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Segmentation on the Flemish housing market

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Abstract: In Flanders, as in most of Europe, the research on housing markets makes a distinction between three segments, namely owner-occupier (74.4%), private tenants (18.5%) and social tenants (5.6 %). In 2005, a large representative survey research was carried out on the housing situation of Flemish households and their housing desires. Based on this survey (Woonsurvey 2005), it was possible to make a finer distinction in the housing market and to research the differentiation within the property market and within the private rental market. Because the sample of social tenants was too small for meaningful statistics, the segmentation of the social rental market was not examined. Using information on housing and residents in a cluster analysis, segments were delineated within the property market (5) and within the private rental market (3). Study of these segments confirmed that a large proportion of residents (both owners and private tenants) do not suffer from payment or quality problems. But on the other hand, the study also shows that a (limited) number of Flemish households do have a problematical housing situation. A number of owners (20%) have purchased a house of poor quality with the intention to renovate in short term, but ultimately some of those do not have the required financial resources. Within the group of private tenants, almost one third (30%) occupies an old house of lesser quality. These tenants have a weak socio-economic position and therefore cannot fulfil their ambition to become a house-owner.

Keywords: housing market segmentation, quantitative research, socio-economic profile residents, quality and comfort housing, Flanders

1. Introduction

The theme of the EHNR Conference 2009 focuses on current changes in the housing market. These changes can be captured into two seemingly opposite trends, namely integration and segmentation. Because of multiple processes of globalisation in trade, transport and labour, the world is getting 'smaller'. But at the same time, income disparities, social exclusion and new poverty are increasing, leading to rising segmentation in the housing market. Policy should not only focus on unifying institutional arrangements, but also on reducing inequalities in housing, both at the European level and within individual states.

Within Flanders, segmentation processes can also be distinguished in the housing market. Within the research portal 'Steunpunt Ruimte en Wonen', these processes of segmentation were examined based on data of a large representative survey on the living and the housing of the Flemish households, carried out in 2005. Based on this survey (Woonsurvey 2005), the property market, private rental and social rental market were researched thoroughly (Heylen et al., 2007).

Approximately 75% of the people in Flanders are homeowners. This very high percentage is related to the ownership policies implemented by the government. It is financially attractive to own your home because mortgage loans are tax deductible and because a home is a mean of security considering the low pensions in Flanders. All of this makes ownership an important concern for the majority of the Flemish households. However, not everyone can afford to buy a house. The households who cannot are mostly situated (often temporary and / or involuntarily) on the private or social rental market. Both in relation to the quality and comfort of the homes, as well as to the socio-economic profile of residents, private tenants are in a weaker position than owners. In accordance with the objectives of social housing, social tenants do not have a strong socio-economic profile, but they live in reasonably high quality and comfortable homes. However, this does not change the fact that in Flanders only a limited amount of social housing is available and that there are extensive waiting lists.

Researching the distinction between owners, social and private tenants is extremely interesting. Yet the story does not end here. Based on the data from the Woonsurvey

2005, it was also possible to study the differentiation *within* the property market and *within* the private rental market in order to achieve a more detailed picture of the two markets. The segmentation of the social rental market was not examined, because the social group of tenants was too small in the sample for meaningful statistical analysis. The results of this study reveal some problematic parts of the Flemish housing market and show existing inequalities in Flanders, which allows targeted solutions. These results are not only interesting in a Flemish context, but both research and the solutions can also be valuable in international segmentation research. The following chapter briefly discusses the methodology used in the investigation. Afterwards, the segments within the rental and property market are described. Finally, the conclusion is formulated that links back these results to the theme of the conference.

2. Research methodology

The division of owners and private tenants into segments was produced through use of the most appropriate statistical technique, namely a cluster analysis. The selection of adequate variables that can be used for this cluster analysis is not an obvious task. Not only do the variables have to add a substantive value to the analysis, there are also practical concerns such as the measurement level. The cluster analysis was carried out in different phases in which variables are added or omitted to make the result satisfactory. First, the selection of the variables is discussed in this chapter and then the cluster analysis itself.

2.1. Selection of the variables

For the cluster analysis to contain a complete picture of the housing market, three different types of variables must be taken into account. In addition to information on the homes themselves, it is also important to include facts about the residents and possibly about the neighbourhood as well. The variables finally selected have to express the diversity on the Flemish housing market. In addition to this substantive condition, there is also a practical consideration concerning the measurement level of the variables. Only (quasi)-metric variables are eligible for inclusion in the model for the cluster analysis. With these considerations in mind, a careful selection was made.

2.1.1. Variables on homes

The first important variable is **the year of construction**. Despite the renovation trend, there is still a relationship between year of construction and the quality of the dwelling. Also because of the spatial component, namely older homes in urban areas, this variable is interesting to record. Furthermore, of course, **the quality and comfort** of the home cannot be missing in the analysis. There are three different kinds of quality measurement available in the database. Firstly, the external quality of the property was measured by a technical inspection. Secondly, the physical condition of the house was questioned in the survey. The variable was subdivided into four categories (very bad - bad - good - very good) based on data of six housing components (roof, gutter, walls, exterior walls, windows and electrical installation).

