (building age and housing type) have been published yet. The data sketch a good overall picture of the situation in the seven municipalities as with respect to the way owner-occupiers are dealing with the (physical) quality of their dwellings. The results are comparable in the seven municipalities. The data presented were gathered in The Hague.

Another consideration to be made is the representativeness of the home-owners that have participated in the survey. Owners that participate in this kind of research are relatively more enthusiastic and satisfied by the importance of such kind of research. First analyses (on the available data on a national level) has shown that the average respondent is higher educated than the average Dutchman. The income level however seems not to deviate from the average income level of the Dutch home-owner. In order to be able to draw more conclusions about the representativeness of the owners that have participated, comparisons with municipal data should be made. In many cases however it is questionable if there is reliable data available about the personal characteristics of home-owners on a municipal level.

4.2 Perception of quality

The home-owners were asked to assess the quality of their dwellings and neighbourhood. This section deals with the quality assessments of the owners themselves. No physical inspections (by a professional) of the dwellings were held. This could produce a biased picture. The judgment of an owner results does not always corresponds with the actual state of repair.
Three quality aspects are taken into account:

- State of repair of the outside (exterior) and inside of the dwelling.
- Ease of use and comfort of the dwelling.
- Living conditions (residential area).

Each of these three aspects is divided in subcomponents. Figure 1 gives an illustration of the assessments of the outside of the dwelling.

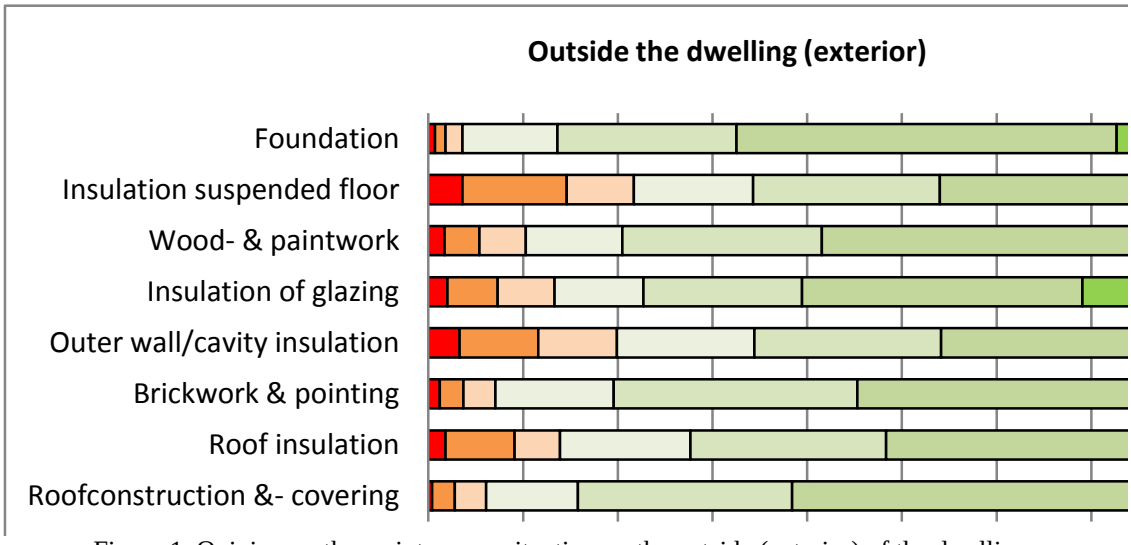

Figure 1. Opinion on the maintenance situation on the outside (exterior) of the dwelling
1-2 = bad 3 -4 unsatisfactory 5 = almost satisfactory
6 -7 satisfactory 8 -9 good 10 = excellent

Most owner-occupiers are satisfied with the exterior of their dwelling. More than half of them asses the state of repair as being good up to even excellent. Components that score relatively low are the insulation of the dwelling. Roughly 20% of the owners consider the insulation level - especially of the ground floor and outer wall – as unsatisfactory.
To a large extent these correspond with 'national' data: 83% of all Dutch households (fully) disagree with the proposition *"my dwelling is in a bad state of repair"* (AFB Research, 2010). These 83% include households that rent. This group could have influenced the results in a negative way. The fact that there are insulation backlogs (especially with respect to the ground floor and façade) is also backed by data gathered on a national level (Meijer, et al, 2009).

