HOUSING EXPENDITURE IN WESTERN EUROPE: macro and micro housing quotas

P.J. Boelhouwer and A.J. Menkveld

HOUSING AND URBAN POLICY STUDIES

11

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1

INTRODUCTION

1.1 Introduction

This research report is part of a larger study into the working of social housing systems in seven West-European countries, namely the Netherlands, Belgium, Denmark, Great Britain, France, the former West Germany (henceforth referred to as ‘West Germany’) and Sweden, with the situation in the Netherlands serving as a reference framework. Besides descriptions of these systems, attention is also given to the effects arising from each system.

The project as a whole comprises a number of modules carried out as separate research projects. The first two of these studies were published in 1992: a comparative study of housing policy (Boelhouwer & Van der Heijden, 1992) and a comparative study of housing finance (Papa, 1992).

In this part-study of the project entitled ‘A comparative study of housing systems in Europe’, attention is devoted to the theme of housing costs. It serves first of all to provide insights into ways of comparing these costs in the different countries, and then examines the housing costs of various groups of households in the seven Western European countries under consideration.

1.2 Problem formulation

The central problem formulation of this research study is as follows:

How have housing expenditures in the Netherlands, Belgium, Denmark, Great Britain, France, West Germany and Sweden developed over the last twenty years?

This problem formulation was elaborated into the following two research questions:

What is the relationship between housing expenditure and other consumer expenditures in family households?
What is the relationship between housing expenditure and income in a number of ownership categories?
The first of these research questions was much in mind in the course of a macro-analysis carried out to examine whether the National Accounts, in particular, offered any opportunities for making international comparisons between housing expenditures. The second research question concerned an analysis at micro-economic level which would answer the following points:

- How are housing expenditures distributed with respect to household income and with respect to their housing arrangements?
- To what degree do rent and rent rebate policy, the fiscal treatment of owner-occupiers, and the organization of the mortgage market affect the relative scale of housing expenditure, and
- What are the consequences of these for the accessibility of different kinds of housing for different groups of households?

Variables with important effects on housing costs, such as the quality of the housing itself and what might be termed the 'spatial' component of housing expenditure (cost differences between living in the town or in the country, and between living in central or outlying regions), have been given little attention in this research study. Emphasis will be laid here on the comparison of housing expenditures rather than on the size and distribution of incomes. It will be clear that incomes and income policy have a decisive influence on the distribution and size of the share of household income spent on housing costs, but incomes themselves will be taken here as a given.

1.3 Definition of concepts

A number of concepts employed in the problem formulation and concepts arising therefrom must be given closer definition. Two concepts used throughout this publication are macro-analysis and micro-analysis:

Macro-analysis

The intention in this kind of research is to gain insight into the relative proportion of total household consumer expenditure made up of the consumption of housing-related goods and services. This can provide no insight, however, into the distribution of these expenditures across households. In the National Accounts, the relative growth of housing expenditure is determined by the number of consumed housing services and the price levels of these services. Total housing consumption figures in the rental sector are determined by the gross rents (including service costs and the national rent rebate figure).

In the private home sector, the imputed rent figures are used, together with a built-in reserve for maintenance costs. The starting point is the property's 'economic imputed rent': a sum which represents the value of the housing consumed and which is based on the rent cost of a comparable rented building. The housing expenses are often held to include, besides the 'gross rent' (rent + imputed rent + supplementary costs), the cost of fuel and power (the consumption costs of heating and lighting).
Micro-analysis
Micro-analytical research study can be much more comprehensive. This is particularly true of local budget research; after all, households often also hold such things as energy costs, municipal and provincial taxes, garage hire and commuting costs to be part and parcel of housing expenses.

However, the more cost categories are included in the concept of ‘housing expenditure’, the more difficult it is to draw conclusions from the data. The best condition that the definition employed should meet is that expenses in the rented and owner-occupied sectors should be mutually comparable.

‘Net housing expenses’ form a suitable starting point. Net housing expenses are defined as the sum paid in order to have access to the dwelling. For rented housing, this includes service costs and any rent rebate. For the owner-occupier, the net costs are formed by the gross mortgage costs plus operating costs, the owner’s share of the rates and the leasehold obligations, taking account of any object subsidy, subject subsidy and fiscal effect. Not all of these categories will appear in every country’s statistics, however, nor will they be classified in exactly the same way.

Before proceeding to answer these two research questions in the chapters that follow, we shall first devote some attention to the research literature to date on the subject of household expenditure. Here, too, an important distinction is made between macro-analysis and micro-analysis.

1.4 Housing expenditure research

As has just been described, comparative studies of housing expenditure can be divided, roughly speaking, into studies into the scale of housing expenditure at the national, or macro, level and studies into the distribution of housing expenditure at the household, or micro, level. This body of research includes descriptive and explanatory studies, primary and secondary source studies, studies of the problems faced by individual residents and by the government. International comparative research has been characterized to date by the rather summary approach to housing expenditure that results from the wide scope of such studies.

Macro-analysis

Comparison of housing consumption/expenditure

By far the largest part of international comparative studies undertake an analysis of the data held in international data banks. Such data banks were not set up specially in order to carry out such research; organizations such as Eurostat (the statistical bureau of the European Union), the OECD (Organization for Economic Cooperation and Development), the IMF (International Monetary Fund), and the UN (United Nations) have all produced considerable quantities of statistical data, available in several
libraries. The OECD’s National Accounts are used particularly often.

An inventory of the available internationally-oriented research on housing expenditure has been drawn up by Van Fulpen (1984). With the help of the National Accounts of 1960 to 1969, Burns & Grebler (1977) calculated the share of housing expenses (gross rent, fuel and power) in households’ total consumption patterns. They looked at the variation in the macro housing quota between a large number of countries, in which the price elasticity of housing consumption plays an important role. Their findings included the fact that average housing consumption grows four times faster as the consequence of urbanization than as that of income growth. Howenstine (1983) compared the development of general price indexes, rent cost indexes and building cost indexes; he found that these indexes moved independently and that large differences existed between different countries. Lakshmanan et al. (1978) showed that housing expenditures in different countries were strongly influenced by demographic and economic developments.

Dutch literature on the subject is thin on the ground. Van Fulpen’s own inventory study is the only published Dutch research project which has an international comparison of housing expenditure as its declared aim, but articles expressing opinions on the subject have appeared in various journals. A number of small-scale studies have been carried out within the Dutch Ministries of Finance and Housing, Physical Planning and the Environment (VROM); these also have an inventorier character and little attention is devoted to the analysis of the differences found. Van Fulpen collated a number of core statistics, mostly drawn from the years between 1960 and 1980, in order to identify possible explanatory factors. He compared the growth in the housing stock, population growth, the production of new houses and the housing supply per 1000 inhabitants, investments in housing, the growth of the gross national product, rent and price rises, and the development of the macro housing quota. Van Fulpen hesitated to draw firm conclusions from his results on the grounds that the differences he found could not automatically be held to be explanations of the changes: ‘In international comparison of housing expenditure, it would seem to be important to differentiate between volume and price components. High income elasticity in a certain country can namely be brought about by a relatively strong growth in the housing supply just as easily as by strongly rising prices in the housing sector. (...) The relationships between the size of the housing supply and social housing policy, and particularly the scale of government intervention, appear to be of central importance to the accurate interpretation of international housing expenditure data’ (Van Fulpen 1984, pp. 40-41).

Micro-analysis
In this, data from various kinds of surveys are used for housing expenditure research in each of the separate countries. Dutch examples of this first group of studies are the Housing Needs Survey (Woonbehoefenonderzoek) and the Rent Survey (Huur enquête). It is likely that other countries also possess data derived from similar exercises. So-called ‘budget studies’ have also been carried out; these include other categories of
expenditure besides housing. These household-analyses provide information at national level on housing expenditure in relation to housing quality and various household characteristics. Their suitability for use in international comparative research depends on the comparability of the definitions and classifications they employ.

The use of budget studies has a long history; in 1794, Eden compared the annual incomes and housing expenses of non-agrarian and agrarian workers, and various descriptive studies appeared in the years that followed. At the end of the nineteenth century, researchers began to search for laws with the help of extensive quantitative analyses. Schwabe (1868) studied the housing expenses of the inhabitants of a number of German towns, and derived a law from the results whose general applicability is not in dispute today: ‘The poorer a person is, the larger the part of his income that is spent on housing’.

This conclusion was given slightly more subtle interpretation by Reid; in her 1962 study, ‘Housing and Income’, she argued that it held for cross-sectional comparisons at a given moment, but that comparisons over longer time-series showed that relative expenditure on housing increased with increased income. To link the rise in incomes with the rise in housing expenditures, such studies calculate ‘income elasticities’: if housing expenditures rise less quickly than incomes in percentage terms, then income elasticity is less than 1, and housing is seen as a ‘necessary good’. If income elasticity is more than 1 then housing is seen as a ‘luxury good’. Reid found income elasticities greater than 1.

Later research studies have taken issue with this conclusion, and have shown that a large number of Reid’s assumptions concealed a considerable ‘bias’, whereby elasticity was accorded too high a value.

So far, the literature (Van Fulpen, 1984, 1985, 1986) includes just one overview in which the distribution of housing expenditure at household level is presented with the aid of budget studies (see Table 1.1).

