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Improvement of information for owner-occupiers about the quality

of their house

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Abstract

Currently, policy issues and regulation concerning quality of houses are concentrating on new built houses, while each year, only 1% of new built houses is added to the total housing stock. Therefore, to maintain and improve the quality of the housing stock, a focus on the existing houses is necessary. The focus of this research is on owner-occupied houses; currently 56% of the houses are owner-occupied, and their share is increasing. Yet, maintaining or improving the quality of the owner-occupied housing stock is no policy issue in the Netherlands except for a few local initiatives. Although, according to recent research, considerable investments need to be made.

The most recent memorandum of the Dutch Ministry of Housing about the policy for the next years (VROM, 2000), focuses on owner-occupiers as consumers. Freedom of choice by giving them authority is one of the main objectives in the memorandum. They state that this authority should be achieved by stimulating transparency of the housing market. Furthermore, recent developments show that there is a lot of attention for better information for homeowners and buyers. In the Netherlands and the EU several proposals for better information about the quality of houses for occupiers, homeowners and buyers are made. Each proposal considers different aspects of quality information, for example: health effects of housing, registration of quality marks, energy performance, guarantees, quality assessments etc.

In economic theory about transactions, the fact that one person (agent) has more information than the other (principal), is known as information asymmetry. This asymmetry can occur between buyers and sellers of houses and can cause lawsuits, dissatisfaction, transaction costs or quality losses. Furthermore, the lack of information about for example health effects causes risks for the homeowner. Therefore, the main research question for this research is: *how can information on the technical quality of houses be improved and to what extent does it make a contribution to improving and maintaining the quality of the owner-occupied housing stock?*

1. Introduction

Owner-occupiers now occupy 56% of the Dutch houses. The Dutch government is stimulating homeownership, which has lead to an increasing number of owner-occupiers. The quality of the private housing stock therefore will be increasingly important. The ageing population and the need for sustainability will influence the demand for quality in the private housing stock. In the past years, the Dutch Ministry of VROM (Housing, Spatial Planning and Environment) has subsidised and actively cooperated in the improvement of the quality of the private housing stock. These investments were mainly focused on counteracting the bad structural condition of the housing stock due to maintenance arrears. State subsidies and tax benefits stimulated owner-occupiers to improve the structural quality of parts of their houses. On local scale, projects were focused on larger areas where the structural condition of the private houses was seriously deteriorated. Owner-occupiers invested a lot in their houses and market parties have cooperated in the renewal of blocks of buildings with private apartments.

The average structural quality has improved strongly and the total amount of repair costs has decreased. Therefore, the attention of the Dutch government is no longer focused on the quality of the private housing stock. At the same time there are still parts of the private housing stock where the structural quality needs attention. For the future, it is important to prevent large-scale maintenance arrears to prevent the deterioration of living conditions in neighbourhoods. Therefore, next to the removing of the existing arrears, maintaining and improving the quality of the private housing stock remains an important issue.

The Dutch Minister of VROM emphasises the responsibility of the owner-occupier for the quality of his own house (Dekker, 2005). The government focuses on advice and counselling on issues like maintaining the conditions of gas and electric installations and ventilation. The government has diminished financial support for homeowners. The most recent memorandum of the Dutch Ministry of Housing about the policy for the next years (VROM, 2000), focuses on owner-occupiers as consumers. Freedom of choice by giving them authority is one of the main objectives in the memorandum. They state that this authority should be achieved by stimulating transparency of the housing market.

