

What determines the preferences for housing tenure? Evidence from Denmark

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Abstract

Tenure choice is a very important element of housing choice, but amazingly little research has been done about why different people prefer different housing tenures. In the economic literature tenure choice is mainly explained as a matter of financial investment. In this paper is shown that many other aspects than investment considerations influence preferences for tenure. Preferences for homeownership are to a very large degree connected to detached houses with garden and the freedom to dispose over and adapt these houses is the most important motive. Preferences for tenure vary much with life cycle situation but there also seem to be generational differences, where new generations have much stronger preferences for homeownership. The paper is based on a Danish survey on housing preferences.

Introduction

In the economic research literature on housing demand there has only been a limited focus on tenure choice. This research has most often been concentrated on constructing models that can explain the demand for housing services in general or for different attributes of housing as size, quality and location. An explanation for why tenure is not included in these kinds of models could be that investment in owner-occupied housing is seen as a decision that households take separately from their decisions on housing consumption (Arnott 1977). To buy a house is seen as an investment that only depends on the expected financial yields and risks and if they are better than alternative investment possibilities. The basic view could be that housing services and residential capital in a perfectly competitive economy are separate goods that are independent and traded on separate markets why housing demand in theory should be unaffected by the tenure decision (Drud and Skak 2005, Hendersson and Ionnides 1983).

It is obvious, however, that in the real world this is not the case. There are considerable differences in the kind of housing supplied as rental and owner-occupied housing and this to a great extent varies between different countries. Moreover there are systematic differences between the characteristics of households who choose to rent and those who choose to own their dwelling. One of the possible explanations for this is that people do not see housing consumption and investments in housing as independent decisions. There has, in the relatively sparse research literature on tenure preferences, been pointed to other financial motives than long-term investment advantages and to conditions for the use of homes that are different in owner-occupied homes and rented.

The performed studies of residential preferences can be divided into respectively. 1. Stated preferences and 2. Revealed preferences (Floor and van Kempen 1997, Timmermans et. al. 1994, Coolen and Hoekstra 2001). The stated preferences are found by asking people directly about how they would prefer to live and why. The revealed preferences are found by examining how people actually live. It can be either among recently moved households or all.

Both methods have methodological problems. By the method of revealed preferences, the problem is that the actual housing situation does not necessarily reflect the underlying preferences. This is because, first, that the real opportunities on the housing market and the individual's financial resources play a role. Even when trying to identify the economic conditioned preferences, the actual situation can give a false picture, because regulations of the market and imbalances may lead to that one can not obtain the optimal housing (Timmermans et. Al 1994, Skifter Andersen and Bonke 1980). In addition, different circumstances impeding mobility can result in that many families, despite significant changes in housing needs, are staying in homes that in the course of time increasingly come to differ from their preferences (Skifter Andersen and Bonke 1980).

By the stated preferences people do not necessarily take account of the possibilities for realizing them. This may mean that there could be significant variations between respondents from households that should have the same preferences, as some have a realistic picture of their chances in the housing market - and have included this in their statements - while others have not, and therefore have preferences that are not realistic. It is a common situation in most countries that more households have preferences for homeownership than the number who can actually obtain it (Dieleman et.al 1998). The reason for this is discussed in the theoretical section below and it is more illuminated in this paper with empirical material from Denmark.

The paper uses data from a Danish study on stated preferences for tenure. The research questions in focus are:

- What factors explain preferences for tenure? Are there other motives for homeownership than long-term investment advantages?
- To what extent have preferences for homeownership not been satisfied and what are the reasons for this?
- What reasons are given for preferences for respectively homeownership and tenancy among different people?
- What are the differences between people who want to own or to rent?

Reasons for tenure choice

Besides the different financial long-term outcomes there are also a number of other conditions making differences between renting and owning. Below is discussed the reasons why demand for rental housing differs from the demand for owner-occupied housing based on the relative sparse literature on this subject. The explanations discussed concerns:

- 1 The financial return households get from investments in their own dwelling compared to investments in other assets and how this depends on taxation, expectations and risks
- 2 The role of cash flow, liquidity and borrowing constraints for household during the life-cycle
- 3 Transaction costs and efforts
- 4 Costs and efforts concerning maintenance and administration of the dwelling
- 5 Security of tenure, power to change and improve dwellings and freedom of choice
- 6 Life-style, housing values and social status

The financial return from homeownership

If consumers see decisions on investments in owner-occupied housing separated from decisions on housing the choice of tenure should only be based on the expected financial return by investing in a dwelling. This expected rate of return could be calculated as the expected capital value of the future financial gains by being a homeowner. The expected return is calculated as the difference between the present value of future housing services from the dwelling and expected costs.

If the expected return from owning is positive, households should be expected to buy their dwelling. In a perfectly competitive economy, however, there should, in the long run, be no financial gains from investments in owner-occupied housing, but for a number of reasons this does not seem to hold in the real world.

The owner-occupier is his own landlord but in most countries there has been a difference between the taxation of the income of owner-occupiers from owning and landlords' incomes from letting out dwellings. In many countries there has been taxation of 'imputed income' from owning a dwelling. This imputed income should correspond to the net value of housing services derived from the dwelling after costs. In most countries, however, taxation of imputed incomes from owning has not been at the same level as taxation of incomes from private renting or from other investments. In some countries governments instead have chosen to reduce deductions in the taxable income from capital costs on mortgages set up to finance the purchase of the house. This reduced taxation of owners has resulted in indirect subsidies for owner-occupied housing, which has been the most important reason for the growth in homeownership in many countries (Rothenburg et. al.). Moreover, differences in the taxation of housing between different countries have caused marked differences in the share of owner-occupied housing in the national housing market. Germany and Great

Britain are good examples. Indirect subsidies for owner-occupation have, however, been markedly reduced in many countries in the 1990s (Haffner and Oxley 1999).

An important aspect of taxation of owner-occupied housing is if it is neutral to income levels. In some countries indirect subsidies to homeownership has been larger for higher incomes because of differences in marginal tax rates. If this is the case high-income groups will have greater financial incentives to be owner-occupiers.