Thirdly, the comfort level was calculated based on the presence of some comfort features (presence of certain forms of isolation, central heating, sanitary facilities, number of furnished rooms,...). This variable was divided into 5 categories: inadequate - basic comfort - good - good and spacious - very good. Only the physical condition and comfort level are selected because they offered sufficient additional value. Another decisive variable is the **size of the dwelling**. This was included through the metric variable 'number of furnished rooms'. The **cost of the house** is both socially and spatially very important. However, a distinction had to be made between owner and private tenant. The cost to private tenants is simply the rent. For owners, the housing cost is less obvious. One option was to record the cadastral income of the property, but ultimately this variable had too much missing values. Finally, the **type of dwelling** (eg, more family, family house) was interesting. However, this is a nominal variable and could not be included in the analysis.

2.1.2. Variables on residents

The first defining feature of residents is **age**. The life necessities are connected with the life phase and therefore also with the age of an individual. Another crucial variable for housing choice is **income**. We perceive income as net equivalent household income. The net household income is the income including income from rent, but excluding income from movable property and additional income from work (such as bonuses). The net equivalent household income is net household income scaled to the composition of the household and age of household members. In addition to the income, a relative indicator of affordable housing has to be taken into account as well. For this, the **equivalent residual income** was chosen. This is what is left of the household income after paying the bare housing costs (loan or rent). This indicator could unfortunately only be used for private tenants because homeowners had too much missing values for this variable. Another important variable to understand the socio-economic position of the occupant is **education**. This was formed into a quasi-metric variable. Finally, the **family type** is significant. Literature shows that singles and single parents have a weaker position in the housing market than couples with or without children.

2.1.3. Spatial variables / variables on the neighbourhood

In origin this is not a spatial study, but one spatial variable was included as a quasi-metric variable, namely the combined variable RSV-SVR. This indicates the degree of urbanisation (metropolitan area– regional town – small town – transitional zone – rural area).

Table 1 Summary of selected characteristics of owners and private tenants

PRIVATE TENANTS	OWNERS
Construction period	Construction period
Physical condition of the dwelling	Physical condition of the dwelling
Comfort of the dwelling	Comfort of the dwelling
Number of furnished rooms	Number of furnished rooms
Age of the reference person	Age of the reference person
Number of children	Number of children
Equivalent income	Equivalent income
Educational level of the reference person	Educational level of the reference person
Degree of urbanisation	Degree of urbanisation
Rent	
Equivalent residual income	

As can be noted in the preceding description, some variables could not be included in the cluster analysis because of technical reasons. This does not mean that these variables cannot be used in subsequent analysis to form a more detailed profile of the segments. Examples of such variables include: the household type, employment situation, type of dwelling,...

2.2. Cluster analysis

As already stated before, the segments within the owners and tenants market are defined by a cluster analysis. This method groups respondents based on the selected variables described above. In this way, groups of respondents are created that are internally homogeneous but externally heterogeneous for the selected features. So

within the groups, respondents are very similar while the differences between the groups are as large as possible. The cluster analysis was performed separately for the property market and the private rental market. In the property market five clusters were defined, while in the private rental market three clusters were determined. We must keep in mind that not all respondents are included in the clusters. Whenever a respondent had a missing value for one of the variables used for cluster analysis, the case was completely removed from the analysis. As a consequence, there were 511 owners and 139 private tenants who weren't included in the segments. This is not a problem as long as this excluded group is not too large and not too different from the respondents that have been included in the clusters. For the owners, there are no significant problems. The excluded private tenants however turned out to have a rather low income. This was taken into account in the extrapolation of the segments to the total housing market. In the next chapter, the results of this cluster analysis are discussed.

3. Segmentation on the Flemish housing market

In this chapter, the segments found in the rental and property market are described. This discussion doesn't merely include the selected variables from the cluster analysis, but also other descriptive variables that can complete the picture of the segments. An important remark with regards to this chapter is that the property market and the private rental market are considered as separate markets. The dynamics between these markets, or the similarities and differences, are not explicitly stated. These interconnections were already addressed in previous research and were briefly described in the introduction. Therefore, the description and comparison of the segments is made in relation to a defined part of the housing market (owners or private tenants), not in relation to the complete housing market.

3.1. Private tenants

On the private rental market, three segments are distinguished. These three segments are successively discussed. For a detailed summary table, see Annex 1.

Table 2 Segmentation of private tenants

	N	%
Segment 1	288	37,9
Segment 2	241	31,8
Segment 3	230	30,3
Total	759	100,0
Excluded respondents	139	
Total	898	

3.1.1. Segment 1: Older tenants in reasonably good housing

The first segment is the largest in size. Of the total private rental market – without the excluded respondents - 38% of households and houses form part of this cluster.