As figure 2 shows home-owners are even more satisfied with the inside of their dwelling than with the outside components.

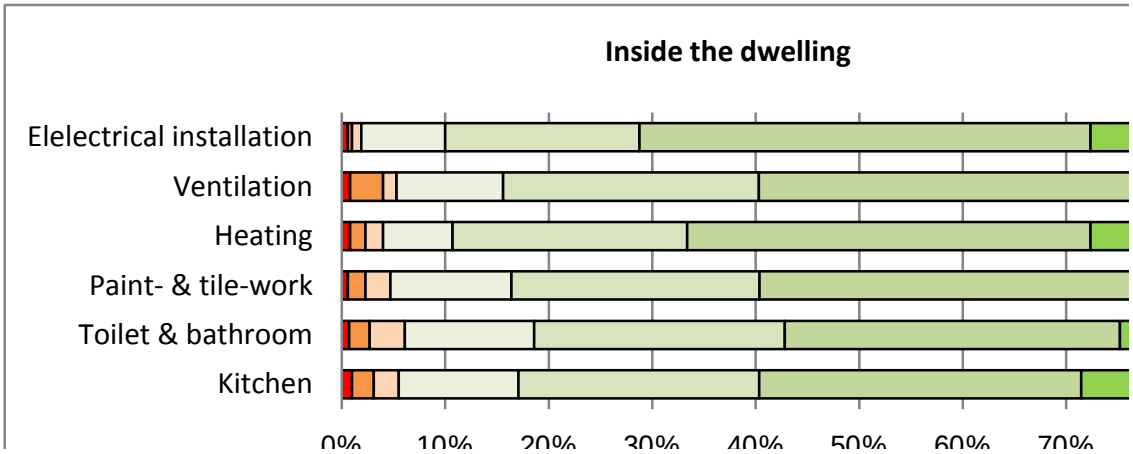

Figure 2. Opinion on the maintenance situation inside the dwelling
1-2 = bad 3 -4 unsatisfactory 5 = almost satisfactory
6 -7 satisfactory 8 -9 good 10 = excellent

The overall judgement of the owners is good up to excellent. Less than five per cent of the home-owners is dissatisfied with some components inside their dwelling. This is in accordance with other data that is gathered on a national level: 97% of the Dutch home-owners are (very) satisfied with their dwellings (AFB Research, 2010).
The ease of use and comfort is also being considered as 'good'. Especially size and lay out of the dwelling prove to be (quite) satisfactory. Only the insulation aspects (see also figure 1) have in general a relatively less good score.

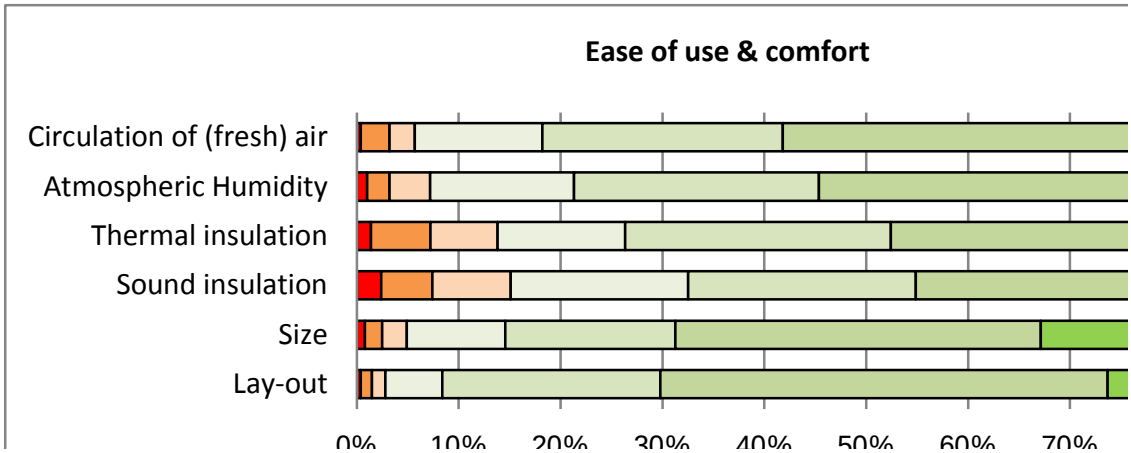

Figure 3. Opinion on ease of use and comfort of the dwelling

1-2 = bad 3 -4 unsatisfactory 5 = almost satisfactory
6 -7 satisfactory 8 -9 good 10 = excellent

The National Housing Survey (AFB Research, 2010) shows that 86% of all households (fully) agree with the proposition; *"the lay-out of my dwelling is OK"*. Other relevant outcomes are

- *"My dwelling is too small"*: eighty per cent of all households (totally) disagree.
- *"My dwelling is too large"*: almost three quarter of all households(totally) disagrees

Figure 4 shows how owner-occupiers consider the living conditions in their direct environment (street and neighbourhood).