The International Labour Organization (ILO) overview dates from 1967 and gives a cross-sectional view of a number of countries, with reference years between 1950 and 1964. Unfortunately this review is now so outdated that practically no useful conclusions can be drawn from it about the situation today.
Table 1.1 Housing cost distribution, based on budget studies¹

<table>
<thead>
<tr>
<th>The lower the income, the higher the housing quota, in:</th>
<th>The housing quota is about equal in all income groups, in:</th>
<th>The higher the income, the higher the housing quota, in:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria (1955)</td>
<td>Finland (1955)</td>
<td>Norway</td>
</tr>
<tr>
<td>Canada (1959)</td>
<td>Ireland</td>
<td></td>
</tr>
<tr>
<td>Denmark (1955)</td>
<td>Luxembourg</td>
<td></td>
</tr>
<tr>
<td>Italy (1954)</td>
<td>West Germany (1962/1963)</td>
<td></td>
</tr>
<tr>
<td>the Netherlands</td>
<td>Greece (1957/1958)</td>
<td></td>
</tr>
<tr>
<td>Switzerland</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Great Britain</td>
<td></td>
<td></td>
</tr>
<tr>
<td>the United States</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


¹ Where no year is given, it is 1964.
THE MACRO HOUSING QUOTA

2.1 Introduction

Most studies of social rented housing which have compared national housing costs with those abroad have made use of the so-called 'macro housing quota'. Numerous publications (including Van Fulpen, 1984; NEI, 1989, p. 15; SCP, 1990; VROM, 1990, p. 7), despite the limitations to the technique which are sometimes also mentioned, present this housing quota as a measure of the part of their income that households spend on housing. Their authors frequently warn that comparisons between them can only be accorded an 'indicative' value, though usually without explaining why this is. Readers are therefore left to assess the importance of these limitations for themselves. In most cases this means that the author effectively does indeed present the quota as a means by which the housing costs of individual households can be compared. In the following section we shall argue that the use of the macro housing quota is associated with several problems, and that these problems mean that macro housing data cannot provide a reliable basis from which to make comparisons about the size of the housing quota of individual households.

The information provided by the National Accounts does, however, yield other interesting comparative materials, and these are described more fully in section 2.3.

2.2 Problems with using the macro housing quota

2.2.1 Problems of definition

The macro housing quota is derived from information in the National Accounts and is defined as the proportion represented by housing costs in family households' total expenditure. The term 'quota' is used throughout this document to express that fraction of total expenditure for which a given is responsible: for example, a household's 'net rent quota' is that percentage of its total expenditure which represents its net rent payments. This concept has elsewhere also been described using either the adjective 'relative' or the noun 'ratio'.

'Subject subsidies', sometimes termed 'individual subsidies', are those provided on certain terms to individual applicants; 'object subsidies', elsewhere termed 'property subsidies' or 'bricks and mortar subsidies', are those which apply to buildings.
consumption expenditure. The formula used to derive the macro housing quota is then as follows:

\[
\text{Macro housing quota} = \frac{\text{rents} + \text{imputed rents of owner-occupied homes} + \text{energy costs}}{\text{total consumption expenditure of family households}}
\]

The first problem we shall discuss here has to do with the definitions of housing expenditure hereby employed. In the Netherlands and Denmark, the concepts of rent and imputed rent include all maintenance and repair expenses, including radical renovations that might well more appropriately be described as property investments. In West Germany all repairs, including expenses for small and daily internal maintenance jobs, are brought under a separate category. In Denmark and Sweden, rent and imputed rent calculations include the costs of garbage collection, the heating and lighting of communal spaces, insurance, cleaning costs, all kitchen fittings (oven, freezer, microwave, etc.), washing facilities and part of the administration costs. In France, part of the service costs are included; in the UK, the cost of renting a garage. The National Accounts give a total figure for the consumption costs of housing, which means that it is impossible to determine the degree to which the size of any particular housing quota is affected by such differences in the definitions employed.

Not only the components, but also the calculation method employed to determine rent and imputed rents varies from country to country. The calculation of the imputed rent of private property forms a particularly serious problem. In any given country, the magnitude of imputed rent depends on the scale of the owner-occupied housing sector, while always amounting to over half the total housing expenditure; the following examples will give an indication of this problem.

In Belgium, owner-occupiers were asked in 1963 to estimate the market value of their homes. Since that date, the imputed rent figure as a proportion of total domestic consumption has been annually adjusted according to the Rent Price Index and a quality index. The size of the housing stock is derived from the growth in the number of households.

Until recently, imputed rents in the UK were determined by the tax authorities responsible for the levying of local rates. The calculations involved dated from 1973. The extent of the housing stock followed from the total number of these ‘rateable values’.

In Denmark, West Germany, France and the Netherlands, owner-occupied homes are divided into groups having specific characteristics (quality, age, and the like). All rented housing falling into a given category is accorded a imputed rent equal to the group average for the owner-occupied houses in that category, although in the Netherlands this is a simple average and in the other countries uses a price per m².

The methods employed to take account of the differences in quality between rented and owner-occupied housing, and the fact that many rent prices are held below market
levels by governmental regulations, also differ from country to country. These points will have made it clear that it is uncertain whether calculated imputed rents can always be said to correspond with actual imputed rents.

Differences in the number of second homes and holiday homes in different countries also cause abnormalities in housing consumption patterns. The number of such subsidiary homes is hard to determine and they are also difficult to distinguish from fully-furnished holiday apartments (consumption categorized as taking place in hotels, etc). In all countries, however, it is assumed that second residences are privately-owned dwellings, for which an imputed rent has to be calculated.

Table 2.1 Summary depiction of the calculation of housing consumption by owner-occupiers

<table>
<thead>
<tr>
<th>Country</th>
<th>Base Year</th>
<th>Housing Stock Indicator</th>
<th>Stratification Parameters</th>
<th>Upgrading for Intermediary Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belgium</td>
<td>1963</td>
<td>households with quality adjustment</td>
<td>owner's own judgement</td>
<td>maintenance and repair</td>
</tr>
<tr>
<td>Denmark</td>
<td>1985</td>
<td>square metres</td>
<td>age, size, facilities, degree of urbanization</td>
<td>no</td>
</tr>
<tr>
<td>West Germany</td>
<td>1986</td>
<td>square metres</td>
<td>age, size, facilities, size of locality</td>
<td>'slight'</td>
</tr>
<tr>
<td>France</td>
<td>1984</td>
<td>square metres</td>
<td>size of locality, comfort, 'standing'</td>
<td>no</td>
</tr>
<tr>
<td>the Netherlands</td>
<td>annual since 1977</td>
<td>dwellings</td>
<td>all dwellings</td>
<td>'rateable individual dwelling'</td>
</tr>
<tr>
<td>Great Britain</td>
<td>1973</td>
<td>total 'rateable value'</td>
<td>no, but the rateable values 50% higher for owners</td>
<td>maintenance costs</td>
</tr>
</tbody>
</table>

Because this type of dwelling is not permanently occupied and often lacks several kinds of provision, the Danish government has simply decided that their rented value should be taken to be half the average rent of comparable rented houses. The other countries nevertheless consider that the housing consumption for such accommodation should be the total rented value. Table 2.1 summarizes the calculations made in each country to derive owner-occupiers' housing consumption.

2.2.2 The indivisibility of expenditures in the rented and owner-occupied sectors
A second disadvantage attached to the use of the National Accounts is the consequent impossibility of distinguishing between housing consumption in the rented and in the owner-occupied housing sectors. A distinction can, however, be drawn between housing and energy consumption. As many comparative studies focus on housing policy, energy expenditures are often not taken into consideration, and the term then employed is not 'macro housing quota' but 'rent(able value) quota'.

2.2.3 Differences in housing quality
An additional problem is the fact that no distinction can be drawn between housing of different quality, a problem which the different countries suffer to widely differing degrees. Incidentally, this problem also frequently appears in studies that try to compare the housing expenses of different types of household or housing category on the basis of survey results.

In the Netherlands, houses are often compared on a 'price per point' basis which involves dividing a house's basic rent price by its number of official 'housing evaluation points'. Since such information is often absent in other countries, between-country comparisons cannot be made on this basis, but it is nevertheless often possible to determine the housing expenditures in different tenures. This distinction, too, is impossible to make use of the macro housing quota alone.

Still, several countries display large discrepancies in the quality of rented and privately-owned housing. In West Germany, for instance, this discrepancy is much larger than it is in the Netherlands. In consequence, the proportion of 'estimated imputed rent' in the calculation of the macro housing quota will be higher in West Germany than it is in the Netherlands.

This difference in housing quality can be seen in the average purchase price of housing in these two countries. According to Haffner (1992, p. 51), the average price paid by a middle-income household (1990 figures) for an owner-occupied house with building society loan is NLG 100,000 more than in the Netherlands, and for bank mortgage clients the difference is NLG 260,000.

Leutner & Jensen (1988, p. 162) note that the average construction price of an owner-occupied house in West Germany in 1988 was DM 300,000, while the average price of an existing house in 1990 was DM 450,000, with exceptionally high prices in certain places such as Munich (DM 850,000) (Bouwer, 1991). Households can come up with such large amounts only by making considerable sacrifices (Boelhouwer & Van der Heijden, 1992, p. 102). In contrast to the situation in the Netherlands, owner-occupied houses in West Germany are often large, free-standing buildings with a large cellar, and
they represent the pinnacle of a household’s residential career. Mobility in the West German owner-occupied housing sector is consequently very low.