Finally expectations of future sales prices for residential properties and capital gains for owners are of significant importance for the choice between renting and owning. These expectations are very dependent on the actual state of the national economy and development of house prices. In periods with a booming economy and increasing prices as the last part of the 1990s and beginning of the 2000s expectations tend to be high, and higher the longer the period with high economic growth. In the long run it can for several reasons be expected that house prices will have a larger increase than prices in general. First, the costs of building production and price of housing services tend to increase more than other consumer goods because productivity in the construction sector tends to increase by a lower speed than in other production sectors and construction can not be imported from other countries with low labour costs. The prices of new dwellings therefore will tend to increase more rapidly than other goods and this will affect the prices of residential property in general. Second, increased urbanisation and more intense economic activity in urban areas tend to increase land prices and property values in many cities. At the same time outskirts and some rural areas in many countries are losing population and employment, which leads to stagnating or falling property values. Expectations of future capital gains therefore may vary very much between different places.

But to what extent is it possible for ordinary households to make a thorough economic analysis of their potential gains from buying their home? An explanation of the success of homeownership could be that the experience from the actual historical development in many countries has shown that most homeowners have had positive returns on investments in their homes and sometimes large returns, even if losses has occurred – especially in periods with decreasing housing prices in real terms or in geographical areas with economic decline or urban decay.

Some housing researchers are of the opinion that homes for different reasons give ordinary people a better ability to accumulate wealth and a more secure investment than many other possibilities. Conventional wisdom saw investment in real property as a hedge against inflation – more reliable than 'papers'. Therefore ownership also could be seen as a way of securing wealth against inflation. Following Troy (1991) many households in general have difficulties in saving, because they tend to spend all of their income. By buying a dwelling they make a kind of a contract with themselves of making savings that they have to stick to if they don't want to lose their home. On the other hand it has shown to be difficult for elderly to 'unlock the wealth' stored in the home. Schemes to help them with this appears to have had limited popularity – mainly because the elderly fears that the value will be used up and they will have to leave before time. For many owners it could also be important to be able to bequeath wealth to their children.

The role of cash flow, liquidity and borrowing constraints

For several reasons the running annual costs of being a homeowner differs from renting. Access to capital is necessary to buy a home and the price of this capital and the distribution of capital costs over time have great importance for running costs. Costs of renting are usually to a greater extent a mirror of the actual housing consumption, while costs of owning can have a quite other distribution over time than actual consumption. Especially in economies with higher inflation, costs tend to be much higher in the first years of owning. This is often in conflict with the development over time of housing needs and incomes among families during the life cycle. Young families can have difficulties in financing the purchase of a sufficient large dwelling at a time, when they have bigger expenses for growing up children and smaller incomes.

Short-term housing demand depends on long-term housing investment decisions, but there is an imbalance between typically large initial investment costs vs. the low initial depreciation rates and other consumption utility flows derived from the housing stock (WorldBank paper). There is a mismatch of the excess utility over costs in the flow perspective – initially negative, then turning positive. This requires some sort of inter-temporal financing' life-cycle decisions. Households must maximize lifetime utility subject to multi-period budget constraints.

This can result in discontinuities in housing consumption over the lifetime (Artle og Varaya 1978) and that households have a greater preference for renting during the early periods of their life cycle.

Most of the capital can be borrowed, but some have to be provided by the buyer himself. Moreover, the capital costs of borrowed capital can be dependent on the financial credibility of the buyer. Banks want security for their loans. Lenders tend to base borrowing capacity on measurable current income and liquid assets rather than future income and total wealth (Haurin et. al. 1997). Therefore homeownership tends to be more difficult to achieve for households with lower current incomes and also more expensive. It can thus be argued (Arnott 1987, Dieleman et.al 1998) that capital market imperfections are significant and households only become homeowners when they can afford the down payment and meet actual debt service provisions.

Transaction costs and efforts

The cost and efforts associated with a move from owner-occupied housing is substantially greater than that moving from rented housing. Moving costs are the same, but for owner-occupation there could be large costs and efforts associated with buying and selling property. It is much more easy to get rid of a rented dwelling.

The consequence of this is that the time of staying, which is expected by a house hunter, affects the choice of tenure. If a short time of staying is expected transaction costs will have relatively more importance in the comparison between the two tenures (Rothenburg et. Al. 1991, Troy 1991, Dieleman et. al. 1988), while the probability of choosing home ownership increases with a longer expected staying time.

Young families who are very mobile, because of their rapidly changing housing needs, will therefore be relatively more interested in rental housing, compared with more established families.

Costs and efforts concerning maintenance and administration of the dwelling

It can be discussed if maintenance and other costs tend to be lower or higher in rented housing. It depends on to what extent landlords can be more efficient than individual owners in generating maintenance and management because of greater professionalism and economics of scale (Skifter Andersen 2008).

It is, however, perhaps more important that owner-occupiers are able to do maintenance and administration of the dwelling as do-it-yourself work. In this way an owner can obtain an untaxed income or can save expenses.

Moreover, homeowners can themselves decide at what point in time they will defray expenses on maintenance and can postpone expenses during times of economic hardship – a possibility that is not available for tenants. Owners have a greater possibility to control current housing costs (Troy 1991).

Tenants can sometimes do interior maintenance and improvements inside the dwelling by themselves but they will not always be compensated for the costs and could loose their investment when they leave the dwelling.

Security of tenure, power to change and improve dwellings and freedom of choice

Depending on rent legislation tenants are protected from being dismissed or from having to move because of rent increases which they can not pay. Still homeownership often is considered more secure against notice to quit and also against economic hardship - especially in homes without mortgages (Troy 1991). This feeling of security connected with homeownership may also be consistent with the possibility of modifying actual housing costs by reallocating maintenance and capital expenditures over time

One can thus expect a lower demand for rental housing the less security found on the rental housing market against termination of tenancies and against extraordinary rent increases.

Households in owner-occupied housing has a much better position to adapt the dwelling for their own needs than the tenants have. Owners will hereby be able to achieve a qualitatively better housing consumption than the tenants can (Arnott 1987). At the same time owners have the opportunity to regain their investment in the dwelling because a higher quality often results in a higher sales value. The tenants usually lose their investment when moving away.

Life-style, housing values and social status

Choice of tenure is influenced by the human need to express themselves through the interior of their dwelling (Troy 1991). For many, the home has become a 'hobby project' (Ærø 2002), where to change, expand and equip the dwelling has been a major leisure activity. This is rarely seen to the same extent in rented housing as in owner-occupied.