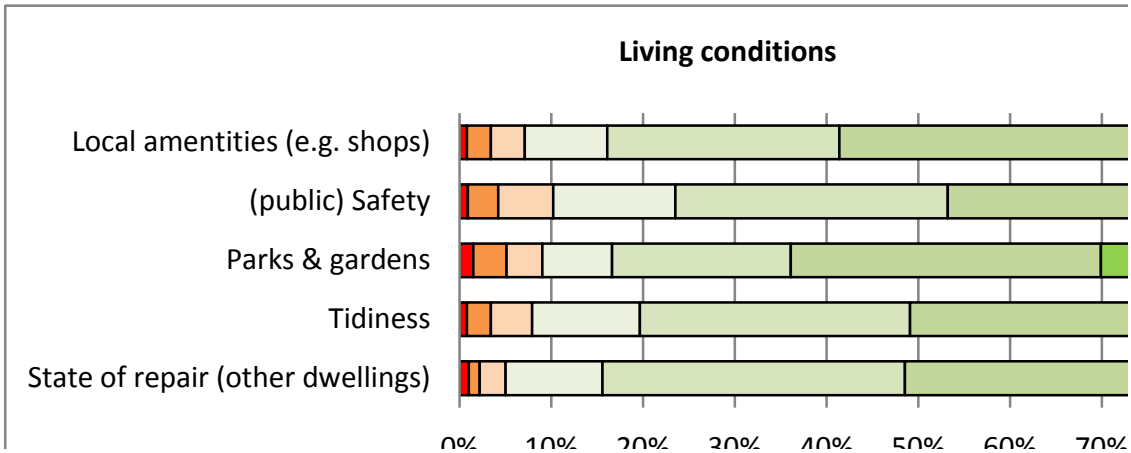

Figure 4. Opinion on living conditions

1-2 = bad 3 -4 unsatisfactory 5 = almost satisfactory
6 -7 satisfactory 8 -9 good 10 = excellent

The lion share of the home-owners is satisfied with their direct living environment. Nonetheless some 10% consider the (public) safety, green space and tidiness as being insufficient.
In the Netherlands as a whole around six per cent of all households is (very) unsatisfied with their direct environment (AFB Research, 2010).

The overall picture that emerges from the data presented in the figures 1 through 4 is that owner-occupiers in general are (very) satisfied with their dwelling.

4.3 Maintenance and repair activities

The average home-owner appears to be quite active maintaining their dwelling. Maintenance activities have been carried out in more than three quarters of the dwellings (over a period of 2 years). The most important reason for owners who have not done anything is because it was not necessary (see figure 5).