2.2.4 The macro housing quota and the National Accounts

Besides differences in the components, the imputed rent calculation methods, and the impossibility of correcting for quality discrepancies, the use of the macro housing quota to perform comparisons comes up against problems which arise from the system employed by the National Accounts. ‘The National Accounts represent a systematic and quantitative overview of the outcomes of general economic processes, over a given period, on the national economy’ (CBS, 1989, p. 193). A country’s economic processes are described, over a given time period, by reference to ‘actual transactions’. The value of the transactions in goods and services which take place in the national economy is expressed in monetary terms. The national economy is divided into the five sections between which transactions can take place, of which family households and the government are two. Depending on the methodology by which these consumption patterns are financially processed by the National Accounts, differences in the relations between these categories arise which are occasioned by the methodologies themselves. Figure 2.1 shows how the macro housing quota fits into the National Accounts’ system of nested relationships.

The National Accounts have serious shortcomings when employed as the basis of comparisons between the housing expenses of individual households in different countries. For instance, the differences between countries in the share of domestic consumption in the GNP arise partly from the different ways in which the consumption of wholly or partly government-subsidized goods and services is recorded.

In particular, the different social security system effects of different countries largely determine the differences in the size of the ‘total domestic consumption’, the denominator of the macro housing quota. The Accounts therefore present large differences in the private consumption patterns of households in different countries which cannot be satisfactorily explained by the economic development of those countries.

Partly because of this, the proportion of GNP accounted for by household private consumption also varies between countries and between years. In 1993, this proportion was 64% in the UK and only 55% in Sweden. Denmark (55%) and West Germany (56%) also have relatively low scores, while average scores appear in Belgium (62%), France (61%) and the Netherlands (61%).
That these figures are also subject to fluctuations is evidenced by the instance of Belgium, which had a figure of 68% in 1987 and 62% only three years later; and although the housing consumption stayed the same, over the same three years the macro housing quota fell by 6%. The fact that the constitution of GNP varies so widely between countries poses serious problems to comparisons between their macro housing quotas. Since Belgium, for instance, has a relatively higher private consumption level than does Sweden, even where their housing consumption is the same, Belgium’s macro housing quota will be relatively lower.

Eurostat itself, which publishes the National Accounts, leaves no room for misunderstanding on this matter, having this to say about the accounting procedures:

- The distinction made between the total consumption expenditure by household and by government sectors does not meet the criterion of actual consumption or that of actual expenditure, but is based on the degree and type of governmental intervention. The international comparison of capital flows for ‘final total household consumption expenditure’ and ‘government expenditure’ is consequently practically meaningless;
- The international comparison of capital flows in social welfare payments (which the National Accounts term ‘social security expenses’ and ‘benefit expenses’) are practically meaningless;
- ‘Household disposable incomes’ are equally impossible to compare, given that the share of household health care expenses borne by the state are included by some countries and excluded in others;
- International comparisons of the structure of total household consumption expenditures are perturbed (Eurostat, 1983, p. 20).
Besides these systematic problems, difficulties exist with the specific way in which housing subsidies are entered in the National Accounts. Cost price-lowering object subsidies are namely booked as 'transferrals from government to third parties'. The most important effect of this is that the cost of housing is reduced. Subject subsidies such as individual rent rebates, however, are held to be 'income transfers' from government to family households. The relative share of family consumption then grows, whereas the price of the subsidized goods consumed, according to the National Accounts, remains the same. For this reason the Accounts provide no insight into net rent (gross rent minus subject subsidies), but only into the rent that the landlord charges the tenant.

As regards the owner-occupied sector, the National Accounts take no account of the effects of fiscal measures, such as the deduction of mortgage interest payments from taxable income and considerations of standard imputed rent. These nevertheless have important effects on the housing expenditures of owner-occupiers. The consequence of this methodology is that a shift from object to subject subsidies can have considerable effects on the size of a country's macro housing quota, even when these housing subsidies are, in absolute terms, identical. When, over a number of years, object subsidies fall and are compensated for by individual rent subsidies, as is currently the case in the Netherlands, the macro quota rises, despite the fact that total household expenditure on housing remains the same or rises only slightly. Papa (1992, p. 172) has established that the relative proportions of subject and object subsidies differ widely from country to country and that a gradual shift from object to subject subsidies can be seen, although this shift is not taking place everywhere at the same speed and to the same degree.

2.2.5 Resumé
This section has discussed six important shortcomings of the macro housing quota:
- different countries employ different definitions of the quota;
- it is impossible to divide consumption figures into figures for the owner-occupied and rented sectors;
- different countries calculate the quota in different ways;
- it is impossible to correct for differences in housing quality;
- the National Accounts' methodology gives rise to problems;
- the National Accounts record housing subsidies in a particular way.

2.3 The course of the macro housing quota over time

2.3.1 The macro housing quota, 1975 - 1993
The previous section gave extended consideration to the problems which arise when one tries to make comparisons on the basis of the macro housing quota provided by the National Accounts. We came to the conclusion that comparison between the absolute sizes of these macro quotas was a precarious basis on which to build up a picture of the housing expenditures of individual households. Comparison between macro quotas over time, however, is a less problematic matter.
Table 2.2 The rent(able value) quota in seven European countries between 1975 and 1993

<table>
<thead>
<tr>
<th></th>
<th>1975</th>
<th>1993</th>
<th>change¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>the Netherlands²</td>
<td>10.1</td>
<td>16.0</td>
<td>3.2</td>
</tr>
<tr>
<td>Sweden</td>
<td>18.0</td>
<td>26.6</td>
<td>2.7</td>
</tr>
<tr>
<td>France</td>
<td>11.6</td>
<td>17.1</td>
<td>2.6</td>
</tr>
<tr>
<td>Belgium³</td>
<td>10.2</td>
<td>13.4</td>
<td>2.1</td>
</tr>
<tr>
<td>West Germany</td>
<td>13.0</td>
<td>17.4</td>
<td>1.9</td>
</tr>
<tr>
<td>Denmark</td>
<td>17.0</td>
<td>22.7</td>
<td>1.9</td>
</tr>
<tr>
<td>Great Britain</td>
<td>13.7</td>
<td>15.5</td>
<td>0.7</td>
</tr>
</tbody>
</table>

Source: OESO, 1995, adapted by OTB.

¹ The average annual rise in the quota, in percentage terms.
² Quota corrected for 1993 adaptations in the National Accounts.

Over a period of time, the aberrations we have described will play no role as long as their effects remain unchanged. For this reason, it is indeed possible to use the National Accounts to compare the rise and fall of household housing and energy consumption, although here too some caution is in order. The analyses carried out here refer to the period 1975 to 1993 (see Table 2.2).

Since housing policy-related explanations are being sought for the observed growth in the macro housing quota, a comparison is made between the development of the rent(able value) quota.

Table 2.2 clearly shows that the Netherlands have had by far the largest growth in the macro rent(able value) quota; it represents, between 1975 and 1993, the exceptionally high annual growth rate of 3.2%. Sweden and France are in a rather distant second and third place with annual growth rates of 2.7% and 2.6% respectively. This growth in the other countries is at most 2.1%/annum.

A number of possibilities could be given for the growth in the Netherlands. It is possible that the relatively very low rent(able values) which typified the Netherlands during the early 1970s affected the first years of the period 1975 - 1993; the rather low Dutch rent(able value) quota of 10.1% in 1975 would support this hypothesis. It is however also possible that the high growth in the macro rent(able) quota is responsible for the high housing expenditure of individual households in the nineties.

In Figures 2.2 and 2.3, it can be seen in which years the macro rent(able value) quota rose. The 1975 figure (1978 for Belgium) is used as the index value.
Figure 2.2  The development of the rent(able value) quota in the Netherlands, Belgium, West Germany and France between 1975 and 1993 (index 1975 = 100)

Source: OESO, 1995, adapted by OTB.

Figure 2.3  The development of the rent(able value) quota in the Netherlands, Great Britain, Denmark and Sweden between 1975 and 1993 (index 1975 = 100)

Source: OESO, 1995, adapted by OTB.
Just as in Table 2.2, the steep rise in the Dutch macro rent(able value) quota is clearly evident. This rise is especially steep after 1985. In the second half of the 1970s, developments in the Netherlands paralleled those of the other countries, but from 1980 house-building activities slowed down considerably in all the countries under study except for the Netherlands and, to a lesser degree, France (see also Table 2.3). The rise in rent(able value) quota and the scale of new building production are clearly linked.

Before we proceed in the next chapter to devote attention to a micro-analysis of housing expenses borne by individual households in the rented and owner-occupied sectors, let us look at the course of the volume and price components of the macro rent(able value) quota (see also Figure 2.4). It can be seen that the rises in the various housing quotas are the result of volume and price developments affecting both the numerator and the denominator of the quota. Volume mutations reflect changes in the amount of consumed goods and services, while price mutations are caused by a price rise or fall unrelated to any changes in the housing services received (such as inflation, or rent rises having no corresponding improvement in amenities).

In Figure 2.4 the percentage deviations from the base year, 1975, are indexed. The years 1980 - 1990 apply to Sweden, and the years 1978 - 1990 to all the other countries.