Furthermore, recent developments show that there is a lot of attention for better information for homeowners and buyers. In the Netherlands and the EU several proposals for better information about the quality of houses for occupiers, homeowners and buyers are made. Each proposal considers different aspects of quality information, for example: health effects of housing, registration of quality marks, energy performance, guarantees, quality assessments etc

In economic theory about transactions, the fact that one person (agent) has more information than the other (principal), is known as information asymmetry. This asymmetry can occur between buyers and sellers of houses and can cause lawsuits, dissatisfaction, transaction costs or quality losses. Furthermore, the lack of information about for example health effects causes risks for the homeowner. Therefore, the main research question for this research is: *how can information on the technical quality of houses be improved and to what extent does it make a contribution to improving and maintaining the quality of the owner-occupied housing stock?*

This paper will start with giving a brief introduction about the owner-occupied housing stock in the Netherlands in paragraph 2. Second, the recent developments in the Netherlands and in other countries concerning policy instruments for the owner-occupied housing stock will be described in paragraph 3. Third, the theoretical background for this research will be set out in paragraph 4. An outline for the research design will be given in paragraph 5, and the paper ends with conclusions in paragraph 6.

2. Quality of the owner-occupied housing stock

The Dutch private housing stock consists of owner-occupied houses, private rent houses, second houses, private rent apartments, owned-occupied apartments and apartment buildings with mixed ownership: owner-occupied apartments and private rent apartments. The research project focuses on owner-occupied houses and apartments.

The Dutch private housing stock is old, ageing and steadily increasing in size. Based on the current replacement speed through demolition followed by new construction, an average house should have a lifespan of 350 to 500 years (Thomsen, 2002). Even with a substantial expansion of the total amount of replacings there will remain a demand for a very long lifespan. Therefore, the maintenance of the existing owner-occupied housing stock is at least as important as the construction of new houses and expanding lifespan measures are inevitably (Meijer and Thomsen, 2006). There are two different forms of

maintenance or improvement to distinguish: cooperative and individual. Concerning the cooperative approach, a condominium association usually coordinates the maintenance. A condominium association is obliged in private condominiums in the Netherlands. All homeowners are members of the association that has the objective to maintain the quality of the building. A fund for maintenance is monthly filled with contribution of each homeowner in the building. Sometimes, the condominium association hires a professional organisation to plan maintenance and to guard the funds.

At this moment (ABF research, 2005) private parties own almost two-third of the Dutch housing stock: homeowners 56% and landlords 10%. The share of the private rent sector is getting smaller and the share of owner-occupiers is increasing. Next to the important difference between private rental houses and homeownership, there are important differences (as regard to housing quality and possible quality improvement) between single-family houses and apartment buildings and between building periods (typology, construction methods etc.). These differences will be taken into account during the project. The project focuses on owner-occupiers. The private rental sector is relatively small (table 1) and has two very different faces: homeowners who own one or a few houses who let their buildings and large investors. Recent research shows that the biggest investments are to be made in pre-war single-family houses and early post-war single-family houses (Thomsen and Meijer, 2006).

Table 1: The Dutch housing stock, ownership and building period

			Home-		Social		Private	
	Total	%	ownership	%	housing	%	rental	%
Pre-war %	1.487.893	21,7	902.006	23,3	281.396	12,2	304.491	44,6
1946-1970	1.952.230	28,4	856.404	22,2	929.579	40,2	166.249	24,4
1971-1990	2.307.546	33,6	1.286.013	33,3	864.472	37,4	157.061	23,0
After 1990	1.114.321	16,2	821.435	21,2	238.160	10,3	54.726	8,0
TOTAL	6.861.990	100	3.865.857	100	2.313.607	100	682.526	100

Source: ABF research 2005

Table 2: The Dutch	private housing stock.	ownership and typology
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	Home-		Social		Private	
	ownership	%	Housing	%	rental	%
Single family houses	3.390.909	87,7	1.201.633	51,9	290.779	42,6
Apartments	474.948	12,3	1.111.974	48,1	391.747	57,4
TOTAL	3.865.857	100	2.313.607	100	682.256	100

Source: ABF research 2005

3. Recent developments

The most recent memorandum of the Dutch Ministry of VROM about the policy for the next years (VROM, 2000), focuses on owner-occupiers as consumers. Freedom of choice by giving them authority is one of the main objectives in the memorandum. They state that this authority should be achieved by stimulating consumer interest organizations, the development of a uniform inspection method by market parties and transparency of the housing market.