These differences lead to that households, who put more emphasis on power and change options in the dwelling, will be more likely to own and less to rent. It is typically among more established middle-aged households that demands for control over the dwelling is large, while both the young and the elderly, to a lesser extent, have these concerns (AKF/ SBI 2001). Of importance to the competitive relationship between owning and renting is the degree to which tenants are given the opportunity to dispose of the property and invest in it.

What is important for differences in preferences

In the economic literature on housing demand, many factors have been found to influence homeownership. Variables that are positively related to homeownership include income (deLeeuw, 1971; Linneman and Wachter, 1989; Haurin, Hendershott, and Wachter, 1997), educational attainment (Ioannides and Rosenthal, 1994; Gyourko and Linneman, 1997), being married (Ioannides and Rosenthal, 1994; Haurin, Hendershott, and Wachter, 1997), and household size (Rosen, 1979; Linneman and Wachter, 1989; Ioannides and Rosenthal, 1994). The work of Gyourko and Linneman indicated that the importance of income and educational attainment in determining household tenure status has increased since 1960, while marriage and children have declined in importance. Homeownership is less likely among younger householders (Gyourko and Linneman, 1997; Toussaint-Comeau and Rhine, 2004) and in centre city areas (Gyourko and Linneman, 1997).

Differences in family situation and changes in the life cycle are traditionally seen as the factors of greatest importance for housing needs and preferences (Skifter Andersen and Bonke 1980, Clark and Onaka 1983, Howell and Freese 1983, Floor and van Kempen 1997). Especially the changes when children arrive to or leave the family create dramatic changes in housing demand, particularly in the phase where the families establish their more permanent dwelling. When they get children, the need for space, facilities and environment changes dramatically. Later, when children move away from home, space requirements are reduced, but this does not always lead to moves to another home - because people find other uses for the space and partly because household mobility decreases dramatically over the years (Rossi 1955, Skifter Andersen and Bonke 1980). Among the elderly mobility is very low, although there may be radically changed housing preferences in terms of size, price, tenure, types of building and location.

There are several reasons why the housing career is not always the same for families with the same family career. The first is the differences in their working careers, and related income development, which means that the financial resources and associated housing options are different. These limitations can to a greater or lesser extent be reflected in the housing preferences depending on how realistic they can assess their future opportunities.

Secondly, there are differences in the opportunities that the housing market offers in different geographical areas. Because of social ties, and general place attachment (Mulder 2007, Hidalgo and Hernández 2001), most people are very much bound to a specific geographic area and will often stay there, even if they do not find adequate housing opportunities.

Finally, the emergence of a form of 'path dependency in housing' (Clapham 2002) often leads to that people are constrained on the housing market. Peoples' housing aspirations and housing choices are likely to be dependent on their previous accommodation and careers. At first, it has been shown that the housing in which one grew up is very important. People tend to choose the same type of housing that they grew up in (Ærø 2002). It has also been proved that the first housing chosen after completing education has an enormous impact on the later housing careers, and housing in mid-life also are crucial to the preferences we have when we are becoming elderly (Howell and Freese 1983). In contrast to earlier, however, the family career is no longer so straight because of more frequent divorce and career changes. Therefore, expectations for the future are not as inevitable as earlier, which may affect housing preferences if one to a

greater extent regards the housing situation as provisional (Floor and van Kempen 1997).

The individual's development over the life cycle in terms of employment and income has a significant impact on the housing preferences, both on the short and the long term. In the young years residential location is influenced by the geographical location of educational institutions, while later it is more the workplace location. Incomes - and thus housing opportunities - are rising at the beginning of the career until the mid-forties and falls off sharply after 60 years. But simultaneously owner-occupiers accumulate housing wealth over time, which means that they can maintain their housing consumption under declining income.

It has also been proved that it is not only the current income that affect housing choice, but just as much the expected income over the remaining life time (Artle and Varayia 1978, Wheaton 1985). People with higher education, all other things being equal, have greater expectations about future income than those with low education and will therefore also have greater preferences for larger and more expensive homes.

The combination of this and the above described 'path dependency in housing' is especially important for the degree to which families establish themselves in owner-occupied dwellings. Some households - especially those who have high education or have higher incomes in the early stages of life - are buying a home at an early stage and remain in such during the rest of their life. Others, who do not succeed in buying a home in the family's establishment phase, may stay in rented accommodation during all their life, although they have preferences for owner-occupancy (Skifter Andersen and Bonke 1980).

A Danish study of housing preferences

In the Danish study 'stated preferences' have been examined. A survey was conducted among 2.500, from registers randomly selected, persons, who were over 15 years old. 1.500 telephone interviews were obtained corresponding to a response rate of 60 per cent. The respondents were compared to the age and sex distribution and the distribution on tenures of the whole Danish population and some minor differences were corrected by weighing the data. Data on the respondents' age, family situation, income, occupation and education were added from public registers

The questionnaire contained subjects like: preferences for tenure, dwelling size, building type, type of location and properties of surroundings and location. Moreover, there were questions about the reasons for preferences for renting or owner-occupation.

Preferences for tenure in Denmark

In the Danish survey respondents were asked 'What housing tenure do you want to obtain within the next five years'. This question uncovers both preferences and expectations but it is not quite clear which of them has the greatest importance when people answers the question. For some respondents there could be unrealistic expectations about their housing needs in the future and about their ability to invest in home ownership. In Table 1 is shown how respondents in different tenures are distributed on preferred or expected future tenure.

Table 1. Preferences for tenure among respondents living in different tenures and preferred type of building for households with different preferences for tenure 2008 (per cent).

	Preferred/expected tenure					Total
	Ownership	Rented	Co-operative	Other	Don't know	
Existing tenure						
Ownership	87	9	2	0	2	100
Rented	49	44	5	0	2	100
Co-operative	32	10	55	1	2	100
Total	70	21	7	0	2	100
Preferred type of building						
Blocks of flats	11	44	37			
Semi detached	7	24	33			
Detached	70	27	29			
Country house	12	5	2			
Total	100	100	100			

Seventy per cent expects to obtain homeownership within 5 years while 63 percent actually owns their dwelling. 21 per cent prefers rental housing (33 per cent are now living there), while six per cent wants to live in a co-operative. There is a strong connection between actual tenure and expected tenure. Nearly 90 per cent of homeowners expect to stay in the sector. Less than half of the tenants will continue to be tenants and 55 per cent of people living in co-operatives will stay there. The largest flow of people between tenures goes from renting to homeownership and from co-operatives to homeownership.