They can be described as older, retired households. Several figures point to this being the case:

- 53% is retired (early)
- The average age is 61 years, 46% of the reference persons are 65 +
- 56% are single, 31% are couples without children
- Low level of education (more frequent in the older age groups)
- Lower income profile (due to retirement income)

The houses themselves, based on data regarding their external quality, physical state and comfort, can be considered of adequate quality. These findings may be linked to other characteristics of the dwellings. Namely, 60% is a multiple-family dwelling, which can be an explanation for the relatively limited age of the homes in this segment (59% built after 1960). Several times already, the strong correlation between quality and year of construction of dwellings has been shown (quality increases along with the year of construction).

In respect to affordability of housing, the equivalent residual income shows that the bare living costs for these households put quite a heavy strain on the household budget. On average, these households have only 664 euros per month left after paying their housing costs. This is about 300 euros less than all private tenants as a single group. Of course, this amount is, to a large extent, determined by the household income. With their income being much lower than average and the rent only a little lower, this strain on the household budget is not unexpected. But almost all tenants in this segment state that they have no (significant) problems with paying the rent or costs of heating, electricity, water,... (87%).

The residents in this segment are very satisfied with their homes and are very reluctant to move. This is related to their understanding of their home as a permanent dwelling: about half of these tenants consider the current property as the place where they want to live for the rest of their life. As a consequence, a large number of them are not interested in being a property owner (anymore).

In the group of households that moved to their current home during the last 10 years, the largest part (31%) made the transition from a single-family dwelling to a multiple-family dwelling. About 29% already lived in a multiple-family dwelling, and remained in this housing type. This information adds up to the picture that we already

had of this segment: older, retired tenants, many of which recently moved. Depending on the process of aging and declining physical mobility, these households often opt for a smaller, more comfortable home. This is also shown in the figures: 57% of these households used to live in a larger house, and 48% had more stairs in their previous home. In addition, two important reasons to move for those tenants were: the previous house was too large (9%) and / or it wasn't adapted to their physical state (7%).

By examining the reasons for moving more closely, we could also identify another aspect. Besides the above, separation (10%) and termination of the lease by the landlord (15%) were also important motives for tenants in segment 1 to move. The profile of the tenants that moved for one of these two reasons is different from the profile of all tenants in this segment. These former tenants are more often in a different age group (50% between 45-64 years), are more often employed or unemployed (therefore significantly less retired) and have a lower average income (937 euro). In this group, there are also relatively more single-parent families. If we consider the housing quality, we see that these properties score slightly worse on external quality, physical condition and comfort. This group is also less satisfied with their home and the tendency to move is higher than for all the tenants of this segment as a single group.

We can distinguish two groups in this segment of the private rental market. Firstly, we have older households that moved to an adapted rental house and consider this house to be definitive. Secondly, there are tenants who moved because of a separation or termination of the lease by the landlord. Their choice of moving to homes of lesser quality was not made voluntarily and they show greater propensity to move than the previous group. For this small part of segment 1, one can use the term 'emergency rent'. Because of personal or financial circumstances, these respondents are forced into a rented accommodation of lesser quality, which is not to their satisfaction.

3.1.2. Segment 2: Young, wealthy households in good homes

The second segment of the private rental market contains about 32% of the dwellings and households from the total rental market (without excluded respondents).

As was the case for segment 1, these households can be clearly described:

- Young households (average age 42 years, 43% between 17 and 34)
- Singles and couples without children are the predominant household types
- Households are highly educated and usually employed

As a result of the high percentage of employment in this segment (few households without earners) and the above average educational level, the average income of these households is very high (1739 euros per month) compared with the entire private rented sector (1256 euro). The two highest income quintiles are heavily over-represented.

The figures on quality and comfort of these homes provide a positive image of this segment. The houses, mostly newly built, have fewer external defects, are assessed to be in better physical state by their residents and have more comfort means than in the complete private rental market rental. As a consequence, these houses are also relatively costly when it comes to rent.

In terms of affordability, there appear to be few problems in this segment: the households have on average about 1349 euros left after payment of housing costs, which is far more than all private tenants as a group. In accordance with the previous, the households themselves also claim to be able to cover their costs easily.

The satisfaction with the living situation, both the house and the neighbourhood, is very high for these tenants. Yet we see a relatively high propensity to move. Related to this, almost half of these tenants see their homes as the most appropriate in the present stage of their life, but not always. The vast majority (71%) has the desire to own a house.

Based on the features above, we can describe the households of this segment as the starters on the housing market. They are young families in the beginning of their 'housing career'. They already have a stable family situation and for their first home, they tend towards the private rental sector. Because of their strong socio-economic position, they occupy the larger, more expensive homes of a higher quality. However,

this house is just a temporary solution, pending the realisation of the strong desire to become a homeowner.

3.1.3. Segment 3: Families with a weaker socio-economic position in bad housing

The third segment, which includes 30% of private rented housing, clearly shows an expressed profile in terms of both residents and housing.

The families in this segment have a rather weak socio-economic position. This is especially apparent in the relatively high proportion of single parents compared with the entire private rental sector. The low income is another indicator. Monthly average income is 1167 euros, which is rather limited compared to other households on the housing market. This low income may be associated with the relatively high unemployment rate and the relatively low number of double earners in this segment.