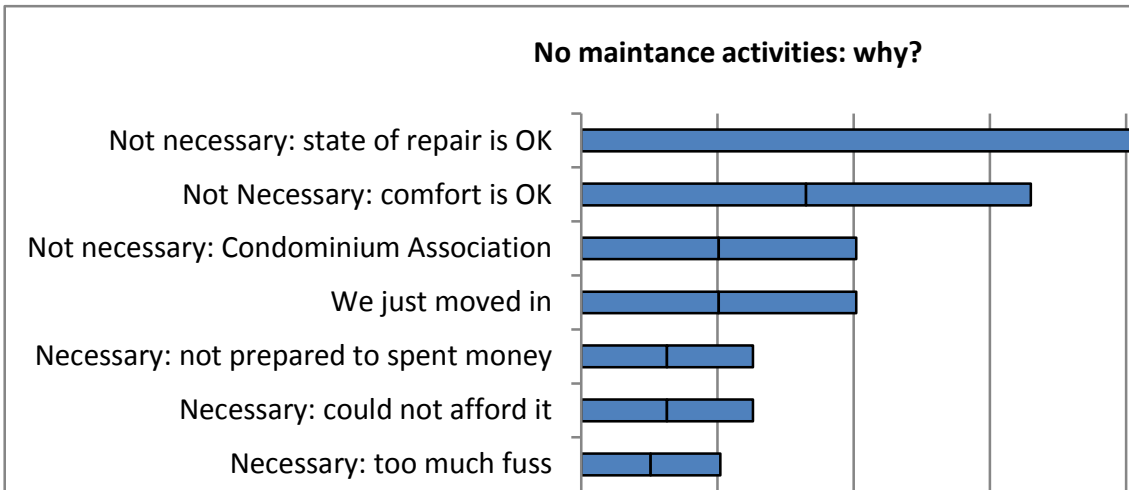

Figure 5. Reasons why no maintenance activities have been carried out the last 2 years

The reason most mentioned is that the state of repair of the dwelling is in order. In some 10% of the cases the Owner-Occupiers' Association deemed it not necessary to carry out maintenances jobs. In relatively few dwellings (5% to 7%) necessary maintenance has not been carried out because a lack of money or skills.

In the questionnaire a distinction was made between three groups of maintenance (or repair) activities:

- Work on the outside (or exterior) the dwelling (e.g. repair of roof or outer wall; wood- or repaint work).
- Work on the inside of the dwelling (e.g. repair or replacement of kitchen, toilet or bathroom, repaint- or retile-work).
- Installation/insulation work (e.g. replacement of the boiler. insulation of roof, glazing, floor or wall).

Figure 6 illustrates that work on the exterior of the dwelling has had priority during the last two years.

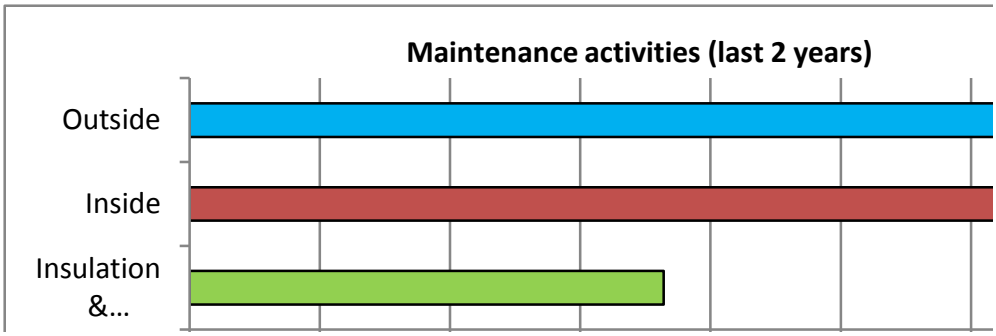

Figure 6. Maintenance activities (categorized) that have been carried out the last 2 years

Three-quarter of the owner-occupiers that have carried out maintenance work did some jobs on the exterior of the dwelling. Particularly the paint and woodwork on the outside has been repaired (done by 70%). Another thirty per cent of the owner-occupiers has repaired their roof-covering (construction) and/or gutters and drainpipes.
Although a lot of work has also been done inside the dwelling, the percentage of home-owners that paid attention to the inside is a bit lower than those who worked on the exterior of the dwelling. Of the owner-occupiers who made repairs inside the dwelling:

- Around seventy per cent did paint, (re)paper and or tile jobs.
- Some 35% repaired, improved or replaced their toilet and or bathroom.
- Followed by 25% who did some work on their kitchen.

Comparatively the least attention has gone to work on installations and/or insulation. Two thirds of the people who did some work inside the dwelling replaced their central heating boiler. About 20% of the owners made improvements on the insulation of their glazing and roof. The extent of these improvements is not known. Hardly any owner-occupier (less than 1%) has installed a renewable energy source in their dwelling during the last 2 years (e.g., solar panels or a heat pump).

The main reasons to carry out repair and maintenance jobs are sketched in figure 7. Logically, the reasons differ per category.