Table 2.3  Ready-to-occupy houses, housing stock, household and population growth in seven Western European countries ranked in order of volume changes in housing consumption, 1975 - 1987, numbers and percentages

<table>
<thead>
<tr>
<th>Country</th>
<th>Ready-to-occupy houses per 1000 of population</th>
<th>Housing stock per 1000 of population</th>
<th>Growth in number of households (%)</th>
<th>Population growth (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>the Netherlands</td>
<td>9</td>
<td>7</td>
<td>372</td>
<td>49(^1)</td>
</tr>
<tr>
<td>France</td>
<td>10</td>
<td>8</td>
<td>449</td>
<td>29</td>
</tr>
<tr>
<td>West Germany</td>
<td>7</td>
<td>5</td>
<td>443</td>
<td>23</td>
</tr>
<tr>
<td>Sweden</td>
<td>9</td>
<td>4</td>
<td>452</td>
<td>12(^2)</td>
</tr>
<tr>
<td>Denmark</td>
<td>7</td>
<td>3</td>
<td>439</td>
<td>22</td>
</tr>
<tr>
<td>Great Britain</td>
<td>6</td>
<td>4</td>
<td>396</td>
<td>23</td>
</tr>
<tr>
<td>Belgium</td>
<td>8(^3)</td>
<td>3(^3)</td>
<td>405</td>
<td>16(^4)</td>
</tr>
</tbody>
</table>


\(^1\) 1971-1987.
\(^3\) houses under construction.
2.3.2 Volume developments

Volume growth in the Netherlands’ macro rent(able value) quota, as was its total annual growth, was very high (21.4%). The Netherlands were followed by West Germany (18.3%) and France (15.7%). In the UK (-8.1%), Sweden (-4.2%) and Belgium (0.3%), volume growth was actually negative: this means that between 1978 and 1990, the volume growth in family consumption was larger than the volume growth in rent(able value).

Relative volume growth in the Netherlands was especially marked between 1975 and 1984. After the second energy crisis at the end of the 1970s, the volume growth of total consumption lagged behind housing consumption. The Netherlands were marked by relatively high housing production (see Table 2.3), which was linked to its relatively small housing stock, rapid population growth and a rapid growth in the number of smaller family households. During the 1980s, the volume of housing consumption fell in most countries as fewer houses were being built. In the Netherlands and France, however, this growth continued.

2.3.3 Price developments

In all the countries studied, the price of rent and imputed rent rose faster, on balance, than did the total consumption expenditure of established family households. This can be attributed primarily to rent rises and also to shifts in subsidy. In Sweden, France and
West Germany, this relative rise took place only after the mid-1980s. Relative price rises occur in countries where object subsidies prevail and the share of subject subsidies in total government expenditure is rising. In Denmark and the UK, subject subsidies already prevail over object subsidies; an early changeover gave rise to greater relative price rises in housing consumption. An explanation for this process can be found in section 2.2.3. In the Netherlands, object-related subsidies still prevailed in 1990. The price rise here between 1978 and 1990 cannot be attributed to any substantial reduction in this prevalence. A possible explanation might be the relatively rapid rise in building costs and the large number of newly-built rented houses that came onto the market during a period of high interest rates (see Table 2.3).

2.4 The use of the macro housing quota: conclusions and recommendations

On the basis of the analyses provided in this chapter, we can come to the conclusion that the information contained in the National Accounts is of extremely limited value when we set out to determine individual households' levels of housing expenditure and compare these between different countries. The National Accounts merely provide an insight into the price and volume of housing consumption at the macro level in various countries. Serious problems are associated with any attempt to use the figures to make comparisons between the total expenditures of households in order to learn something about the relative size of these expenditures. The most important of these problems to have been described in this chapter are:
- different countries employ different definitions of the quota;
- it is impossible to divide consumption figures into figures for the owner-occupied and rented sectors;
- different countries calculate the quota in different ways;
- it is impossible to correct for differences in housing quality;
- the National Accounts' methodology gives rise to problems;
- the National Accounts record housing subsidies in a particular way.

On the basis of these limitations, we come to the conclusion that it is inappropriate to compare the size of the macro housing quotas in different countries in any attempt to describe the net housing expenditures of individual households in those countries. For this reason such comparisons between macro housing quota size are to be discouraged. These problems would, however, be partly obviated if the OESO or Eurostat were to split house rent and house imputed rent into two separate categories. The information is available at the various national statistical bureaus; in 1992, the Netherlands drew this distinction for the first time in the course of its own National Accounts.

In contrast to absolute comparisons between countries, however, quota comparisons over time are much less problematic. Over a period of time, the aberrations we have described will play no role, as long as their effect remains unchanged. For this reason, it is indeed possible to use the National Accounts to compare the rise and fall of household housing and energy consumption, in which a distinction can also be drawn between volume and price trends. This, too, should be approached with some caution.
3 MICRO HOUSING EXPENDITURE

3.1 Introduction

This chapter will respond to the second research question, that has to do with the relationship between housing cost and household income in various residential categories. In Chapter 2 we indicated that it is not readily possible to make comparisons between absolute figures for housing expenditure using macro data; the discrepancies between the ways in which the National Accounts are drawn up and in which a building's imputed rent is defined in different countries are too large. It is also impossible to distinguish between the living expenses of tenants and those of owner-occupiers, or to compare the situation for different income groups. The macro housing quotas are, however, suited to the description of general developments in housing expenditure.

This second research phase was therefore directed towards making comparisons at household level between actual cash costs in the rented and owner-occupied housing sectors. These data are to be found in the results of research into housing needs, population and housing censuses, and budget studies.

There were three central themes to this second part of the research study: first, the composition of housing expenditure and the influence of subject subsidies and fiscal arrangements on this composition; second, the distribution of housing costs across disposable household incomes; and thirdly, the relationship between the distribution of living space and the size of housing costs and of household income.

Data was collected as systematically as possible from ministries, research institutes and statistical bureaus in the countries concerned.

In view of the desirability of optimal comparability, data was searched for which the relevant definitions corresponded with those employed by the Dutch Housing Needs Survey (Nederlandse Woningbehoeftenonderzoek - hereafter referred to as the WBO). Details of incomes and housing expenditure in both the rented and owner-occupied sectors had to come from a single survey, which also had to be reasonably contemporary and had to provide the option of distinguishing between gross and net housing expenditures.
Figure 3.1 Housing costs

<table>
<thead>
<tr>
<th>Tenant</th>
<th>Owner-occupier</th>
</tr>
</thead>
<tbody>
<tr>
<td>quoted rent</td>
<td>gross mortgage costs</td>
</tr>
<tr>
<td>+ service costs</td>
<td>+ operating costs</td>
</tr>
<tr>
<td></td>
<td>+ (owner’s) property taxes</td>
</tr>
<tr>
<td></td>
<td>+ land lease</td>
</tr>
<tr>
<td>direct housing costs</td>
<td>CROSS RENT</td>
</tr>
<tr>
<td></td>
<td>- non-subsidizable service costs</td>
</tr>
<tr>
<td></td>
<td>BASIC RENT</td>
</tr>
<tr>
<td></td>
<td>- individual rent subsidy</td>
</tr>
<tr>
<td></td>
<td>- rent adjustment subsidy</td>
</tr>
<tr>
<td></td>
<td>GROSS HOUSING COSTS</td>
</tr>
<tr>
<td></td>
<td>+/− fiscal effect</td>
</tr>
<tr>
<td></td>
<td>- house-owners’ subsidy</td>
</tr>
<tr>
<td>A</td>
<td>NET RENT</td>
</tr>
<tr>
<td>B</td>
<td>net disposable household income</td>
</tr>
<tr>
<td>A/B*100%</td>
<td>net housing quota</td>
</tr>
</tbody>
</table>

In processing the data we made use wherever possible of the housing expenses framework represented in Figure 3.1, and limited the definition of housing costs to direct, net expenses. Fixed associated costs (including service costs and the resident’s share of property taxes), variable associated costs (gas, water, electricity, other services), and miscellaneous costs (garage, furnishings, furniture insurance) have been ignored.

This chapter will now consider the following points. Section 3.2 discusses the sources used and the differences between definitions employed. Housing costs are related to household incomes and to residence type - i.e., rented or owned. Not only do differences exist between the incomes of these two groups, but the composition of the housing stock also varies from one country to another. These topics are covered in section 3.3; it demonstrates that the relationship between supply and demand in a given country and its institutional and political organizational arrangement of social rented housing have profound effects on the housing policy pursued, and that these factors are strongly influenced by existing house ownership patterns and the income levels of residents in the various housing sectors. This, in turn, influences the distribution of housing cost quotas. Subsidies, premiums and legislation are usually organized per sector, and the course of housing costs is different for tenants than it is for owner-occupiers. To establish the housing quotas, section 3.4 provides some insights into average incomes and income distribution. Using the stepwise system shown in Figure 3.1, the following sections describe the structure of housing expenses in a number of countries in the late 1980s. Separate treatment is given to the rented sector (section 3.5) and the owner-occupied sector (section 3.6). We examine the distribution of average gross and net housing expenditures over different categories of net household incomes, giving special attention
to the reduction of these expenditures by subject subsidies and to the fiscal treatment of owner-occupied houses. Where necessary, differences in rent/subsidy policy and in fiscal policy will be indicated.

In order to place the various countries’ distribution patterns thereby determined into a wider perspective, section 3.7 will provide a brief outline of recent social rented housing policies and related financing strategies.

3.2 Sources and definitions

Table 3.1 shows a few basic details drawn from the sources used. Where the definitions employed differ from those used in the WBO, this is indicated.

Remarkably, France is the only other country to have carried out a study with a comparable scope and approach as the WBO. For Denmark, Great Britain and Belgium, such details are limited to the results of family budget surveys, whose sample sizes are smaller and whose questions on housing expenses are less detailed. Danmarks Statistik had published little on the results of the most recent Danish budget survey (1987). Of this, only a subdivision between tenants and owner-occupiers on income grounds was usable. Details of housing expenses themselves would have to have been taken from the 1981 survey, and because these results were so dated compared to those of the other countries, it was decided to make no use of them in this study.