Furthermore the profile of the houses is sharp-cut within this segment. All indicators point to low housing quality and comfort:

- Year of construction: especially homes built before 1960.
- Low external quality: relatively more houses in need of renovation (17%)
- Relatively more houses in poor physical state
- Less comfortable: only 34% of the houses have central heating and isolation is limited.

For these less qualitative houses, a relatively low rent is paid. But because of their low income, these households have a small budget left after the payment of their housing costs (less than 900 euros). When asked at the households themselves, the answers show that affordability problems indeed occur in this segment: over half of these tenants consider the payment of their rent as a more or less heavy burden and around 23% have ever had problems in paying the housing costs.

The living conditions of households in this segment of the private rental sector also give rise to a significantly lower satisfaction and, consequently also to a greater propensity to move (if they had the means). The desire to become an owner is particularly high in this segment (80%).

The combination of the features of households and those of the housing leads to a characterisation of this segment as that of disadvantaged tenants in rental houses of lesser quality. Because of their limited financial resources, those households have little choice but to rent the homes with the lowest costs, and hence also the lowest quality. When asked about their current home, the largest group (39%) says that it is a temporary dwelling, and that they are looking for something better. These households are apparently awaiting a home that better fulfils their needs.

For the tenants of this segment that moved into their current dwelling during the last 10 years and for whom it's not their first independent housing experience, a comparison between the previous and the current housing situation can be made. Especially for this particular segment, it may yield important insights. We see that the largest group, one quarter of these tenants, have left the previous home because of a divorce. The absence of a stable family situation seems to be an important factor in housing. Moreover, we see that the households that ended up in this segment during the last 10 years, haven't really improved their housing situation in comparison with their previous home (albeit based on their own estimate): almost half say that the previous house was in better state (in regard to quality of electricity, heating, wood etc.) and 40% say that the previous house was better in terms of comfort (the presence of a well-equipped kitchen, bathroom, toilet, etc.). Each time it's the largest group that talks about decline.

This is the only segment on the rental market that can be described as problematic. The owners of this segment have a low socio-economic profile and have few other options than to rent homes where all indicators point to low quality and comfort. The choice of their rental house was not voluntarily, but out of necessity (eg the disappearance of a stable family situation). This negative housing experience is also shown in the fact that a large proportion of these tenants have the strong desire to become an owner.

3.2. Owners

Based on the cluster analysis, the property market is divided into 5 segments that are briefly described below. A comprehensive summary table is included in Annex 2.

Table 3 Segmentation of owners

	N	%
Segment 1	773	19,6
Segment 2	672	17,0
Segment 3	277	7,0
Segment 4	804	20,3
Segment 5	915	23,2
Total	3441	100,0
Excluded respondents	511	
Total	3952	

3.2.1. Segment 1: Young families in lower-quality housing

The figures on the first segment of the property market, with about 20% of the owners, indicate that this segment consists of several socio-economic profiles. However these households have in common that they (for now) live in homes of lesser quality.

The households that live in the dwellings of this segment have a mixed socio-economic profile. The reference person of these households is typically young and highly educated. Furthermore, in 47% of the households there are two earners. On the other side, there are also factors that suggest a weak socio-economic profile. Single-parent families are over-represented and this segment also has relatively more households where the reference person is unemployed. These factors lead to a household income that is rather low compared to the entire property sector. The average equivalent household income is about 1407 euros per month, compared to an average of 1465 euros per month for the complete group of owners.

These young owners often have acquired their property by purchase (85.5%). This may partly explain why this is an old set of houses with little recent dwellings. Given the older age of these houses, it's not really surprising that the figures on quality and comfort indicate a limited quality.

The owners of these properties stated that, in time of purchase, a significant need for major construction works on the dwelling existed. However, these construction works were relatively rarely performed before moving into the property. The number of construction works performed during the last 10 years was quite high (an average of 4 or 5, higher than the average for all properties owned). Yet we see that the homes remain of inferior quality.

Taking into account the strong presence of younger households, it's likely that a part of this segment recently acquired their house. It is possible that in these houses the most necessary renovations were carried out, but that further adjustment were postponed until the households saved enough money. To verify this, the number of households that have construction works specifically planned for the future was researched. We note that in segment 1 about 45% of the very large group of households that purchased their homes has some specific construction works planned for the future (opposite to 18% of all owners). We can see that especially households with housing in a (very) poor physical state plan these construction works. If then we look at the residents of houses in (very) bad physical state who don't have any construction works in prospect, we see that they often (can) save significantly less than households with housing in a moderate or good condition with no planned construction works. This segment seems to partly consist of residents who have purchased a bad house to renovate in time. There are also households that cannot save and, corresponding, have no construction works in prospect.

The affordability of housing is somewhat compromised for the owners of this segment. This can be inferred from the relatively low residual income, that what is still left after payment of the housing costs. Nevertheless, 93% of these households indicate that they never had payment problems. Although this is slightly lower than for all owners, it remains very high.