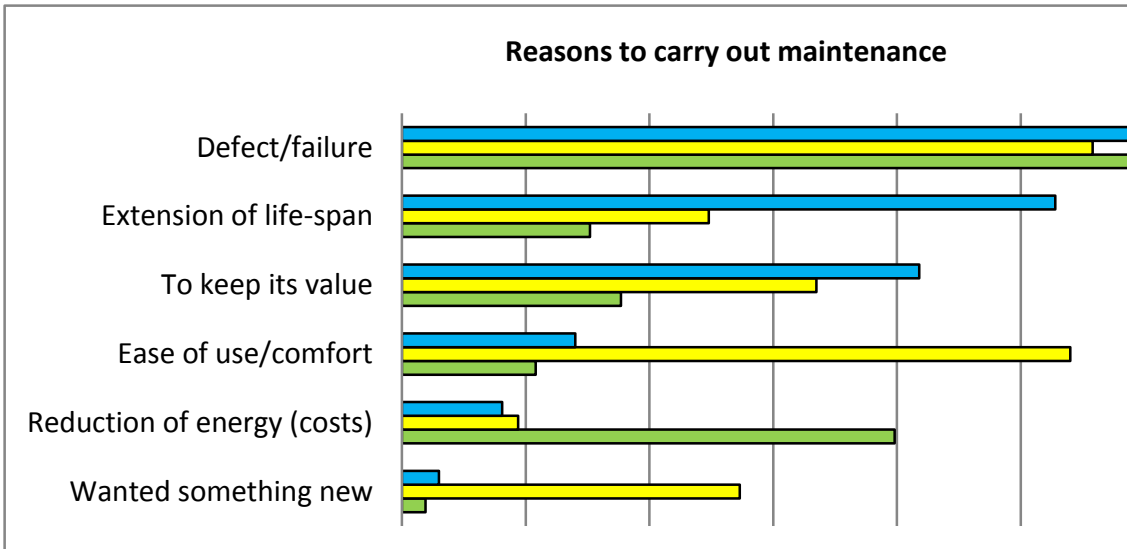

Figure 7. Reasons to carry out maintenance and repairs (in categories)

For all three categories of maintenance jobs the fact that the building component failed or was defect has been the most important reason to undertake action. Additional reasons to carry out maintenance on the exterior of the dwelling are to prolong the lifespan and to keep the value of the dwelling. 'Inside jobs' are carried out to enlarge the ease of use and the comfort of the dwelling. Insulation- or installation work is done in order to reduce the energy use of the household (and subsequently lower the energy bill).

4.4 Investments

The data about investments (per job and category) is still being analysed. Other recent research shows (see table 3) that an average home-owner invests € 4,760 in his/her dwelling on an annual basis (Vereniging Eigen Huis, 2011).

Table 3. Annual expenditure of an average homeowner on maintenance and improvements (in €)

(Source: Vereniging Eigen Huis, 2011)

	Average expenditure on an annual basis in €
Regular maintenance	2,022
Major repairs	1,740
Improvements	996
Total	**4,758 (= 397 a month)**

Regular maintenance: e.g. painting, garden maintenance, maintenance central heating boiler, small reparations on the roof, replacement of a faucet.
Major repairs: e.g. replacement of roof gutter, replacement of boiler, replacement of roof topping, replacement of electrical installation.
Improvements: e.g. placing of double glazing, floor- or roof insulation, dormer, construction of a carport.

On the basis of the Dutch Real Estate Appraisal Act it can be calculated that an average owner-occupied house has a value of € 263,000. Every year an average owner-occupier invests almost € 4,800 in his dwelling. This accounts for more than 1.8% of the average value. A little more than € 2,000 is invested in regular maintenance. These repairs (and their costs) are recurring on a frequent basis. In major repairs an amount of well over € 1,770 is yearly invested on average. Relatively the smallest amount (€ 1,000) is spent on improvements on the dwelling (Vereniging Eigen Huis, 2011).

The current research project shows that a small minority of the owners (less than 10%) lends money to pay for the expenses for repair and management of the dwelling. In these cases the mortgage on the dwelling is raised and/or surplus value is used.
The vast minority pays with their own money (savings). In the case of multifamily housing a relative important part of the maintenance and repair cost on the exterior of the building is paid from the maintenance fund of the Owner-occupiers' Association. Ideally the apartment owners add money to this fund on a monthly basis.

4.5 Need for advice and information

In the last two years a little more than half of the owner-occupiers have had some support or advice with the maintenance of their dwelling. From those who have had support or searched for advice and information roughly 40% to 50% needed more information on:

- How the repairs could be carried out.
- How a reliable builder/constructor could be found.
- How to determine the costs of the repairs.