In the lower part of the table is shown the connection between preferred tenure and preferred type of building. Only 11 per cent of those who want homeownership prefer multi-storey blocks of flats. Most of them want a detached house. Also most of the tenants and residents in co-operatives prefer detached or semi detached homes even if it is only a minority who actually are living in such.

The respondents were divided into nine different life-cycle groups according to their age and family situation. Moreover a group of households with mixed families, who shares a dwelling, were identified. As expected preferences for tenure vary between families in different stages of the life cycle, but Table 2 points to that differences between generations also could exist.

Table 2. Preferences for tenure among households in different stages of the life cycle 2008 compared with actual rate of home ownership (per cent)

	Preferred/expected tenure					Total	Actual ownership rate
	Ownership	Rented	Co-operative	Other	Don't know		
Living at parents home	51	38	6		5	100	67
Young singles < 30 years	73	25	2			100	14
Young couples < 30 years	99		2			100	47
Couples with children	88	7	4	1	1	100	78
Lone Parents	67	19	14			100	32
Singles 30-59 years	59	25	13		3	100	35
Couples 30 - 59 years	77	12	10		1	100	75
Elderly couples 60+ years	64	25	10		1	100	73
Elderly singles 60+ years	27	65	6	1	2	100	35
Mixed households	69	18	6	2	5	100	53
Total	70	21	7	0	2	100	63

As expected, preferences for home ownership are strong among families with children compared to families without children and especially compared with the elderly, but the table shows that the highest preferences

are found among young couples without children where nearly all of them wish to live in owner occupation within the next five years. One of the explanations for this is that young couples have unrealistic expectations about their future. For many of them five years are a long time where many things could happen in their lives. But it also shows that home ownership is a very dominant preference for this group. A reason could be that the survey was carried through in the beginning of 2008 when it was not quite clear that the housing market in Denmark would break down and prices fall drastically. The respondents perhaps expected that the development with increasing house prices and capital gains would continue in the future with very good financial returns for investors in home ownership. As can be seen less than half of the group had obtained homeownership.

All groups except for the elderly and young people living in their parents' home (which they do not own themselves) have a lower actual ownership rate than their preferences. The elderly singles is the only group where a majority prefer rented housing. In general singles more often prefer to rent than couples, but besides the young couples, the largest difference between actual ownership rate and preferences is highest among middle-aged singles. Much of the unsatisfied demand for ownership is found among singles.

Reasons for unsatisfied demand for homeownership

In the survey respondents, who wanted homeownership but not yet had obtained it, were asked about the reasons for this. The question posed to respondents with preferences for homeownership living in rented or co-operative housing was: 'if you prefer to have homeownership within the next five years, why have you not obtained it yet?' They should indicate if the answers below were more important or less important:

- My family situation and my housing needs will change within the next five years
- I expect to get a higher income within five years
- I have a second home, which at the moment covers my need for free surroundings
- I am not prepared to cut down my other consumption to get home ownership
- I will have to move to a place long away from my present workplace/ place of education to find a home I can afford to buy
- I cannot find a home, I can afford, in the place where I want to live
- I cannot get a mortgage

In Table 3 is shown the share of these respondents, who indicates that the different reasons are more important for why they have not obtained homeownership yet. The group only consists of 171 respondents and therefore only is divided into three age groups.

Table 3. Proportion of respondents, who prefer homeownership but have not obtained it yet, who indicates that different reasons are 'more important' for their situation (per cent)

	16-29 years	30-44 years	45+ years	All	Couples w. children
Family situation will change	79	70	32	69	55
Expect higher income	86	65	13	68	52
Have a second home	8	12	13	10	10
Not prepared to cut down consumption	31	25	21	28	25
Will have to move to a place long away	24	28	21	25	23
Cannot find a home, I can afford, where I want to live	44	38	29	40	37
Cannot get a mortgage	19	12	16	16	12
Number of respondents	87	60	18	171	36

Expectations of changes in family situation and income are the far most important reasons. This especially applies for the young but also for the group 30 to 44 years. Family changes is also the most important reason for the 45+ group and for couples with children but not so outstanding.

Most people are bound to a specific place, which they for different reasons are attached to (Hidalgo og Hernandés 2001, Cuba og Hummon 1993, Mesch og Manor 1998). Difficulties in finding an affordable home in this place are the second most important reason for not buying a home. This is a problem for especially the young and to some extent for the middle aged and couples with children. Connected to this is that one

out of five do not want yet to move to a place far away from their working place or place of education to obtain homeownership. But this problem could be solved by getting a new job or by finishing education.

About 30 per cent of the respondents in principle can afford to buy a home but they are not prepared to cut down their consumption of other goods than housing to obtain homeownership. Finally 16 per cent do not think that they can get a mortgage to finance the purchase of a home.

Owner-occupation is for many connected to living in detached houses with garden as will be shown below. For ten per cent of the respondents, mostly found among the elderly, it is an important reason for not realizing their dreams of homeownership that they possess a second home. In Denmark about eight per cent of the households owns a second home. This can provide a substitution for homeownership and also give access to green spaces nearby.

Logistic regression of factors that determine preferences for homeownership

To determine what factors determine preferences for homeownership some statistical analyses were conducted. The chosen statistical method was logistic regression. The chosen independent variables were:

1. *Level of education*: A variable with five groups from no education to university degree.
2. *Household income* in 100.000 DKK
3. *Couple?*: Is the household a couple (with or without children)
4. *Children?*: Do the family have children?
5. *Young?*: Is the respondent less than 35 years?
6. *Elderly?*: Is the respondent more than 60 years?
7. *Preference for a detached home?*
8. *Degree of urbanisation*: A variable with six groups from central cities to countryside
9. Preference for *nearness to green spaces*? It is very important to live near green areas
10. Preference for *access to public transport facilities*?
11. Preference for *avoiding neighbourhoods with social problems*?
12. Preference for living in *social homogenous neighbourhoods*?
13. Preferences for *neighbourhoods suitable for children*?

The first analyses conducted showed that it was necessary to distinguish between demand for homeownership in respectively detached housing and apartments. Three analyses were made. In the first is all respondents included and a variable is included for preference for detached (or semi-detached) home. The two other analyses were conducted for respectively respondents who preferred detached homes and for respondents who preferred apartments.