Based on the profile of housing in this segment, it is not surprising that residents are less satisfied with their living situation than all owners together. Coupled with this more limited degree of satisfaction, the tendency of moving is also higher for these residents than for all owners.

Therefore we can conclude that this segment partly consists of owners with young children that are not satisfied with the poor quality and poor comfort of their homes, but also that these owners do not seem to be able to change this situation. Additionally, a part of this segment seems to have purchased a house with the idea to renovate over time.

3.2.2. Segment 2: Young families in good homes

The households in the second segment of the property market (about 17% of the total) are mostly young couples with children (83.5%). Socio-economically these families have a strong position: the reference person is highly educated, almost always employed, there are mostly two earners and therefore the household income of 1510 euro / month is fairly high (but not significantly higher than for all owners).

Segment 2 consists for nearly 2/3 out of households who have built their own home. This means a strong over-representation of builders in respect to the entire property sector. This partly explains why the homes of this segment are rather of a recent construction date. Dwellings built after 1971 are clearly over-represented (85.6%). This segment also contains almost exclusively single-family dwellings.

Regarding the quality of housing, all of the data point at a very positive situation. This is not illogical given the recent construction date. Both in the technical inspection as in the survey on the physical condition and comfort of the housing, few problems were noted.

Although the housing cost quota (ratio of 'bare' housing costs and household income) is rather high, a significant large equivalent residual household income is left. Therefore it is not surprising that households signalise no special payment problems.

The profile of this owner segment is very positive, both in terms of the households themselves, as the houses they inhabit. This results in a high satisfaction with the living conditions. This segment seems to consist of young couples starting on the owner market (33% of this segment previously lived with their parents and of those not living with their parents was 65% tenant of their previous home).

3.2.3. Segment 3: Wealthy households in good dwellings

The third segment of the owners' category is a rather small segment (about 7%), but fairly specific.

The main characteristic of these households is their high income: on the average, the monthly equivalent income amounts to about 2792 euros, for the whole of all owners this is only 1465 euros. Almost half of all households, not surprisingly, fall into the fifth income quintile.

The activity degree, percentage of people gainfully employed, in this segment is very high (81,6% employed) and as to family type a strong presence of couples with children may be noted. With regard to age we see an over-representation of age class 35 to 44 and to some degree also of age 45 to 64, with only few people of 65 and more.

The dwellings of these households are also in good condition. There is a slight over-representation of builders compared to the total of owners. This may partly explain why houses are rather recent. The houses are also very large (on the average 11 rooms suitable for living against 7 for all owners).

The quality of the houses is very good, based on all figures, similarly for the external quality (no houses requiring major renovation or to be replaced) and the physical condition (80% 'good' houses). The level of comfort may even be called exceptionally high (more than 98% 'very good' houses). This is a result, amongst others, of practically all houses having central heating, very good isolation and all sanitary equipment.

Based on foregoing results, it is no surprise that this is an expensive segment of owner-occupied houses, the constructed as well as the bought ones. However, no problem of affordability of the houses seems to pose itself. As households have an exceptionally high income, their housing cost amounts to a limited percentage only of their total income. As a result, even after payment of housing costs a large disposable amount remains.

This segment seems to consist of double-income households in a stable situation. Their income is high because they are very highly educated professionals who are no longer at the beginning of their career. Consequently, they can afford a good and expensive house with all required comfort

3.2.4. Segment 4: Older owners in rural bad-quality dwellings

Segment 4 contains about 20% of all owners. Residents from this segment are mostly pensioner households:

- The average age of reference persons 69, two thirds are 65 or over.
- Moreover, couples without children living in and single persons are the predominant household types.
- 77% of reference persons is on (early) retirement, in 82% of households no employed person is present.

The income of these households is lower than the average (1024 against 1465 euros), probably as a result of the high proportion of pensioners.

Many houses of this segment were constructed between 1946 and 1970. They are also more often situated in rural areas or in transition zones (85% against 64% for the complete category of owners). Only 5% of households live in regional towns or metropolitan areas.

The indicators on the quality of houses are ambiguous. Externally these houses score somewhat less than the average in the sector of owners: more houses are in need of minor renovations. The physical condition, on the basis of the survey, appears to be good, however: most houses fall in the categories 'good' or 'reasonable'. Possibly an

adjustment of perceptions plays a role, namely that these owners present the situation as rather positive, because of their strong attachment to the house. The level of comfort (isolation, central heating, sanitary equipment,...) also seems lower in these houses than the average of the whole owners' sector. This may be linked to the fact that these residents have lived in the house for a long time, and that few adaptations have been done in the course of the years. The figures show, as a matter of fact, that during the last 10 years fewer renovations were done in these houses than in the whole owners' sector.

Because of the small number of owners still paying off a loan, the housing cost quota in this segment is fairly low. The residual income is, just like the household income, lower than the average of the owners' sector.

The households in this segment are equally satisfied about their housing situation as the other owners, and they indicate a much lower inclination to move. This might seem surprising, given the rather bad condition of their houses, but it probably is the sign of conservative attachment to a house where the owners have been living for a considerable time (only 7,8% moved in after 1995) and of their relatively high age.