Remarkably often (in around two thirds of the cases) a construction or maintenance firm has been asked for advice and information. It is possible that these owner-occupiers have called in these constructors to carry out the job. In most other cases (around 40%) the owner-occupiers have used family/friends and/or the internet as a source of information. In less than 5% the local authorities have been asked for information and advice.

Asked for the need of support and advice in the near future a little less than 50% of the owner-occupiers say they (probably) need information and advice. This is roughly the same percentage as in the last 2 years. The determination of costs and finding a building or construction firm are here also the highest scoring subjects (see figure 8).

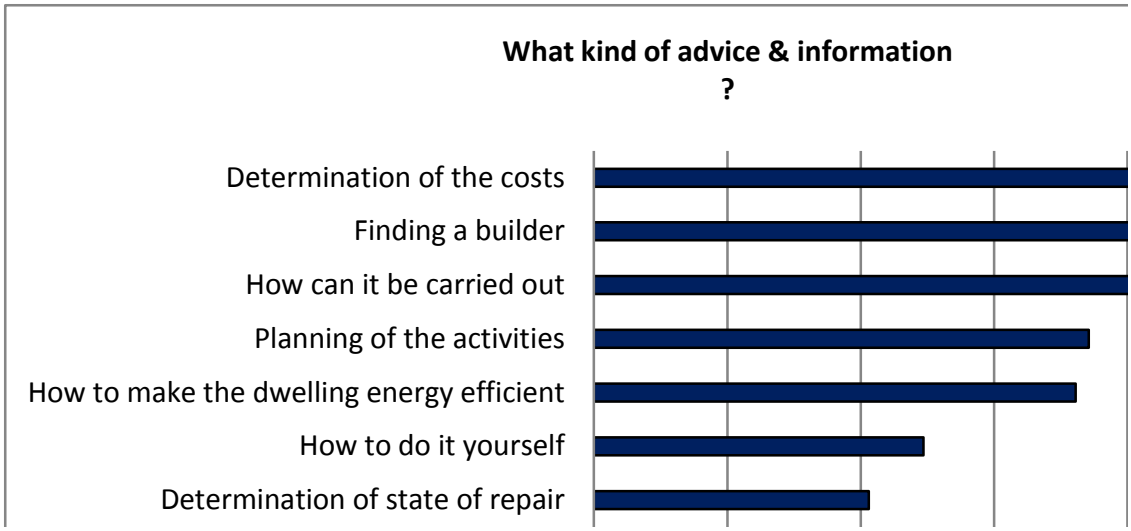

Figure 8. On what subjects advice and support is needed in the future?

The internet and construction firms are named by some two thirds of the owners as the source they would like to get their information from (figure 8). Around 50% of the home-owners will ask their family and friends for help. A quarter of the owners mention the local authority as the place they would like to go for information and support. Compared with what they actually have done in the recent past this percentage is remarkably high

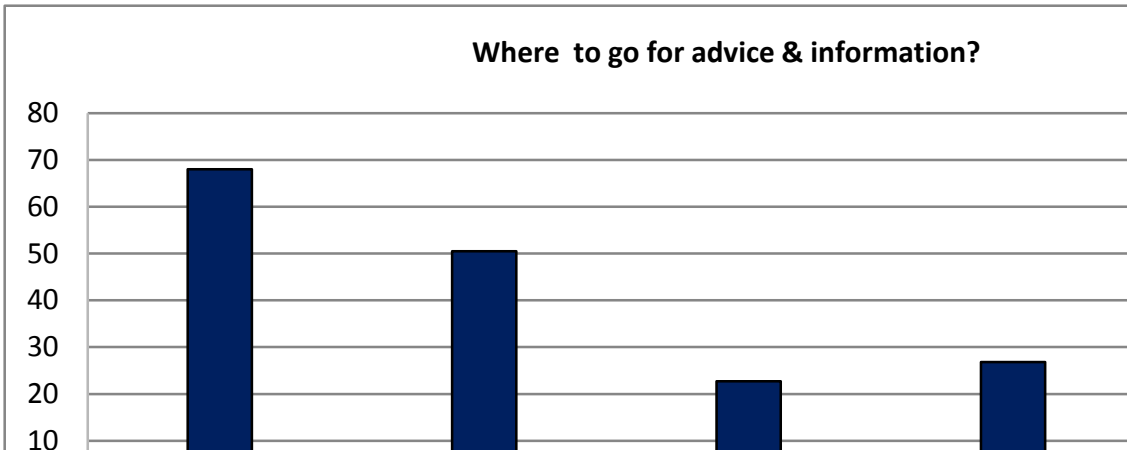

Figure 9: Where to get advice and information?