In Table 4 is shown the results of the statistical analyses. Only results for variables included in the found statistical models are shown. Variables without figures are not significant.

Table 4. Results of logistic regression of preferences for homeownership for all respondents and for those who respectively prefer detached homes or apartments.

	All respondents		Preferred type of building			
	Significance	Exp(B)	Detached og semidetached		Apartment	
			Significance	Exp(B)	Significance	Exp(B)
Level of education						
Household income	0,0000	1,26	0,0000	1,24	0,0020	1,17
Couple?	0,0000	1,81	0,0000	2,15		
Children?			0,0200	1,63		
Young?	0,0000	3,49	0,0000	2,66	0,0000	3,52
Elderly?	0,0010	0,55			0,0140	0,40
Preference for detached home	0,0000	3,02	-	-	-	-
Degree of urbanisation	0,0000	1,22	0,0000	1,26		
Nearness to green spaces?						
Access to transport?	0,0010	0,62	0,0000	0,50		
Avoid social problems?						
Social homogeneity?					0,0770	0,37
Suitable for children?	0,0140	1,44	0,0020	1,73		
-2 Log likelihood	1330		1002		361	
Nagelkerke R Square	0,341		0,256		0,243	
Model without income						
Level of education	0,014	1,14	0,016	1,16	0,014	1,14

Note: Only figures for variables included in the found statistical models are included.

It can be seen from the figure that there is a very strong connection between preferences for detached homes and preferences for homeownership. The probability for having preference for homeownership increases by three to four times if someone prefers to live in a detached home. It can also be seen that there are considerable differences between explanations for preferences for homeownership in respectively apartments and detached homes.

There is a much stronger preference for owing among young people less than 35 years. This was also showed above. There seems to be a generational effect here, which could be a result of that this group only have been adults in a period with growing house prices. Many of them have not experienced the crisis in the late 1980s. On the other hand elderly are much less inclined to be homeowners. It is especially among those who want apartments that a large difference exists between young and elderly.

In general couples have stronger preferences for ownership than singles, but it only applies for those who want a detached home.

Household income has a strong influence on the propensity to be homeowner. If the household income is increased by 100.000 DKK (about 12.000 Euro) the probability for preferences for owing is increased by 26 per cent. Income has the largest importance for those who prefer detached homes. Level of education is not significant in the general model, but this is because of its correlation with income. If income is removed from the analyses, level of education gets a strong influence. But the results thus do not quite confirm the hypothesis of the importance for preferences for homeownership of the expected long-term income, which, independent of the actual income, should be higher for people with higher education. The results could mirror that the expected future financial situation of the respondents only to a minor degree have influence on their preferences and expectations concerning their housing situation.

Preferences for detached homes

Preferences for homeownership in detached houses are much stronger among couples than among singles. Having children also increases these preferences. It can be seen that if there is a strong preference for living in a neighbourhood suitable for children there is also a preference for a detached owner-occupied home.

As expected household income has importance. The probability increases with 24 per cent when household income is increased by 100.000 DKK. It is also here a little surprising that education does not have any separate importance.

The variable 'degree of urbanisation' has an increasing value when one moves from central cities to the countryside. It can be seen that preference for detached homes increases very much with preferences for living in less urbanised places, but preferences for nearness to green spaces are not important, perhaps because this is obvious for people living in suburbs or the countryside. At the same time preferences for access to public transport facilities has less importance for people who wants homeownership in detached homes than for all other.

Preferences for living in a social homogenous neighbourhood to avoid neighbourhoods with social problems are not important.

Preferences for owned apartments

Preferences for apartments are primarily found among young singles without children who want to live in the cities and not at all among the elderly. Income is significant but education is not. None of the preferences for qualities of the neighbourhood have importance except for 'social homogeneity', which is quite negative. People who wants owner-occupied apartments do thus to a less extent than all others care about living in a neighbourhood where people are alike.

Reasons for preferences for homeownership

In the survey respondents with preferences for homeownership were asked about what advantages they attributed to this tenure. They could express that the following advantages either had great importance, some importance or no importance for them:

Advantages by homeownership:

Long-term financial considerations

- To be able to invest in something financial stable
- Good possibilities to increase your fortune when housing prices increase
- To achieve financial security in the future

Short-time financial considerations

- To be able to bring along the value of improvements when you move away
- To get tax reductions
- To own something that you can borrow money on

Inheritance

- To have something of value that your children can inherit

Use of the dwelling

- Free disposal over the dwelling and its immediate surroundings
- To be able to adapt the home as you wish and cultivate your own garden

Housing market

- Because you cannot find a rented home in your neighbourhood

The answers were coded so that 'great importance' has the value 100, 'some importance' was 50 and 'no importance' was 0. In Table 5 is shown the average scores for all respondents, who wanted to have homeownership, and for those of them who preferred respectively an apartment or a detached or semidetached house.

Table 5. Averages scores for different advantages by homeownership stated by respondents who want homeownership 2008.

	Preferred type of dwelling		All	Difference between apartment and detached house
	Apartment	Detached house		
Long-term financial considerations				
To be able to invest	72	75	75	-3
Increase fortune when housing prices increase	60	59	59	1
Financial security	76	84	83	-8
Short-time financial considerations				
Bring along the value of improvements	69	71	71	-3
To get tax reductions	57	61	60	-4
Something that you can borrow money on	44	40	40	4
Inheritance				
Something your children can inherit	49	46	46	3
Use of the dwelling				
Free disposal over the dwelling	81	93	92	-11
Adapt home and cultivate garden	58	86	84	-28
Housing market				
Cannot find a rented home	32	19	20	13
Number of respondents	134	935	1069	

Note: 'great importance' =100, 'some importance' = 50 and 'no importance' = 0

It can be seen from the table that most of the stated advantages by homeownership in average are ascribed 'some importance' or more. Advantages connected to the use of the dwelling are of the greatest importance for preferences for homeownership. For nearly all respondents the free disposal of the dwelling is of great importance and the freedom to adapt the home to one's own needs also is very important for many. Connected to this is that it is important that one can bring along the value of improvements when one moves away from the dwelling.