This segment, to conclude, seems to be made up mainly of elderly retired owners in lower-quality houses. Nevertheless, this group of owners is very satisfied with their housing situation and they show a very low inclination to move. This is probably related to the long time respondents have lived in the house.

3.2.5. Segment 5: Older owners in good-quality houses

The fifth segment consists of 23% of all owners (915 respondents). Consequently, this is the largest segment.

The socio-economic characteristics of these owners also indicate the presence in this segment of many elderly retired households. Just like in the previous segment, we find many single persons and couples without children. More than half of the reference persons are retired and correspondingly the percentage of households without gainfully employed members is high (55%). The socio-economic difference

between both segments is the income: the owners in this segment have a high average income, in spite of the elevated percentage of pensioners.

The houses in this segment are rather recent: almost half of the houses were acquired after 1970. The high presence of multiple-family dwellings is striking (11% against 6% for the whole owners' sector).

From the different indicators can be deduced that the quality of the houses is fairly good. The external house quality is rather average, but the indicator of the physical condition, on the basis of the survey, suggests a high quality: 95,8% of all houses is classified in the category 'good'. The level of comfort too is fairly good, with 76,2% of households in the categories 'good' or 'good and spacious'.

These owners pay off less per month, on average, than the whole of the owners' category. The housing cost quota as well is lower than in the complete sector. The result is that, because their income is average, the amount left after deduction of housing costs is higher than for the whole owners' sector.

Segment 5 responds, just like segment 4, to a spatial profile. In this case, houses are more situated in urban areas: 55% of houses is in metropolitan areas, regional towns or small towns (against only 36% for all owners).

This segment contains the largest group of respondents and it shows a fairly average profile, both as to residents and houses. Owners are rather elderly, often already retired and with an average socio-economic profile. This group lives in reasonably recent and fairly good houses, mostly in urban areas.

4. Conclusions

Following upon the description of the segments detected on the housing market, these need to be situated within a larger research context. Different studies have led to the concept of a standard housing path on the Flemish housing market (Vandorpe et al, 2001; Myncke et al, 2007). This means that a large number of households go through comparable housing transitions on specific moments during their life course. For instance, because of the heavy emphasis on property in Flanders, young people already buy a house at a young age, living with their parents until that time. A next transition moment occurs when children leave the home and the loan has been paid off. Finally, a third transition is possible at a higher age, which happens when the housing situation is no longer adapted to living needs, for instance a house which is too large and has too many stairs. These transitions can be found in this study and in this way confirm previous research. However, an important additional remark needs to be made on this issue. The survey also shows that the standard housing path is not accessible for everyone. Some groups of residents, owners as well as tenants, cannot follow this 'ideal' path because of socio-economical reasons.

Four groups falling outside of this standard housing path can be distinguished. First of all, some people never get the chance to become owners because they lack the financial means. As their starting position on the housing market is already weak, they can only rent low-quality houses, without any perspective of an improved housing situation. In our research we find those tenants in the only rental segment with problems as to quality and affordability (i.e. segment 3). Secondly, we find in the first segment of the owners' market people who have been able to buy an old house in bad condition, thus fulfilling the Flemish norm and desire of house ownership. These houses, however, at the time of buying were of lesser quality and require major adaptation and renovation. Because it is hard for these owners to save, they eventually do not possess the necessary means to actually execute (or have executed) these construction works. Then there's a third group. Originally, acquiring a house was not a real problem for these residents. But when their stable family situation disappears because of a divorce, for example, it becomes difficult to maintain their situation as owner. In many cases, these people are forced to move to a rental house that often is smaller and of lesser quality. These residents too can be found in the problematic

segment of the rental market. Finally, there's a fourth group that should not be forgotten. Social tenants were not investigated in this study, but they too are not able (or only partially able) to follow the standard housing path.

Still, we have to stress once more that the major part of owners and even most tenants in Flanders live in a house of reasonable to excellent quality. Problems related to affordability and quality of the house occur mainly in the groups described above. They make up only a limited part of the housing market, but that does not mean, obviously, that no attention should be paid to these problems. Within the context of rising globalisation of the housing market this segmentation within (sub)states should not be neglected. The tenants or owners in a weaker socio-economic position will most probably not succeed in taking full profit of the new developments on the European housing market. When not enough attention is given to this potential problem, existing inequalities might widen further.

Therefore we have the intention to further study these segments in a follow-up research project. A first objective is the spatial distribution of the segments in Flanders. An improved linking of the segments identified with the geographical environment would be extremely interesting, both from a policy and a scientific point of view. A better understanding would allow a local policy specifically targeted at the most vulnerable groups. This policy and its results can then, in their turn, be an input for further research into the reduction of inequalities on the housing market.

5. References

Heylen, K., Le Roy, M., Vanden Broucke S., Vandekerckhove B. and Winters S. (2007). *Wonen in Vlaanderen. De resultaten van de Woonsurvey 2005 en de Uitwendige Woningschouwing 2005*. Brussel, Departement Ruimtelijke Ordening, Woonbeleid en Onroerend Erfgoed.