Research institutes in Sweden and (the former West Germany) have developed simulation models in which slightly outdated figures can be brought up to date. No recent income and mortgage expense details exist in Germany, as the last Census in 1987 was not allowed to collect data that might jeopardize personal privacy. For Belgium, we opted to use data from the budget survey carried out by the Centre for Social Policy (Centrum voor Sociaal Beleid) at the University of Antwerp, as the National Institute of Statistics turned out not to have any useful current data on housing expenses. The statistical bureaus of Denmark and Great Britain were unable to provide data divided into 10%-groups (deciles) of income. France is one of the few countries within the EU which does not employ a system in which income tax is deducted at source, but is levied afterwards on a yearly basis. Roughly half of French households are, however, exempted from this tax. The Enquête Logement asks no questions in this regard, and for this reason we treat the concept of French income differently from that of other countries. The figures shown (for example in Figure 3.2) are also actually lower.

In Belgium, Great Britain and Sweden, as opposed to the Netherlands, the income of any children living in the parental home is included in the net household income. In Belgium and Sweden, extra income derived from the dwelling (rental income and rent rebate, respectively) are added to the total income figure.

Net rent figures seem to be amenable to reasonably reliable comparison, although the desired subdivisions into income classes and residence categories could not always be made. No data could be found in the UK and Sweden for the rented sector as a whole, but rented social rented housing and rented private housing could be separated. The most up to date calculations for West Germany, on the other hand, applied to the whole
<table>
<thead>
<tr>
<th>Country</th>
<th>Name of the survey/ organization/year/ no. of respondents</th>
<th>Income/difference from WBO definition</th>
<th>Expenses for owner-occupied property/any differences from WBO</th>
<th>Expenses for rented property/any differences from WBO</th>
</tr>
</thead>
<tbody>
<tr>
<td>the Netherlands</td>
<td>Woningbehoeftenonderzoek (WBO)/ Centraal Bureau voor de Statistiek (CBS)/ 1989-’90/ 5431</td>
<td>net disposable household income (main earner + partner): salary, business fees and transfers, minus health insurance contributions and income tax, excluding house-derived income (rent rebate, fiscal effects, premiums), including child benefit</td>
<td>mortgage costs (interest + repayments), ground lease, home insurance and resident’s share of rates, minus premiums and allowing for ± fiscal effects</td>
<td>net rent = basic rent + standardized service costs, minus rent rebate + rent adjustment subsidy (ignores heating and water costs)</td>
</tr>
<tr>
<td>Belgium</td>
<td>Budget enquête/ Centrum voor Sociaal Beleid (CSB)/ University van Antwerpen/ 1988/ 3565</td>
<td>/includes income of children still living at home + income from sub-letting</td>
<td>/no data on fixed ancillary costs, subsidies, or fiscal effects</td>
<td>/includes heating and water costs</td>
</tr>
<tr>
<td>Denmark</td>
<td>Forbrugsundersøgelser (Use Survey)/ Danmarks Statistik/ 1981/ 2232</td>
<td>/no difference</td>
<td>/equivalent imputed rent</td>
<td>/no difference</td>
</tr>
<tr>
<td>France</td>
<td>Enquête Logement (Housing Survey)/ Institut National de la Statistique et des Études Économiques/ 1988/ 35500</td>
<td>/gross incomes unavailable as income tax not deducted at source in France</td>
<td>/no data on the effects of premiums and fiscal effects</td>
<td>/no difference</td>
</tr>
<tr>
<td>Great Britain</td>
<td>Family Expenditure Survey (FES)/ Central Statistical Office</td>
<td>/income includes that of all members of the household + housing benefit</td>
<td>/mortgage costs minus fiscal effect</td>
<td>/excludes service costs</td>
</tr>
<tr>
<td>West Germany</td>
<td>Modell Institut Wohnen und Umwelt Darmstadt. Incomes: Einkommens und Verbrauchstichprobe ‘83/ 50000/ Rents: 1%-Wohnungstichprobe Volkszählung ‘87/ 1987-’88/ 19% of all dwellings in 1987</td>
<td>/upward-corrected net incomes taken from 1983</td>
<td>tenant data alone</td>
<td>/only ‘purely’ rented housing, for household incomes below DM 5000 per month</td>
</tr>
<tr>
<td>Sweden</td>
<td>Modell National Swedish Institute of Building Research + Bostads- och hyresundersökningar (BHU) ’85 (Household &amp; Rent Survey)/ 1991/ 12315</td>
<td>/incomes includes all members of the household + object subsidy</td>
<td>/excludes mortgage repayments (maintenance, operating costs and home improvement costs ignored in this chapter)</td>
<td>/includes heating, water, and extended service costs</td>
</tr>
</tbody>
</table>

of the rented sector, with no distinction made between social rented and owner-occupied housing.

Swedish statistics make every effort to approach housing costs from the Swedish policy principle of ‘tenure neutrality’. With this is meant that no single sector of the housing market may be stimulated, by means of government subsidies and fiscal privileges, more than any other. For this reason, account is taken of accompanying costs, including the higher costs borne by owner-occupiers for maintenance and home improvement purposes, while the loan-repayment part of mortgage premiums is ignored (capital accumulation). Moreover, account is taken of the operating costs (costs for kitchen equipment, washing machine, etc) in every housing sector. For the purposes of international comparability, in this study maintenance, repair and operating costs have been ignored. Publications on the Danish budget survey employed the imputed rents of owner-occupied houses rather than the actual cash outlays involved, so these data were omitted from the present study. As was mentioned earlier, no useful data exist on housing expenditure in the owner-occupied sector. French and Belgian surveys did not ask about the fiscal effects of private house ownership, so in the calculation of net housing costs no account could be taken of these effects.

3.3 Tenure

Table 3.2 gives an overview of the composition of the housing stock in the countries studied. The different percentages of private and rented stock go some way towards explaining the differences in the distribution of housing expenditures. It can be held that differences in the composition of a country’s housing stock create fundamentally different starting points for housing policy, of which housing cost policy forms a part. Other causes for differences in the structure of housing costs between different countries include the spatial diversity within and between countries and varieties of political organization and procedure.

The most conspicuous difference has to do with the relative proportions of rented and owner-occupied housing in a given country.

In Great Britain, Belgium and Denmark, owner-occupied housing is relatively abundant; partly as a result of government policy in these countries, there has been a strong rise in the share of owner-occupied properties in these countries.

It is difficult to make an equally straightforward distinction between private and social rented housing in every country. In Sweden, the Netherlands and West Germany in particular, much privately-owned, rented property is built with the help of government subsidies. In the Netherlands and Sweden, rent legislation and housing distribution in the private and social rented sectors have been brought into almost perfect line.

During the 1980s one-fifth of British council housing stock was sold to sitting tenants. This did not only raise the owner-occupier quota in the UK but also marginalized the remaining social rented housing sector.
Table 3.2 Percentage distribution of housing stock by housing tenure in seven Western European countries in the late 1980s

<table>
<thead>
<tr>
<th></th>
<th>Owner-occupied</th>
<th>Private rented housing</th>
<th>Social rented housing</th>
<th>Cooperative housing</th>
<th>Other/unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td>the Netherlands</td>
<td>44</td>
<td>12</td>
<td>44</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Belgium</td>
<td>65</td>
<td>26</td>
<td>6</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Denmark</td>
<td>55</td>
<td>18</td>
<td>17</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>France</td>
<td>54</td>
<td>20</td>
<td>17</td>
<td>-</td>
<td>9</td>
</tr>
<tr>
<td>Great Britain</td>
<td>68</td>
<td>8</td>
<td>24</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>West Germany</td>
<td>42</td>
<td>42</td>
<td>16</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Sweden</td>
<td>43</td>
<td>21</td>
<td>21</td>
<td>15</td>
<td>-</td>
</tr>
</tbody>
</table>

Source: Boelhouwer & Van der Heijden, 1992b, p. 252, Belgian figures from the 1988 CBS survey.

The share of rented social rented housing in the Netherlands is large, which also means that there is a much wider variety of tenant categories in the Netherlands than elsewhere.

3.4 Average income and income distribution

3.4.1 Average income
Table 3.3 provides an overview of the average net disposable incomes found in each sector; these details were found to be largely unavailable for Sweden, West Germany and Denmark.

The average household income of owner-occupiers, and in particular that of mortgage holders, was higher, on average, than that of tenants.

The largest income differences were found between tenants and owner-occupiers in France, and between mortgage holders and council house tenants in the UK. The Netherlands showed a particularly small difference between the incomes of tenants in privately-owned and in publicly-owned property.

Income distribution in the rented sector
To examine more closely the distribution of households by income, as much use as possible has been made of ‘deciles’. A decile is a group comprising ten percent of the total number of households. Household incomes were first ranked and then divided into ten groups of equal size. The averages found in these deciles sometimes differ from those in Table 3.3 as the source data comprised information on both income and housing expenditure.