Besides this, long-term financial advantages are very important. In general very important motives for homeownership are to get a good return from investment in housing and to achieve financial security. The prospect of capital gains is also important but not so much as the other expected advantages. This survey was conducted at a moment when the housing market in Denmark still had not gone down and it was still a common belief that the value of housing investments would be stable in the future. For about half it is also quite important that they can build up a fortune that can be passed on to their children.

Short-time financial advantages, as getting tax reductions and use property as security for loans for actual consumption, also have some importance. In Denmark it is still possible to deduct capital expenses but the value of these deductions has been reduced very much in the last 15 years.

There are only small differences in the advantages stated by respondents, who respectively want to live in an apartment or a detached or semidetached home. The main difference is that preferences for detached homes to a much greater extent are connected to the free disposal of the dwelling and the good possibilities for adapting the home and cultivating a garden.

Some people are living in places where the supply of rental housing is not very good. This especially relates to rural areas but also cities where the housing market is tight. For about 20 per cent of the respondents this has some or great importance for their choice of homeownership. In these cases one cannot talk about a real choice between tenures. This situation is most often found among people who prefer to live in apartments.

The interrelation between motives for ownership

To uncover how the different motives for ownership are interrelated a factor analysis was conducted. The analysis found three factors with eigenvalues more than 1, explaining more than half of the variation in the variables.

Table 6. Results of a factor analysis of variables explaining motives for homeownership. Correlation between factors and variables.

Variables	New factors		
	1	2	3
To be able to invest	0,78	-0,06	0,07
Increase fortune when housing prices increase	0,76	0,27	-0,07
Financial security	0,66	0,12	0,25
Bring along the value of improvements	0,46	0,39	0,27
To get tax reductions	0,36	0,56	0,14
Something that you can borrow money on	0,22	0,68	0,08
Something your children can inherit	0,09	0,67	0,07
Free disposal over the dwelling	0,26	-0,12	0,73
Adapt home and cultivate garden	-0,03	0,15	0,82
Cannot find a rented home	-0,09	0,42	-0,13
Eigenvalue	2,9	1,2	1,0
Percent of variance explained	29,2	12,4	10,3

Note: the analysis was varimax rotated

The factors behind preferences for homeownership can, according to the results of the factor analysis in Table 6 be divided into:

Factor 1: Long-term financial considerations. This factor is very correlated with the variables 'to be able to invest', 'increase fortune when housing prices increase', 'financial security' and 'bring along the value of improvements'. It is all advantages by owner-occupancy, which are gained during the course of time.

Factor 2: Short-term financial considerations: The factor correlates with variables for short-term advantages like 'get tax reductions' and 'security for loans for consumption'. But it also correlates with 'cannot find a rented home' and 'something that your children can inherit'. The explanation for this connection could be that people who put weight on their short-term financial situation also often are the ones that prefer rented dwellings. The advantage 'bring along the value of improvements' also plays a role here.

Factor 3: Disposal and freedom of action: This factor is mainly about freedom of choice, power to control the home and possibilities for activities. It is very much correlated with the variables 'free disposal over the dwelling' and 'adapt home and cultivate garden'.

In the following will be analysed how the value of these factors vary between different kinds of respondents to illuminate how motives for homeownership vary with sex, life-cycle phase, employment situation and preferred location.

Table 7. Motives for homeownership among respondents divided by sex, age, employment situation, preferred type of house and preferred type of location. Average factor scores (multiplied by 100).

	Factor		
	Long-term financ.	Short-term financ.	Disposal
Sex			
Man	0,7	-8,6	-10,0
Women	-0,8	9,3	10,8
Life-cycle phase			
Living at parents home	7,9	49,1	-73,3
Young singles < 30 years	-8,9	19,0	-71,1
Young couples < 30 years	1,5	6,7	11,7
Couples with children	11,3	1,0	11,8
Lone Parents	-2,7	5,5	12,0
Singles 30-59 years	17,8	-27,2	-18,8
Couples 30 - 59 years	1,9	-18,2	7,8
Elderly couples 60+ years	-17,2	-12,1	9,5
Elderly singles 60+ years	-51,4	9,4	-35,9
Employment situation			
Early pensioners/welfare rec.	-6,4	8,3	43,9
Pensioners	-39,7	-4,1	-7,0
Unemployment benefit	-1,1	26,5	-2,1
Students	-6,5	2,4	-8,4
Employed, low income	-12,4	16,9	-4,3
Employed, middle-high income	11,5	-6,2	5,9
Preferred type of building			
Prefer apartment	-3,6	22,0	-84,5
Prefer detached house	1,4	-2,0	7,3
Preferred location			
City center	13,4	6,1	-53,8
Other densely populated area in city	18,6	23,5	-14,5
Suburbs	-0,5	0,9	-7,0
Middle-sized and smaller towns	-5,7	-5,2	10,9
Villages	-0,8	-6,8	10,9
Countryside	-5,4	3,3	28,1

Women put more weight on short-term financial advantages and on the freedom of disposal than men.

For young singles the better possibilities for disposal of the dwelling by homeownership does not play a role. Also singles 30-59 years old and elderly singles seldom are interested in this advantage. For all the other life cycle groups disposal of the dwelling is important at nearby the same level; a little less important for the middle aged and elderly couples without children.

Long-term financial advantages are most important for couples with children and, somewhat surprisingly for middle-aged singles. It is of smaller importance to young and middle-aged couples and of less than average importance to singles in all ages and to elderly couples. Especially the elderly singles do not care much of long-term financial advantages. For the young singles, and to some extent for young couples, single parents and elderly singles, short time financial advantages are important. These are of less importance to middle-aged singles and couples and to elderly couples.

It can also be seen from the table that long-term financial advantages mostly are important for people in employment with middle to high incomes. Especially old-age pensioners do not care much about these, but also among employed with lower incomes these motives plays a minor role than average. For this group, and among people without employment, short-term financial advantages are more important. Finally disposal of the dwelling is most important for people on welfare benefits or early retirement. Most of this group actually prefer to rent their dwelling (about 80 percent), but they are people who use all their time in the dwelling and the possibility to make a better life by having activities at home seems to be important for those who prefer to be homeowners.

Those who prefer to own an apartment have, as also shown above, somewhat different motives than those who want to live in a detached or semidetached house. Disposal of the dwelling and freedom of choice to change it has a very small importance for people who prefer apartments. But they are more concerned about the short-term financial advantages.