There are several developments in the Netherlands concerning the registration of information on certain aspects of buildings. The citizen platform 'priorities in compliance' has recommended the Ministry of VROM to develop a 'risk card' for houses. This card should provide occupants with information on used materials, harmful substances in the environment etc. Moreover the Ministry of VROM is setting up the basis administration for addresses and buildings (BAG) in municipalities. The aim is that there is one administration of addresses and buildings, where other administrations can draw on (VROM, 2005). The obligatory energy labelling of all buildings at the moment of mutation as a result of the EPBD are introduced as from 2007.

3.1 Instruments focused on owner-occupiers in the Netherlands

There are several organisations for data registration of houses, for example the cadastre for legal information and the municipality for registration of the address and owner of a building. Aspects

concerning the quality of each separate house are not registered. In 2009, a registration of addresses, owners and legal information about buildings will be available in a digital database, administered by the local government. Then, homeowners or buyers have to appeal to only one authority to achieve available information about a house. This can be the basis for the uniform registration of building data concerning quality.

The homeowner is bound by government regulations. He is obliged to keep the structural condition at a minimum level according to the Building Decree. The most important public law requirements regarding the safety, health, energy efficiency and usability of buildings are set in the Building Decree. The Building Decree is originally focused on the construction of new buildings, but there is also a section for existing houses. If the homeowner changes something in the dwelling, like an extension or changing the façade, the homeowner is obliged to report this change and in some cases he needs a building permit from the municipality. Several other laws impose specific quality requirements, as those specified in the Gas Act for gas installations. The implementation of the European Energy Performance Building Directive (EPBD) in the Netherlands in 2007 obliges homeowners to submit an Energy Performance Certificate when selling the house.

Private law concerns agreements between two private parties, for example the buying and selling of a house, like the obligation to provide information when selling a house. There are all kinds of private law certificates and quality marks for providing the security for buyers that houses have a certain quality. However, the real meaning of those instruments is not always clear. The Dutch Minister of VROM wants the market to provide a uniform inspection method for houses.

3.2 The Dutch building file

The Dutch Consultation Platform Building Legislation (OPB) is a typical exponent of the Dutch 'polder model'. This platform consists of representatives of all parties within the building sector and functions as an advisory board for the Minister of VROM who is responsible for the building regulations. The platform discusses the future development of the Dutch system of building regulations (Meijer, 2002).

At the end of 2000 the platform presented its vision for the future of building regulations in the memorandum 'To a transparent users market' (naar een transparante gebruikersmarkt, OPB, 2000). The platform stated that building regulations for quality development are mainly focused on new houses, while the yearly production of new houses scarcely adds anything to the existing housing stock. The OPB suggested that a research on a set of instruments focused on the existing stock should be done. Starting point was the fact that the owner-occupier is responsible for the quality. The OPB proposed the introduction of the concept of a building file. This building file should describe the quality condition of buildings and would function as a maintenance manual. The file should play a role especially at the necessity for the government to guard the quality of new built houses would decrease. Once the quality of the housing stock is transparent, the functioning of the market would make sure that a part of the current quality regulations are met (especially the regulations for comfort from the Building Decree).

The concept of the building file consisted of four boxes of information. The first box contains general information about the building like address, owner and building type. The cadastre already gathers this type of information. The second and third boxes contain information to provide the necessary insight in the actual quality. The second box describes the structural condition of the building, which would have to be inspected and assessed according to all public regulations of the Building Decree. The third box contains supplementary private law information such as installations, functional quality, lay out of a dwelling, environmental sustainability and facilities in the neighbourhood. This box functions as a selection guide and quality reference for consumers. The last, voluntary, fourth box contains a user and maintenance guide for keeping the house in a good state of repair (Visscher, 2004).

With a building file, transparency concerning the quality of dwellings could be given for homeowner and consumer. The responsibility of owner-occupiers would be facilitated and the consumer might have profit from fewer costs around the transaction of his house. Many EU-countries develop instruments that register quality aspects. Spain, Germany, England and Italy have instruments that resemble the Dutch concept for a building file (Bos & Meijer, 2004). The attention of many countries is more and more focused on a set of instruments for the existing stock. Because of the European EPBD the instruments are mainly focused on the energetic quality of the housing stock.