Myncke R. and Vandekerckhove B. (2007). *Toekomstige ruimtebehoefte voor ouderen in Vlaanderen*. Brussel, Departement Ruimtelijke Ordening, Woonbeleid en Onroerend Erfgoed.

Vandorpe L., Vandebrande S. and Vandekerckhove, B. (2007). *Het verlaten van de ouderlijke woning in Vlaanderen en de relatie met de woningmarkt*. Brussel, Departement Ruimtelijke Ordening, Woonbeleid en Onroerend Erfgoed.

Annex 1: Summary table private tenants

	Segment 1 Older tenants in reasonably good housing	Segment 2 Young, wealthy households in good homes (starters)	Segment 3 Families with a weaker socio- economic position in bad housing
	N= 288	N= 241	N= 230
Socio-economical characteristics of the households			
Age RP	Old (av. 61 y)	Fairly young (av. 42 y)	Very young (av. 35 y)
Number of children	Very few (av. 0,1)	Average (av. 0,5)	A lot (av. 1,0)
Type of household	Over-representation of singles (56%) and couples without children (31%)	Over-representation of singles (34%) and couples without children (34%)	Over-representation of couples with children (33%) and single- parents (18%)
Level of education RP	Low (4% higher education)	Very high (46% higher education)	Average (23% higher education)
Employment situation RP	Mostly (early) retired (53%)	Mostly employed (80%)	Mostly employed (78%) but also an over-representation of unemployed RP's (14%)
Number of earners	Mostly no earners (72%)	Mostly single (47%) en double (34%) earners	Mostly single earners (54%)
Income	Very low (av. 973 euro)	High (av. 1739 euro)	Rather low (av. 1167 euro)
Quality characteristics of the housing			
Construction age	Average (37% built after 1970)	Recent (57% built after 1970)	Very old (6% built after 1970)
Housing type	Over-representation multiple- family dwellings (58%)	Slight over-representation multiple-family dwellings (52%)	Strong over-representation multiple-family dwellings (73%)
External quality (inspection)	Average (74% without defects)	Very good (91% without defects)	Bad (60% without defects)
Physical state (survey)	Fairly good (12% in bad of very bad state)	Very good (4% in bad of very bad state)	Very bad (45% in bad of very bad state)
Level of comfort	2% inadequate and 33% basic comfort	0% inadequate and 17% basic comfort	8% inadequate and 37% basic comfort
Costs and affordability of living			
Cost	Low rent (av. 369 euro)	High rent (av. 530 euro)	Fairly low rent (av. 403 euro)
Affordability <i>Housing costs quota & equivalent residual income (ERI)</i>	Very low ERI (av. 664 euro), very high housing costs quota (33%)	High ERI (av. 1349 euro), rather low housing costs quota (26%)	Low ERI (av. 889 euro), rather low housing costs quota (27%)
<i>Subjective affordability</i>	Despite low income, few subjective payment problems (87% never)	Very few subjective payment problems (94% never)	Most subjective payment problems (77% never)
Satisfaction with the housing en the neighbourhood			

Satisfaction <i>(proportion satisfied of very satisfied)</i>	Rather high satisfaction with dwelling (88%) en with neighbourhood (90%)	Average satisfaction with the housing (87%), rather high satisfaction with the neighbourhood (93%)	Very low satisfaction with the housing (60%) and rather low with the neighbourhood (84%)
Tendency to move <i>(proportion that is likely or probably going to move)</i>	Low tendency to move out of the dwelling (39%) and out of the neighbourhood (24%)	Average tendency to move out of the dwelling (56%) and out of the neighbourhood (32%)	Very high tendency to move out of the dwelling (70%) and rather high tendency to move out of the neighbourhood t (39%)
Desire to become owner	Limited desire to become owner (26%), of which 50% wants to buy their rental house	Strong desire to become owner (71%), of which 34% wants to buy their rental house	Very strong desire to become owner (82%), of which only 30% wants to buy their rental house
Idea on the current dwelling	Mainly thought of as permanent housing (47%)	Mainly thought of as housing suited for this life stage (46%)	Mainly thought of as temporary housing (39%)
Extrapolation to the complete rental market			
Estimation	162.446	152.264	142.083