Finally there is a connection between what kind of location people want to live in and their motives for homeownership. Most striking is the difference between more and less urbanised places concerning the freedom to control the dwelling, which is much more important in the countryside, villages and towns than in cities, especially in the centres. Long-term financial considerations are much more important in central cities but unexpectedly not in suburbs. The dramatic increase of house prices in Danish cities could be an explanation but prices also have increased much in the suburbs of Copenhagen and Aarhus. Finally short-term financial considerations seem to be most important for people who wants to live in densely populated areas near city centres. One of the main reasons for this is that many of these respondents have answered that they are not able to get a rented dwelling in these areas.

Reasons for preferences for rented housing

In the survey respondents with preferences for renting their home were asked about what advantages they attributed to this tenure. They could state the following as having advantages either that they had great importance, some importance or no importance for them:

- No down payment is required
- Lower housing costs in first coming years
- Rent allowances are available
- No risk of losing money when house prices fall
- Easier to get rid of
- No trouble with maintenance and repairs

In Table 8 is shown how important these different advantages by renting are. Based on the distribution of answers on importance is calculated a score that is 100 for very important, 50 for some importance and 0 for no importance.

Table 8. Advantages by renting expressed by respondents, who prefer to rent their dwelling. Distribution on how important the advantage is for choosing to rent (per cent and averages score)

	Very important	Some importance	No importance	Don't know	Total	Average score
No down payment is required	36	27	31	6	100	53
Lower housing costs in first coming years	51	27	19	3	100	66
Rent allowances are available	44	22	30	4	100	57
No risk of losing money when house prices fall	39	27	29	5	100	55
Easier to get rid of	51	26	21	2	100	66
No trouble with maintenance and repairs	61	22	14	2	100	74

In general there is a high score on all six advantages. In average 'no trouble with maintenance and repair' has the highest score as more than 60 per cent finds it very important. It is followed by 'easier to get rid of' and 'lower housing costs in coming years', which is very important for half of the respondents with preference

for renting. 'No down payment' is the least important advantage, but it is still very important for one third. Also avoiding financial risks and availability of rent allowances is very important for about forty per cent.

The advantages by renting varies somewhat between respondents at different stages of the life cycle can be seen from Table 9. In the table is shown the average score for how important the advantages are and how the scores for the different life cycle groups different from the average for all groups. There were too few respondents with preference for renting in the group of young couples less than 30 years. The number of respondents who were young singles or lone parents is also quite low while these results are somewhat unreliable.

Table 9. Advantages by renting expressed by respondents in different phases of the life cycle. (Average score for the importance of the advantages and deviance from the average for all respondents in per cent)

	No down payment	Lower housing costs	Rent allowances	No financial risk	Easier to get rid of	No trouble with repairs	Number of cases
Living at parents home	67	83	70	70	86	73	55
Young singles < 30 years	65	65	55	60	60	65	11
Couples with children	61	75	31	50	43	66	31
Lone Parents	56	56	40	65	70	75	10
Singles 30-59 years	38	56	39	43	78	81	23
Couples 30 - 59 years	50	64	39	50	73	74	22
Elderly couples 60+ years	34	59	57	52	65	78	67
elderly singles 60+ years	60	60	72	53	56	72	81
Mixed households	60	79	60	57	64	71	21
Total	53	66	57	55	66	74	320
Score above the average score, per cent							
Living at parents home	27	26	23	27	31	-1	
Young singles < 30 years	23	-2	-4	9	-9	-12	
Couples with children	16	14	-46	-9	-34	-11	
Lone Parents	6	-16	-30	18	7	2	
Singles 30-59 years	-29	-15	-31	-22	19	10	
Couples 30 - 59 years	-5	-4	-31	-9	11	0	
Elderly couples 60+ years	-36	-11	0	-5	-1	6	
elderly singles 60+ years	14	-10	25	-4	-15	-2	
Mixed households	13	19	4	3	-2	-3	

Note: There were too few cases with young couples that wanted to rent. Scores: 'great importance' =100, 'some importance' = 50 and 'no importance' = 0

The lower part of the table can be interpreted as that for young people living in parents home nearly all of the advantages are very important. For young singles it appears that the avoidance of down payment and financial risk is more important than average.

It must be assumed that most of the couples with children, who want to rent their home, have low incomes. Financial advantages as no down payment and lower housing costs in the short run thus are very important. Housing allowances are not so important, which could be due to that it is more seldom that couples with children can get these allowances in Denmark. Lone parents find it more important than others to avoid financial risks.

Both singles and couples in the age group 30 to 59 years find it more important that they can leave the dwelling easily. The singles also put more weight on avoiding troubles with repair and maintenance, which

also is a little more important for elderly couples. For the elderly singles renting is attractive for financial reasons, especially housing allowances, which are quite favourable for pensioners in Denmark.

Summary and conclusions

The research questions treated in this paper are:

- What factors explain preferences for tenure? Are there other important motives for homeownership than long-term investment advantages?
- To what extent have preferences for homeownership not been satisfied and what are the reasons for this?
- What reasons are given for preferences for respectively homeownership and tenancy among different people?
- What are the differences between people who want to own or to rent?

The study, which the paper is based on, is a survey among 1500 Danes 15 years and older. Thus the data is, what is called, 'stated preferences' for tenure. As the discussion in the paper reveals, there are two reasons why housing preferences are difficult to reveal and why the results of these kinds of studies must be treated with caution. The first is that stated preferences sometimes do and sometimes do not take into account to what extent it is possible to realize them. People with the same underlying preferences could give different answers because they to a different extent consider how realistic they are. The second is that the way people make priorities in relation to their future choice of a home can be influenced by their present housing situation and especially by present disadvantages, which they very much want to improve.

Who prefer homeownership

As in most other countries the large majority of the Danes prefer homeownership. It is especially among families with children that homeownership is popular. Preferences are somewhat weaker among middle-aged and elderly couples without children and even more among singles. Especially elderly singles prefer rented dwellings.