5 Conclusion

The last decades the owner-occupied stock has undergone a notable growth. From the 1980's on owner-occupation grew from some 40% up to 60% at present. The private rental sector declined from 21% to 9% at present. The growth of the owner-occupied sector can be explained by a substantial growth through new construction and by the selling out of private and social rented dwellings. The national government has made propositions to sell out large numbers of social rented dwellings in the near future. A further growth of the owner-occupied sector can be expected.
The local differences of the owner-occupied sector (in terms of size, age and housing type) are vast. In the larger municipal areas the relative importance the owner-occupied sector is far lower than the Dutch average. In these larger municipalities multifamily housing also has a larger relative significance.
Although the owner-occupied stock is still young, the ageing process is continuing rapidly. Relatively few owner-occupied dwellings have been built the last decade. When existing social rented dwellings are going to be sold out in vast numbers this ageing process will be accelerated. As a relative large part of social rented dwellings is located in multifamily housing, this will also influence the characteristics of the owner-occupied sector. At this moment more than 85% of owner occupiers live in single family houses.

The average Dutch home-owner is quite satisfied with his dwelling. The vast majority of owner-occupiers award their dwelling with satisfactory up to excellent marks. This applies as well to state of repair of the exterior and interior of the dwelling, the ease of use and comfort of the dwelling as the living conditions (residential area). This appraisal is based on the owners own opinion. The actual situation (especially with regard to the state of repair) could be different.
Owner-occupiers are quite active maintaining their dwellings. Only a small fraction of the owner-occupiers indicate that although (major) repairs or maintenance activities were necessary, nothing has been done. The lion share of owner-occupiers seems to maintain their dwellings in an adequate way. The most efforts are aimed at the exterior of the dwelling (especially exterior paint- and woodwork). A lot of work is also done inside the house (repainting, repapering and retiling and improvements of toilets,

bathrooms and kitchens). Installation and insulation jobs occur relatively the least. In most cases the central heating boiler is being replaced.
The most important reason to carry out maintenance work (and this applies to all three repair categories that have been distinguished) is because the building component was worn-out or had broken down. Other important reasons to repair the exterior of the dwelling is prolonging its lifespan and increasing its value. Work inside the dwelling is further predominantly done to increase ease of use and comfort. Reduction of energy use is an important additional reason for carrying out installation and insulation work.
On average a Dutch home-owner spends almost € 4,800 annually to maintain, repair and improve his dwelling. Compared with the average value of an owner-occupied dwelling (€ 263.000) this is quite a substantial expenditure.

In general owner-occupiers seem perfectly able to maintain their properties in an adequate manner without any help. Via communication instruments and partly (if available) subsidy and financial instruments some of these owners can be guided and stimulated.
The overall quality condition of the owner-occupied stock is as such not a convincing reason for the introduction of generic instruments and incentives. Nonetheless there are some 'problem' segments that may need attention from authorities. For these segments special dedicated instruments for quality improvement in the owner –occupied sector could be advocated and already have been developed.
With respect of maintenance backlogs a worrying situation can be identified in some parts of pre-war (single-family) dwellings in smaller municipalities and in multifamily houses (built before 1945 and between 1945-1970) which predominantly are located in some urban areas of larger municipalities. Current (communicative and financial) instruments are now being analysed in case study research. This could lead to a further sharpening and adaption of these instruments. It could also be wise to back these instruments up with some regulatory force. Local authorities have the possibility to intervene in non-functioning Owner-Occupiers' Associations with major repair backlogs. It is feasible that this is broadened to other parts of the owner-occupied stock. This should be done under the express conditions that this regulatory intervention is confined to a certain space (specific area) and time period. Besides that intervention should be based on a firm democratic foundation based on a univocal cost-benefit analysis.

Main goal for the future is – under the principle that prevention is better than cure - to take care that that current quality backlogs do not spread further. A final aspect to consider here is that social rented dwellings should not be sold out without conditions Demands should be made on minimum quality levels before sale, the selling process and (the organization of) maintenance after sale.

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