Recently, a few members of the OPB rejected the concept of the building file after a presentation of the results of research on this concept and a final discussion. It would cost too much effort for homeowners, it would be a financial burden for them and some members were opposed to the obligatory character. Nevertheless, the reasons and objectives to develop the concept of the building file are still existent. There is still need for transparency and information about the quality of houses. The local government digitally registers information about houses, such as legal information. This database can be a useful steppingstone for further development of the concept. And though the concept of the building file doesn't have support of the whole OPB, it can be examined for further research on instruments to improve the quality of the private housing stock

3.3 International instruments

In Germany the *Hausakte* (voluntarily) has been developed and in Spain the Libro del Edificio (obliged). In Great Britain, the *Home Information Pack* (HIP) is obliged as from June 2007. The content of HIP exists of: the sale conditions, evidence of title, standard searches, energy performance certificate, commonhold information, leasehold information, a new homes warranty and a technical report when the house is not finished or not complete. Voluntarily, a technical assessment, quality marks, certificates or other assessments can be added to the HIP. In Germany a research into measuring, categorising and registering quality aspects of houses is being conducted. Lützkendorf and Speer (2005) state that consumers will collect information to reduce their risk when they make a choice. According to them, purchasers of houses can have insufficient knowledge about technical quality aspects to understand information about it. The researchers developed a model for categorising quality aspects (see Figure 1.1).

4. Theoretical background

Basically, there are two moments when owner-occupiers use informational instruments concerning the quality of the house: around the transaction of a house and during the management/ maintenance phase. The decisions of a household during the management phase are influenced by changes in the life course of the household. There are many market instruments, which aim at offering information on the quality of the house during these moments.

4.1 Transaction

The longer a household lives somewhere, the smaller the chance they will improve something and the bigger the chance they will spend less on improving (Montgomery, 1992). Research of Littlewood and Munro (1997) shows that people who have just moved, regularly make improvements so that the new house will satisfy their requirements. The chance on quality improvement is therefore bigger after the transaction of a house.

In contrast to the purchase of most of the consumption goods, buying a house is a serious event in emotionally and financial respect. In many cases buying a house is one of the largest financial operations in one's life, which can cause far-reaching positive or negative financial consequences. For that reason, purchasers will be careful making a decision (CPB, Bureau for Economic Policy Analysis, 2005).

The decision-making process around a purchase is complex. A consumer is interested in certain aspects of the product (in this case the house) for:

- Determining the risk the consumer runs by taking a purchase decision. This risk arises by:
 - Uncertainty about the decision;
 - Possible consequences from a bad decision
- The value of the product for the consumer in relation to the characteristics of the product (Assael, 1995) or: does the consumer pay the right price?

Uncertainty concerning the decision

Consumers will collect information to reduce their risk when they make a choice. It is possible that purchasers have insufficient knowledge about certain quality aspects of the house (Lützkendorf and Speer, 2005). Sellers might have lead on purchasers concerning information about the quality of the house (in relation to the price). The purchaser is prepared to pay in order to be sure about the quality of the house. The heterogeneity of the product (the house) therefore increases the information need of the purchaser

(Priemus, 2000; VROM, 2006). To limit possible negative impact of this information asymmetry, the legislature can act. Thus the quality level of houses can be regulated (maintaining and legislation minimum requirements) (Elsinga, 2006).

Consequences of a bad decision

In the Netherlands, the purchaser of a house is obliged to research the quality of the house. There are several other markets where purchasers use information to assess the quality of possible purchases. Akerlof (1970) explains information asymmetry and its consequences by means of the purchase of a car. In his article, 'lemons' are cars with a bad quality. He distinguishes four types of cars: good, bad, old and new. An old or a new car can therefore be good or bad. The purchaser of the car does not know if he buys a good or a bad car. The purchaser cannot assess the quality of the car. However, the seller does know the quality of the car. The bad car gets the same price as the good car, because purchasers do not see the difference. When good and bad cars have the same price, for the seller it is more advantageously to sell a bad car (because nothing is invested in the car). Nevertheless, the seller will receive the same price as for a good car (profit). Because of this, eventually there will be more 'lemons' on the market, as a result of which the price of a car will decrease and the seller of a good car can no longer receive the correct price for it.