In 1989, 41.6% of the population of the Netherlands lived in social rented housing. As is also the case in other countries, this proportion rises as income falls. Thanks to the large scale of the supply, the income distribution in this group is less one-sided than in Belgium and the UK, to give two conspicuous examples in which the sector is more strongly marginalized.
Table 3.3 Net monthly disposable incomes found in seven Western European countries, in various years, expressed in Dutch guilders

<table>
<thead>
<tr>
<th>Year</th>
<th>All tenants</th>
<th>Social tenants</th>
<th>Private tenants</th>
<th>All owner-occupiers</th>
<th>Mortgage holders</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belgium 1988</td>
<td>2680</td>
<td>2260</td>
<td>2780</td>
<td>3340</td>
<td>n.a.</td>
<td>3100</td>
</tr>
<tr>
<td>France 1988</td>
<td>3040</td>
<td>2730</td>
<td>3250</td>
<td>4690</td>
<td>n.a.</td>
<td>3480</td>
</tr>
<tr>
<td>the Netherlands 1989</td>
<td>2500</td>
<td>2430</td>
<td>2750</td>
<td>3750</td>
<td>4050</td>
<td>3320</td>
</tr>
<tr>
<td>Great Britain 1988</td>
<td>n.a.</td>
<td>1870</td>
<td>2700</td>
<td>n.a.</td>
<td>4500</td>
<td>3210</td>
</tr>
<tr>
<td>West Germany 1988</td>
<td>2370¹</td>
<td>n.a.</td>
<td>n.a.</td>
<td>3900²</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>Sweden 1987</td>
<td>2470</td>
<td>n.a.</td>
<td>n.a.</td>
<td>3980</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
</tbody>
</table>


¹ Tenants with a monthly income of less than DM 5000.

Figure 3.2 Percentage distribution of the relative share of households living in rented social housing per income class in five Western European countries in the late 1980s

Figure 3.3  Distribution of the relative share (%) of households living in rented private housing per income class in five Western European countries in the late 1980s


The private rented house sector (Figure 3.3) plays a less prominent role in the Netherlands and the UK than it does in countries such as West Germany and Belgium. Belgium’s minimal social rented housing sector for households unwilling or unable to buy a house forms a scarcely realistic alternative, so the Belgian private rented sector remains an important one. In West Germany it is hard to draw a line between social rented and private rented housing; after the Second World War, many private investors built ‘social rented housing’ with the help of government subsidies and tax benefits, buildings which - after a certain number of years had elapsed - revert to private control under the relevant private housing legislation.

Low-income groups are also over-represented in the private rented sector, but the concentration is less marked than in the social rented sector.

**Income distribution in the owner-occupied sector**

Figure 3.4 shows the percentage share of owner-occupiers in the total number of households (the owner-occupancy quota) per income decile in a number of countries. For Denmark, a division into five income classes had to suffice.

In all the countries studied, the proportion of households owning their house rose as the disposable income rose. There is, however, a large spread around the average owner-occupancy quota. In the UK, the quota for the modal income class (5th decile) closely approaches its value in the highest income decile. In Belgium and France, considerable numbers of owner-occupiers can also be found in the lower income deciles.
Table 3.4 shows that in the countries just mentioned the share of owner-occupiers not holding a mortgage is relatively high; these households can be found principally in the lower income groups. These are predominantly older households whose mortgages have been paid off and whose pension levels put them into the lower income deciles.

The table also shows that in the Netherlands most mortgage holders are to be found in the middle and upper income groups. Section 3.6.1, which focuses on housing expenditure in the private home sector, describes the most common types of mortgage.

Table 3.4 Distribution of the share of owner-occupiers without a mortgage expressed as a percentage of all owner-occupiers, per income decile, in four Western European countries, 1988-1989

<table>
<thead>
<tr>
<th>Year</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>the Netherlands 1989</td>
<td>69.1</td>
<td>68.9</td>
<td>51.1</td>
<td>34.1</td>
<td>21.8</td>
<td>17.4</td>
<td>15.1</td>
<td>13.3</td>
<td>9.8</td>
<td>12.2</td>
<td>23.2</td>
</tr>
<tr>
<td>Belgium 1988</td>
<td>90.5</td>
<td>85.7</td>
<td>74.5</td>
<td>65.6</td>
<td>51.2</td>
<td>44.2</td>
<td>32.8</td>
<td>36.5</td>
<td>34.4</td>
<td>35.3</td>
<td>53.0</td>
</tr>
<tr>
<td>France 1988</td>
<td>90.8</td>
<td>84.5</td>
<td>71.3</td>
<td>66.5</td>
<td>54.3</td>
<td>46.7</td>
<td>40.2</td>
<td>33.0</td>
<td>33.7</td>
<td>34.2</td>
<td>51.7</td>
</tr>
<tr>
<td>Great Britain 1988</td>
<td>86.3</td>
<td>83.7</td>
<td>72.2</td>
<td>50.6</td>
<td>36.6</td>
<td>28.6</td>
<td>21.1</td>
<td>21.3</td>
<td>20.6</td>
<td>17.6</td>
<td>36.5</td>
</tr>
</tbody>
</table>


Figure 3.4 Distribution of the relative share (%) of owner-occupiers per income class in six Western European countries, in various years


Note: Denmark's income classes cumulatively comprise 21%, 53%, 76%, 92% and 100% of households.
In the Netherlands, loans are relatively long-term. Moreover, the Netherlands is the only country in which mortgage interest payments may be progressively (and without limit) deducted from household income for income tax purposes, which means that Dutch mortgage holders are less inclined to repay their mortgages early (see Haffner, 1992).

3.5 Housing cost distribution in the rented housing sector

3.5.1 Average housing expenditures

Table 3.5 shows the composition of the average housing costs of tenants in the countries studied. A distinction has hereby been made between social rented housing tenants and private housing tenants.

Table 3.5 Average housing expenditure in the rented house sector in seven Western European countries in 1988, in guilders

<table>
<thead>
<tr>
<th></th>
<th>the Netherlands</th>
<th>Belgium</th>
<th>Denmark</th>
<th>France</th>
<th>Great-Britain</th>
<th>West Germany</th>
<th>Sweden¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALL TENANTS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>gross rent</td>
<td>443</td>
<td>404</td>
<td>-</td>
<td>459</td>
<td>315²</td>
<td>526</td>
<td>-</td>
</tr>
<tr>
<td>individual rent rebate</td>
<td>39</td>
<td>n.a.</td>
<td>-</td>
<td>75</td>
<td>134</td>
<td>39</td>
<td>-</td>
</tr>
<tr>
<td>net rent</td>
<td>404</td>
<td>404</td>
<td>570</td>
<td>384</td>
<td>181</td>
<td>487</td>
<td>-</td>
</tr>
<tr>
<td>net household income</td>
<td>2466</td>
<td>2682</td>
<td>3389</td>
<td>3037³</td>
<td>1942</td>
<td>2931</td>
<td>-</td>
</tr>
<tr>
<td>net rent quota</td>
<td>16.4</td>
<td>15.1</td>
<td>16.8</td>
<td>12.6</td>
<td>9.3</td>
<td>16.6</td>
<td>-</td>
</tr>
<tr>
<td>SOCIAL RENTED HOUSING TENANTS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>gross rent</td>
<td>429</td>
<td>290</td>
<td>-</td>
<td>359</td>
<td>287</td>
<td>-</td>
<td>1009</td>
</tr>
<tr>
<td>individual rent rebate</td>
<td>43</td>
<td>n.a.</td>
<td>-</td>
<td>109</td>
<td>145</td>
<td>-</td>
<td>309</td>
</tr>
<tr>
<td>net rent</td>
<td>386</td>
<td>290</td>
<td>-</td>
<td>250</td>
<td>142</td>
<td>-</td>
<td>700</td>
</tr>
<tr>
<td>net household income</td>
<td>2392</td>
<td>2263</td>
<td>-</td>
<td>2734³</td>
<td>1832</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>net rent quota</td>
<td>16.1</td>
<td>12.8</td>
<td>-</td>
<td>9.2</td>
<td>7.8</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>PRIVATE HOUSING TENANTS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>gross rent</td>
<td>484</td>
<td>430</td>
<td>-</td>
<td>529</td>
<td>431</td>
<td>-</td>
<td>960</td>
</tr>
<tr>
<td>individual rent rebate</td>
<td>22</td>
<td>n.a.</td>
<td>-</td>
<td>51</td>
<td>86</td>
<td>-</td>
<td>221</td>
</tr>
<tr>
<td>net rent</td>
<td>462</td>
<td>430</td>
<td>-</td>
<td>478</td>
<td>345</td>
<td>-</td>
<td>739</td>
</tr>
<tr>
<td>net household income</td>
<td>2707</td>
<td>2776</td>
<td>-</td>
<td>3249³</td>
<td>2409</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>net rent quota</td>
<td>17.1</td>
<td>15.5</td>
<td>-</td>
<td>14.7</td>
<td>14.3</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>


¹ 1991.
² Private sector including furnished property.
³ Exclusive of (retrospective) income taxation.
1988 has been employed for comparison purposes. In three of the seven countries, statistics were available for this year; for the countries where this was not the case, figures from nearby years were adapted according to recorded developments in wages and rent levels (the Netherlands (1989), Denmark (1981) and West Germany (1987)). The Swedish figures were drawn from the most recent statistics, for 1991. It is impossible to compare Sweden with the other countries; statistics on the average incomes of tenants are absent, and the rent figures include figures for energy and water use as well as the extensive service costs usually included in the Scandinavian countries (see Chapter 2). It was, however, possible to make this distinction in the Danish statistics. The advantage of this methodology is that it allows us to create a clear framework of comparison.