Annex 2: Summary table owners

	Segment 1 Young families in lower-quality housing	Segment 2 Young families in good homes	Segment 3 Wealthy households in good dwellings	Segment 4 Older owners in rural bad-quality dwellings	Segment 5 Older owners in good-quality houses
	N= 773	N= 672	N= 277	N= 804	N= 915
Type of owner	Mostly buyers (85,5%)	Mostly builders (64%)	About 50/50 buyers/builders	About 50/50 buyers/builders	About 50/50 buyers/builders
Socio-economical characteristics of the households					
Age RP	Young (46 j), quite a lot of age 17-34 (19%)	Young (43 j), age 17-34 (16%) and age 35-44 (45%)	Young (49 j), a lot of age 35-44 (33%) and age 45-64 (46%)	Very old (69 j), very much 65+ (68%)	Old (60 j), a lot of age 45-64 j (48%) and a lot of 65+ (39%)
Number of children	A lot (av. 1,2)	A lot (av. 1,7)	A lot (av. 1,6)	Very few (av. 0,1)	Very few (av. 0,1)
Type of household	Quite a lot of single parent families (9%), a lot of couples with children (54%)	Mostly couples with children (83%)	A lot of couples with children (67%)	Very many couples without children (53%), and singles (39%)	Very many couples without children (59%), and singles (26%)
Level of education RP	High, 32% higher education	High, 39% higher education	Very high, 59% higher education	Very low, 0% higher education	Fairly high, 28% higher education
Employment situation RP	Mostly employed (77%), quite a lot of unemployed (4,8%)	Almost always employed (94%)	Mostly employed (82%)	Almost never employed (14%), mostly (early) retired (77%)	Low employment (41%), mostly (early) retired (52%)
Number of earners	Rarely no earners (19,4%)	Mostly double earners (71%)	A lot of double earners (59%)	Mostly no earners (82%)	Often no earners (55%)
Income	Rather low (av. 1407 euro)	Rather high (av. 1511 euro)	Very high (av. 2792 euro)	Very low (av. 1024 euro)	Average (av. 1480 euro)
Quality characteristics of the housing					
Construction age	Very old (82% built before 1970)	Very recent (86% built after 1970)	Recent (56% built after 1970)	Old (74% built before 1970)	Rather recent (50% built after 1970)
Housing type	Mostly single-family dwellings (96%)	Mostly single-family dwellings (97%)	Mostly single-family dwellings (95%)	Mostly single-family dwellings (95%)	Often multiple-family dwellings (11%)
External quality (inspection)	Not so good (only 73% without defects)	Very good (95% without defects)	Very good (93% without defects)	Somewhat less (82% without defects)	Good (87% without defects)
Physical state (survey)	Bad (26% in bad of very bad state)	Very good (0% in bad of very bad state)	Very good (1% in bad of very bad state)	Rather good (2,7% in bad of very bad state)	Very good (0% in bad of very bad state)
Level of comfort	Low (34% inadequate or basic comfort)	High (0% inadequate and 10% basic comfort)	Extremely high (98,9% very good)	Low (33% inadequate or basic comfort)	Average (17% inadequate or basic comfort)
Necessary construction works (purchased after 1995)	Strong need for construction works (56%)	Rather limited need for construction works (48%)	Strong need for construction works (58%)	Very limited need for construction works (35%)	Limited need for construction works (42%)
Costs and affordability of living					

Cost					
<i>Purchased</i>	Very low (av. 104.897 euro)	Average (av. 142.362 euro)	High (av. 180.373 euro)	Rather low (av. 121.269 euro)	Low (av. 108.962 euro)
<i>Built</i>	Low (av. 158.652 euro)	Average (av. 198.377 euro)	High (av. 262.276 euro)	High (av. 296.130 euro)	Average (av. 205.649 euro)
Affordability					
<i>Housing costs quota</i>	High (13%)	High (14,9%)	High (12%)	Very low (2%)	Very low (6,4%)
<i>Equivalent residual income</i>	Rather low (1210 euro)	Rather high (1282 euro)	Very high (1751 euro)	Very low (998 euro)	Rather high (1384 euro)
<i>Subjective payment problems</i>	Most problems (93% never)	Few problems (96% never)	Very few problems (98% never)	Few problems (97% never)	Very few problems (98% never)
Satisfaction with the housing en the neighbourhood					
Satisfaction (<i>proportion satisfied of very satisfied</i>)	Least satisfied with housing (92%) and neighbourhood (92%)	Very satisfied with housing (99%) and neighbourhood (97%)	Very satisfied with housing (99%) and neighbourhood (96%)	Very satisfied with housing (97%) and neighbourhood (96%)	Very satisfied with housing (98%) and neighbourhood (96%)
Tendency to move (<i>proportion that is likely or probably going to move</i>)	Strong tendency to move out of the dwelling (12%), and out of the neighbourhood (14%)	Limited tendency to move out of the dwelling (6%) and average out of the neighbourhood (11%)	Average tendency to move out of the dwelling (11%) and the neighbourhood (11%)	Limited tendency to move out of the dwelling (9%) and the neighbourhood (5%)	Strong tendency to move out of the dwelling (12%), and average out of the neighbourhood (14%)
Spatial characteristics					
Provincial variation	No specific characteristics	More Limburg and Vlaams-Brabant	No specific characteristics	Slight over-representation of West and East Flanders	No specific characteristics
Urbanisation	More urban (47% in urban areas)	Mostly rural (20% in urban areas)	Mostly rural (31% in urban areas)	Clearly rural (16% in urban areas)	Mostly urban (55% in urban areas)
Extrapolation to the complete owner's market					
Estimation	409.475	416.920	161.929	364.805	491.370