Concerning houses, partly the same problem exists. Not everyone is skilled enough to see the technical defects of a house. Because it has been shown that the results of the current technical assessments of houses are not uniform (Visscher, 2004), there is a risk that the information collected by the buyer is not reliable, as a result of which the price that is paid for a house can be incorrect. For the selling party it is not worthwhile making quality improvements to increase the price, if the buying party has no correct insight in the quality. It might be possible that, on the housing market, an increasing share of the market consists of bad quality houses through this mechanism. Especially, considering the fact that much more aspects than technical quality alone determine the price of a house. The location, the surroundings, facilities and the livability in the neighborhood have a large influence on the price. In this research it will be also determined to what extent technical quality plays a role in the buyer's decision.

By using the principal agent theory and the concepts 'moral hazard' and 'adverse selection', Lützkendorf and Speer (2005) come to a number of short- and long-term impacts of information asymmetry on the housing market. For example: complaints of buyers or owners, bad maintenance, higher mutation degree, loss of money, lawsuits, transaction costs etc.

Value of the product

The value of the product in relation to the characteristics of the product concerns the 'real' quality of the house in relation to the quality observed by the consumer and therefore the fact if the correct price for the 'real' quality is paid. According to the Van Dale dictionary (CD-Rom, version 1.4) quality is: "the nature, especially of substances and goods concerning the use of it." But also: "properties concerning appreciation, especially of persons". The 'properties' of something or someone frequently coincide in a complicated manner. Moreover these properties frequently are relative notions. The quality of the house is for example influenced by the quality of the surroundings (de Vreeze, 1989). The appreciation of these properties is also dependent on other factors, for example the housing market. When houses are scarce, it is less important if a house owns a certain quality aspect to a smaller degree. Reeves and Bednar (1994) examined the definition of quality and indicate that several definitions are appropriate at several circumstances. They sum up the definitions of several scientists: value, conformance to specifications, fitness for use and meeting or exceeding expectations of the customer. Lützkendorf and Speer (2005) use both the term quality and the term performance in their model (Figure 1.1). They define quality as: satisfying to the expectations of the customer.



Figure 1: Model to categorize different quality aspects by Lützkendorf and Speer (2005)

When the different definitions of quality are to be measured, there are two different types of outcomes. The minimum requirements are the same for a longer time (intersubjective: norms), but the requirements of (future) purchasers (subjectively) are dependent on market developments, personal preferences etc. and therefore they vary much more. Moreover it is possible that the needs of consumers also influence the way minimum requirements are measured. A simple *yes* or *no* can indicate if a house meets the requirements of the Building Decree or not. But for a purchaser it is possibly more interesting to know the investments that need to be made in the first years, and to know the weak spots of the house etc. For this research the technical specifications of a house will be determined and several performance levels will be used. These levels will be compared to the legally fixed technical minimum level, which is described in the Building Decree, the quality of the owner-occupied housing stock, the quality that is measured in the several assessments and quality marks and with the expectations and needs of the owner-occupiers themselves.

4.2 Management

During the management phase, changes in the composition of the household play a large role in the decision-making process concerning adaptations of the house. According to the life course approach, a life exists of several fields: household, work, education and place of residence. Each field has its own career. The different careers of an individual interact with each other. In a household, the careers of the individuals are entwined. Events as birth and marriage are decisive events, which challenge people to reorganize their life and their housing situation. Life course careers also provide the resources to realise the wish to move (Helderman and Mulder, 2004). There are three risks for the owner-occupier concerning home ownership:

- Affordability risk;
- Equity risk;
- Maintenance risk (Briemen, 1999).