3.5.2 Gross rent
It was possible to establish gross rent averages in four of the six countries. The figures for the Netherlands (NLG 443) and France (NLG 459) are quite similar, while gross rents were rather lower than this in Belgium (NLG 404) and higher in West Germany (NLG 526). The UK clearly had the lowest gross rent levels in 1988 (NLG 315). The UK’s relatively low rent level can be partly explained by the rent price fixing system. Until 1990, councils were able to meet housing corporations’ losses from the public purse (‘ring fencing’). Considerable use was made of this option in the past (Menkveld, 1993, p. 62).

Hills (1991, p. 110) expects UK rent levels to double as a result of the withdrawal of this arrangement and the influence of central government on rent price fixing. For the lowest income groups this rise will be completely counterbalanced by a rise in individual rent rebates (‘housing benefit’). As new house building has declined since 1979 and over 1.6 million council houses have been sold, the quality of the stock of rented houses has fallen dramatically. This helps to explain the low gross rent levels in the UK.

In Belgium, individual rent subsidy is automatically included in the rent figures. The landlord sets the net rent per building complex, on the basis of the gross rent and the distribution of the tenants’ declared incomes. The gross rent in Belgium and the Netherlands becomes practically identical when this is taken into consideration and comparable individual rent subsidies are assumed.

3.5.3 Net rent
Gross rent costs are reduced by means of rent subsidies in the Netherlands (NLG 39), France (NLG 75) and West Germany (NLG 39); the figures are averages for all tenants, and the actual subsidy per person will strongly depend on the proportion of tenants actually receiving this subsidy.

Of the six countries considered in this study, the UK has by far the lowest average net rent. The already low gross rent of NLG 315 is reduced by the largest subsidy figure, NLG 134, to a net rent of only NLG 181.

This phenomenon is widely recognized in the literature. In contrast to other Western European countries, the UK’s social services department can take over the entire burden of rent payment during a tenant’s unemployment, with any rent rises automatically
being compensated for by more housing benefit.

3.5.4 The net rent quota
Since most countries have details of their net household incomes, these figures can be combined with the net rent data to yield figures for the net rent quota. This represents simply the distribution of average incomes and average net rents, which takes no account of the way in which the households are distributed over the houses themselves. Another way of determining the average net rent quota of all tenants is to first establish the net rent quota for each household separately, to add all these up and to divide the total by the number of households. The fact that this method leads to different figures for the net rent quota than those found in this study can be illustrated with reference to the example of the Netherlands. According to Table 3.5, the net rent quota in the Netherlands is 16.4%. However, if the quotas of all separate households are added up and the result divided by the number of tenants, the result is 19.7% (reference year 1989). This variant, which takes account of the distribution of households over the housing stock, is the more accurate figure and is the one usually employed in Dutch WBO (Housing Needs Survey) analysis.

The present study was not able to analyze the foreign data bases in this way. It was possible, however, to determine average rent and income figures per tenant group (divided into income deciles, for instance, or into social rented and private housing tenants). The net rent quota was then calculated using the average value of each variable. Where the number of subgroups increased (e.g. income deciles), any difference from the net rent quota otherwise determined becomes smaller.

Since countries having relatively high net rents also have notably higher net incomes than in the Netherlands, there is more agreement between the average net rent quotas in the six countries than between the average net rents; the figure for the Netherlands (16.4%) is closely matched by the figures for Denmark (16.8%) and West Germany (16.6%). Since net household income is slightly higher in Belgium than in the Netherlands, while the net rent in both countries is the same (NLG 404), the net rent quota in Belgium is slightly lower (15.1%). Comparable and stronger effects can be seen in France, where the net rent quota is much lower (12.6%) than in the Netherlands. It should be remembered, however, that the French net incomes are 'before-income tax' figures; in common with several Mediterranean countries, French employers do not deduct income tax at source; employees pay their own income tax retrospectively. A complicated system of income tax exemption regulations mean that about 50% of French households do not have to pay any income tax at all, but the country's highest earners pay a 60% rate of income tax. Unfortunately, almost no French statistics exist on the effects of their tax system on tenants' incomes. The proportion of tenants paying retrospective income tax (given that the difference in income between house purchasers and house tenants is much less than 50%) and the scale of this tax are both unknown. The rent quota is therefore not comparable to the figures found for other countries.

Great Britain shows a remarkably low net rent quota (9.3%), for which the country's relatively high levels of individual rent subsidy ('housing benefit') must be held primarily responsible.
Table 3.5, besides showing rent costs for the entire rented housing sector, also provides some insights into their distribution across the social rented and private housing sectors. In all the countries studied, the net rent quota in the rented private housing sector is higher than that in the rented social housing sector, although this difference is less marked in the Netherlands than it is in the UK, Belgium and France.

The only country in which rent levels in the private housing sector are higher than in the social rented housing sector is Sweden, where the results of negotiations between tenants and landlords in the social rented housing sector are the yardstick for settlements in the private sector. In contrast to Western European countries, Swedish social rented housing policy has led to a situation in which the remaining differences in quality and rent level between the private and social rented housing sectors are very small indeed. As a result, the tenant profiles for each type of housing are also very similar (Hägred, 1993).

The average incomes, as well as the rents, of private housing tenants are higher than those of social rented housing tenants, and once again this difference is least marked in the Netherlands.

### 3.5.5 Distribution of housing expenses in the rented sector by household income

This section will examine the observed distribution on either side of average household expenditures according to various income classes. Once again, deciles are employed. Appendix 7 to this summary provides distribution patterns for all distinguishable categories in the housing expenses scheme, but in this chapter we shall restrict ourselves to the two central concepts: net housing expenditure (Figure 3.5) and net rent quota (Figure 3.6). The absolute values of these variables was discussed in the previous section; here the emphasis will be laid on a comparison between the skewness of distribution to either side of this value. This has been made possible by according the average net rent a value of 100 and calculating the other deciles accordingly. For example, the Netherlands’ entire rented sector average value of NLG 420 signifies 100. The net rent for tenants in the second income decile was NLG 340: this is 81% of the average value \((340/420)*100\% = 81\%)\). This 81% is also the ‘concentration figure’ in Figure 3.5. This figure shows that the higher the income, the higher the net rent level. The figure also indicates that the Netherlands show the weakest relationship between net rent levels and net household income, and therefore the largest skewedness in the distribution of living space. In both the private and the social rented housing sectors, the calculated concentration figures show the least variation and therefore the flattest curve.

The variation is largest in the UK and in Sweden.

Part of the low level of variation in the Netherlands can be explained by the more modest reduction in the basic rent which Dutch rent subsidies bring about. The lowest income groups in rented social housing are subject-subsidized to the tune of a little over 10%, whereas HLM-tenants in France can count on their rents being reduced by a third, and UK council house tenants’ rents are effectively halved by housing benefits. Figure 3.6 shows the variation in households’ net rent quotas, ranked according to income. The West German calculations have made use of Ulbrich (1991).
Figure 3.5 Distribution of net rent about its average value (concentration figures) according to income category in five Western European countries, various years


2. No income deciles are available for the UK, but the values have been calculated for the lowest 25%, the median and the highest 25% of income distribution.

Net rent quotas were calculated for Sweden by assuming that the incomes in the second and ninth decile lay exactly halfway between their respective decile-minimum and decile-maximum; average incomes per decile are not given in the source employed (Turner et al., 1991).

The higher the income, the smaller the proportion of that income is spent on net rent. The highest net rent quotas are to be found in the lowest income deciles, where subject subsidies are also responsible for the largest reduction in the net rent quota. The small degree of distribution in Dutch net rent levels across different income groups means that net rent quotas in that country display a rather wider variation. In both the social rented and the private housing sectors, households with a subminimal income (decile 1) spend more than a third of their net income on net rent. Only in Sweden does the burden of rent seem to be comparably heavy.

In the UK, the net rent quota actually increases with increasing income. This might be because the rent costs of the unemployed are paid for in their entirety by social services. This form of subsidy is not provided by the ministry responsible for social
rented housing, as it is in other countries, but by the ministry responsible for social affairs. Although the housing quotas are kept low by this method, it makes for a yawning poverty trap. It is also a perceived disadvantage of the UK system that any extra income derived from rent rises (which would ordinarily lighten the burden of social rented housing) automatically lead to higher housing benefit costs (borne by social services) and to greater profits for private landlords.

The distribution of the net rent quota in the French social rented housing sector seems to differ little from that in the private sector. However, the first income decile shows a lower net rent quota for social rented housing tenants than does the second decile. This phenomenon cannot be seen in private house tenants, and is caused by the fact that after the renovation of many HLM flats they are 'harmonized' (conventionnées), which enables their tenants to make use of more advantageous subject subsidy regulations.

Figure 3.6 Distribution of net rent quotas about its average value (concentration figures) according to income category in six Western European countries, various years

1 The Netherlands (1989), Belgium, France and the UK (1988), Denmark (1981) and West Germany (1992)
2 No income deciles are available for the UK, but the values have been calculated for the lowest 25%, the median and the highest 25% of income distribution.
3 The Danish income categories cumulatively comprise 21, 53, 76, 92 and 100%, respectively.
3.6 Housing expenses in the owner-occupied sector

It is considerably more difficult to compare the housing expenses of different owner-occupiers in the seven countries under study than those of tenants. For instance, the definition of ‘housing expenses’ does not always include costs such as necessary house maintenance (for more on these differences in definition, see Table 3.1).