What is somewhat unexpected is the very high preference for homeownership among young couples without children. Especially, as less than half of the group has obtained homeownership yet. Also young singles have a high preference, even if very few of them own their home. This could be explained by a generational effect. Young people in Denmark have grown up in a period where house prices have been steadily growing and large capital gains have been obtained in housing. At the time when the survey was conducted in spring 2008 this trend had stopped, but the later breakdown of the housing market was not quite obvious at that time. The high preferences for homeownership among young people could mirror very high expectations of future financial returns from investments in housing. However, the study also shows that expected long-term financial advantages do not play a greater role for young people than for the elderly. Thus the only available explanation is that there is a difference between generations, where the new young generation in general has higher preferences for homeownership, perhaps because many more of them have grown up in owner-occupied detached homes. We know from other research that people has a greater propensity to choose the same kind of housing as they grew up in (Ærø 2002) and this could be one of the causes of stronger preferences for homeownership among new generations.

Educational background only has importance for preferences for homeownership if income is omitted from the analyses. This study thus cannot confirm the hypothesis of the special importance of the expected long-term income, which should be higher among people with higher education. The results could mirror that concerns about the future financial situation of the respondents only to a minor degree have influence on their preferences and expectations concerning their housing situation in the first coming years.

Why has homeownership not been obtained

The main reasons stated by young people for not having realized homeownership yet are their expectations of getting higher incomes and of future changes in their family situation. These explanations also have some importance for middle-aged families but not for the elderly. The second most important reason is connected to the housing supply. It is that people can't afford to buy a home in the place where they want to live and that they are not ready to move far away from their place of work or education. This reason is important for families with children. Only a minority states that they cannot get the mortgage necessary to buy a home.

Moreover, one out of four can afford to buy but are not ready to cut down other consumption to obtain homeownership. This is most common among young people.

Reasons for preferences for homeownership

There is a very strong connection between preferences for detached homes and preferences for homeownership. This points to that these preferences are very much intertwined. For many people detached homes with gardens are synonymous with homeownership. At the same time factors explaining homeownership are not the same for people preferring detached homes as for people who prefer apartments. Factors, which increase preferences for homeownership in detached houses, are income, being couples and having children, and being young. Moreover, preferences are stronger in less urbanised places and where there are good conditions for growing up children. Preferences for homeownership in flats are also connected to income, but at a lower rate. It is even stronger among young people than applies for detached homes, while it does not matter if they are couples or have children. But preferences for owner-occupied flats are much weaker among the elderly.

Based on available literature six different circumstances were identified as having importance for the choice of tenure.

- 1 The financial return households get from investments in their own dwelling
- 2 The role of cash flow, liquidity and borrowing constraints during the life-cycle
- 3 Transaction costs and efforts
- 4 Costs and efforts concerning maintenance and administration of the dwelling
- 5 Security of tenure, power to change and improve dwellings and freedom of choice
- 6 Life-style, housing values and social status

It was expected that point 1, 2, 5 and 6 promote preferences for homeownership, while 3 favours renting and 4 could be important for both tenures, as maintenance could be cheaper by homeownership, while the advantage for tenants is to avoid the trouble.

In this study were identified three factors, which are decisive for preferences for homeownership: 1. Long-term financial considerations, 2. Short-term financial considerations and 3. Possibilities for use and disposal of the dwelling. These factors are very much in agreement with the circumstances identified above in the literature, but there are some differences. Financial return can be both long-term and short-term. Among the last is 'to get tax deductions' and 'to be able to get mortgages used for actual consumption'. Besides the three mentioned factors it was also shown that the motive to accumulate wealth for heirs has a separate importance and is more connected to short-term than to long-term considerations. Finally housing market conditions, where it is difficult to get a rented dwelling, to some extent are connected to the short-term motives.

The study shows that the advantages by homeownership most often mentioned by people, who prefer detached homes, is 'free disposal of the dwelling' and 'Possibilities to adapt the home and cultivate a garden'. The first motive is also very important for people who prefer owner-occupied flats, but not as the same high level. For both building types long-term financial considerations as 'be able to invest' and 'financial security' are the next most important motives. Short-term motives are a little less important, but still have high scores. Especially the advantage of bringing along the value of improvements is important. Finally a lack of rented dwellings in the local housing market supply have some importance for people who expect to buy a flat, but not so much for those who prefer detached homes.

Motives for preferences for homeownership varies very much depending on who the respondents are and where they are located. Disposal of the dwelling is less important for singles in all ages, especially for the young. It is relatively more important for people on welfare benefits and early pension – people who spend all their time in the home. Long-term financial motives are less important for the elderly and most for employed people with middle-high incomes. Short-term motives are much more important for the young and for the unemployed and employed with lower income.

When looking at the location of the dwelling it appears that both short- and long-term financial motives have much more importance in the central parts of the cities where housing prices have increased the most in the

last 15 years. Disposal of the home is the most important reason for homeownership in the countryside. The importance is decreasing with increasing urbanisation and has only a small importance in city centres.

Reasons for preferences for rented housing

Respondents could reflect on four financial reasons for preferences for renting and two non-financial: 'easier to get rid of rental dwellings' and 'no trouble with maintenance and repairs'. The study showed that the non-financial reasons were a little more important than the financial. The highest score got 'no trouble with maintenance and repairs'. Among the financial reasons 'lower housing costs in coming years' and 'rent allowances' were the most important. 'No down payment' and 'no financial risks' were also important but at a lower level.

The non-financial reasons have most importance for middle-aged singles and couples without children and little importance for families with children. This could mirror differences in life-style where families with children use most of their time in the home, are prepared to use time and resources to keep it, and who do not expect to leave the dwelling in the near future. Households without children, especially singles, have a less permanent situation, which could lead to that it is important to have flexibility and less work with maintenance.

Couples with children who prefer rented homes mostly have very low incomes. Therefore lower housing costs and the lack of down payment have more importance for this group. It is not easy for families with children to get rent allowances in Denmark, which is mirrored in that this reason has relatively low importance for this group. On the other hand there are very good subsidies for the elderly in rented housing and not in owner-occupied, which is the reason why housing allowances are a very important motive for elderly to prefer rented housing.

Summing up, it can be concluded that tenure choice, as expected, is somewhat influenced by long-term investment considerations, but that many other factors like short-term financial aspects, freedom of disposal of the dwelling, flexibility and security are very important. Preferences for homeownership are to a very large degree connected to a specific type of housing, the detached house with garden, and to a life style connected to families with children, for whom daily life is very much concentrated to the home. The study points to that preferences for homeownership in Denmark will increase in coming years as the new generations increasingly want to be homeowners.

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