The risks can coincide at a micro level: for example, when payment problems arise because of an interest increase (affordability risk), the owner can decide to save on maintenance. When the owner-occupier is not aware of required maintenance expenditure at the purchase of a house, or when unexpected defects appear, a maintenance risk can arise. Furthermore, as the expenditure which is necessary for proper maintenance, is a too large part of the household's budget and for this reason the household decides to give up on necessary maintenance, it is a matter of a maintenance risk. As a result, the technical condition of the house can decline and this has a possible impact on the livability of the environment. An equity risk arises if the house is sold and the profit is insufficient to pay the resulting mortgage debt.

There are all kinds of instruments to reduce these risks for owner-occupiers such as: technical assessments, quality marks, maintenance contracts etc. (Briemen, 1999). Moreover occupants can get all kinds of health complaints, caused by a bad technical quality of the house. When the occupant is not informed of this, it is a matter of an information deficit. Transparency of the quality of the house this is able to counteract this deficit.

5. Research design

The attention of this research will be at improving the information for owner-occupiers about the quality of their house. Earlier, it was already stated that the government's policy for the quality of the owner-occupied housing stock is limited at present. Information about the quality of houses can be considered as a communicative policy instrument (Hoogerwerf, 2003) that the government can use to reach an improvement of the quality of the owner-occupied housing stock. There are already a lot of market instruments that provide owner-occupiers with information about the quality of their house. Therefore the first step in the research will be to see what can be achieved with the current instruments. The model mentioned below reflects the possible and/or desired impact of a possible policy on quality and the role information can play.



Figure 2 based on: Coleman, J.S. Foundations of Social Theory, P. 646, Figure 23.6: Macro-to-micro-to-macro relations in effects of social policies.

This model is used as a starting point for the research. The assumption thereby is, that the government uses policy tools to cause a certain behavioural response, in this case the maintenance or improvement of the house. For example, in the past, subsidies were used on large scale to stimulate home improvement. Another assumption in this model is, that the maintenance and improvement activities of owner-occupiers lead to an improvement of the quality of the owner-occupied house stock. Therefore two hypotheses can be derived:

- Improvement of the information about the quality of houses will ensure that owner-occupiers maintain and improve their own house more effectively and more efficiently (relation B).
- The maintenance and improvement activities of owner-occupiers lead to a quality improvement of the owner-occupied housing stock (relation C).

Before committing this research to improvement of information, the first step in the research will be to state (by using existing theories and literature) to what extent information has an effect on behaviour and thus will lead to an improvement of the quality of the owner-occupied housing stock (founding of the research).

Problem definition: how can information on the technical quality of houses be improved and to what extent does it make a contribution to improving and maintaining the quality of the owner-occupied housing stock?

5.1 Conceptual model



5.2 Research outline

First, the research will start by defining 'quality' and different levels of performance. The quality of the owner-occupied housing stock will be researched. Then, the expected quality problems will be described, as well as the different quality aspects that need extra attention. Second, the existing instruments that focus on owner-occupiers and on providing them with better information will be listed. Third, there will be a survey among owner-occupiers to find out which quality aspects are important for them, which maintenance and improvement activities they undertake, and which information they need for doing these activities. Also the survey will concentrate on the existing instruments for and the meaning of the owner-occupiers about these instruments. Fourth, a model will be made for improving and combining the existing instruments to provide owner-occupiers with better information. A literature study will be used to optimize the instruments.

6. Conclusions

There are several reasons to start a research on instruments that focus on providing information for maintaining or improving the quality of the private housing stock. For example, the developments in the Netherlands and other countries focused on providing better information about the quality of houses, the attention of the Dutch Ministry of Housing for making the housing market more transparent and the focus on stimulating homeowners to act more as consumers and the attention of Dutch citizens for environmental and health risks in houses. The theoretical view on information asymmetry supports the idea that better information about quality aspects of houses, will help owner-occupiers to calculate their risks and take responsibility for their actions.

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