Moreover, the cash comparison of housing expenses which this study employs gives rise to certain problems. For a balanced comparison, it is important that owner-occupied housing costs are compared over the longer term, and that account is also taken of the income which the capital put into the house would have generated if it had been invested elsewhere (the ‘opportunity costs’). Together with the fact that financial conditions (such as the type of mortgage and its repayment period, and the fiscal treatment of house-owners by governments) vary considerably between countries, comparisons between these countries is subject to serious shortcomings. Even worse problems arise when relative housing costs in the rented and owner-occupied housing sectors are compared. For instance, expenses are usually high during the first few years of house ownership and fall as the years pass, whereas in the rented sector it is the other way around. For these reasons it is inappropriate to compare expenses in these two sectors on a cash basis.

Another problem is presented by the fact that the share of owner-occupiers not holding a mortgage varies widely between the countries. Naturally, for those whose mortgage and interest repayments have been completed, housing expenses are lower. The proportion of owner-occupiers without a mortgage is relatively low in the Netherlands (23.2%). In Belgium (53%) and France (51.7%), more than half of all house-owners no longer have to meet mortgage costs, and in the UK this figure is 36.5%. These households are to be found predominantly in the lower income categories, and generally represent older households who have paid off their mortgages completely and whose pensions put them into these lower income classes.

Given all these problems, it is impossible to compare the structure of average housing expenses in the owner-occupied sector in the seven countries under study, as was possible for the rented sector (Table 3.5).

In order to obtain some sort of idea of the net housing quota of owner-occupiers, an estimate was made of their net housing expenses in the late 1980s on the basis of information gleaned from a number of budget and housing studies in each country.

Wherever possible, a distinction was drawn between those owner-occupiers with and those without a mortgage. These figures are presented in Table 3.6, together with the tenants’ net rent quotas described in the previous section. Table 3.6 should therefore be seen as merely an indication, and as being considerably less reliable than the data already presented on the rented sector.
Table 3.6 The average estimated net housing costs quotas borne by mortgage-holding owner-occupiers and by all owner-occupiers in the second half of the 1980s, and the net rent quota borne by tenants in 1988, in seven Western European countries (%)

<table>
<thead>
<tr>
<th>Country</th>
<th>Net rent quota</th>
<th>Net housing quota for mortgage holders</th>
<th>Net housing quota for all owner-occupiers</th>
</tr>
</thead>
<tbody>
<tr>
<td>the Netherlands</td>
<td>16.4</td>
<td>13.4</td>
<td>11.6</td>
</tr>
<tr>
<td>Belgium</td>
<td>15.1</td>
<td>18.6</td>
<td>9.0</td>
</tr>
<tr>
<td>Denmark</td>
<td>16.8</td>
<td>-</td>
<td>28.7</td>
</tr>
<tr>
<td>France</td>
<td>12.6</td>
<td>16.0</td>
<td>7.7</td>
</tr>
<tr>
<td>Great Britain</td>
<td>9.3</td>
<td>13.9</td>
<td>-</td>
</tr>
<tr>
<td>West Germany</td>
<td>16.6</td>
<td>-</td>
<td>14.9</td>
</tr>
<tr>
<td>Sweden</td>
<td>24.8</td>
<td>-</td>
<td>30.0</td>
</tr>
</tbody>
</table>

Sources:
Denmark: Budget survey carried out by Danmarks Statistik (1981); imputed rent only.

Table 3.6 shows that the net housing quotas for mortgage-holding owner-occupiers in the Netherlands (13.4%) is relatively low compared with those in Belgium (18.6%) and France (16.0%) and comparable to that in the UK (13.9%).

This data is unavailable for Denmark, West Germany and Sweden, but the quota for all (both mortgage-holding and non-mortgage-holding) owner-occupiers has been estimated. In this category, too, the Netherlands has the lowest quota (11.6%), despite the fact that the Netherlands has a relatively small proportion of non-mortgage holding owner-occupiers (23%). The housing quotas of all owner-occupiers in Sweden (30.0%) and Denmark (28.7%) are definitely high, though comparison with Denmark is complicated by the fact that the figure represents imputed rents calculated in Denmark. The German quota is considerably lower (14.9%), but is still higher than that in the Netherlands.

In contrast to mortgage-holding owner-occupiers, the housing quota for all owner-occupiers taken together is lower in Belgium (9%) and in France (7.7%) than it is in the Netherlands. This can be explained by the relatively high proportion of non-mortgage holding house owners in France (52%) and Belgium (53%).

Table 3.6 also shows the relation between the net housing quota of house-owners and tenants in the seven countries. It can be seen that in most countries this quota is slightly lower for the house-owners, with Sweden and Denmark forming the exceptions. Given that in many countries more than half of all house-owners have finished paying off their mortgage debts, this should not surprise us.
Of the four countries for which mortgage-holding house-owners’ net housing quotas are known, the Netherlands is the only country where this quota is lower for owner-occupiers than it is for tenants.

Naturally, the comparatively low net housing quota borne by Dutch mortgage-holding owner-occupiers requires an explanation. A partial explanation can be found in the study carried out by Haffner (1992) into the financing, subsidy and fiscal treatment of owner-occupiers in their first year of house ownership (Sweden is not included in this study). With the help of average 1990 purchase prices, Haffner calculated the gross financing expenses of house purchase in the first year of ownership (including one-off ancillary costs) for representative purchasers in various income groups and household types (Table 3.7). In this, only the purchase of existing housing stock was considered; for newly built houses, she drew other conclusions.

Haffner’s calculations show that in the first year of house ownership, only in Belgium and France do the gross financing expenses cost less than they do in the Netherlands. This is because the purchase price of houses is lower in these countries and because the proportion of the downpayment is different. The tax advantages of house purchase are nevertheless smaller in Belgium and France than they are in the Netherlands; the gross burden is reduced by an average of 25% after tax, whereas this percentage is 6% to 1% in Belgium and 11% to 7% in France (depending on the number of children, in both countries).

Haffner (1992, p. 117) also notes that it is difficult, on the basis of her calculations, to make unequivocal pronouncements about the position of owner-occupiers in the Netherlands compared to those elsewhere in the EC. She does conclude, however, that since Dutch owner-occupiers profit from unlimited interest deductions, their situation compares favourably in terms of recurring housing expenses.

For owner-occupiers in other countries subject to ordinary taxation, Dutch levels of fiscal advantage can be approached only when West German Bausparen are invested in the financing of a private house or when Belgian buyers derive the most advantage from interest deductions affecting the purchase of newly-built houses. Dutch owner-occupiers also enjoy a comparatively advantageous progression in housing costs, due partly to the fact that the tax-deductability of mortgage interest payments has no time or size limits; comparable deductions in the other countries studied are all limited in one way or another. The one-off transaction costs associated with the purchase of a private house are, however, relatively high in the Netherlands (Haffner, 1992).

3.6.1 Distribution of housing expenses in the owner-occupied housing sector according to household income

Table 3.6 has already made it clear that comparisons between the housing expenses of the countries studied is only actually possible in certain respects, namely:

1. between the Netherlands, Belgium, France and Sweden, with regard to gross housing expenditure and pre-tax expenditure of all owner-occupiers taken together;
Table 3.7  Typical finances surrounding the purchase of an existing house, average purchase price, gross financing expenses in the first year of ownership, and net financing costs after income tax effects, for owner-occupiers with an average income, in six Western European countries, in 1990

<table>
<thead>
<tr>
<th>Mortgage type</th>
<th>Interest type</th>
<th>Interest rate (%)</th>
<th>Term Financing (years)</th>
<th>Purchase price (€)</th>
<th>Gross Financing Expenses (€)</th>
<th>% of GFE after income tax effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>the Netherlands</td>
<td>*savings</td>
<td>5-year</td>
<td>9.2</td>
<td>30</td>
<td>202 000</td>
<td>19 580</td>
</tr>
<tr>
<td>Belgium</td>
<td>annuity</td>
<td>5-year</td>
<td>10.3</td>
<td>20</td>
<td>155 000</td>
<td>13 613</td>
</tr>
<tr>
<td>Denmark</td>
<td>mixed² fixed</td>
<td>11.0</td>
<td>30</td>
<td>30</td>
<td>160 000</td>
<td>33 707</td>
</tr>
<tr>
<td>France</td>
<td>annuity</td>
<td>fixed</td>
<td>10.9</td>
<td>18</td>
<td>157 000</td>
<td>17 286</td>
</tr>
<tr>
<td>Great Britain</td>
<td>*savings</td>
<td>variable</td>
<td>14.4</td>
<td>25</td>
<td>201 000</td>
<td>23 195</td>
</tr>
<tr>
<td>West Germany</td>
<td>annuity</td>
<td>5-year</td>
<td>9.0</td>
<td>25</td>
<td>312 000</td>
<td>25 824</td>
</tr>
</tbody>
</table>


1. Maximum share of the purchase price (including ancillary costs, except financing expenses) which can be mortgaged. For Denmark, this is the max. share of the total purchase price.
2. Depending on the number of children, and in Belgium also on the income tax property withholding tariff.
3. 60% annuity, 40% *linear.

2. between the Netherlands and Sweden, with regard to the net housing expenditure of all owner-occupiers taken together;
3. between the Netherlands, Belgium, and France, with regard to gross housing expenditure and pre-tax expenditure of mortgage holders;
4. between the Netherlands and the UK, with regard to the net housing expenditure of mortgage holders;
5. between the Netherlands, Belgium, and France, with regard to the housing quota (pre-tax) of all owner-occupiers taken together;
6. between the Netherlands and the UK, with regard to the net housing quota (after tax) of mortgage holders.

The distribution is displayed in the same way for the house-owning sector as for the rented sector. Concentration figures are calculated for each income decile in order to show the divergence from the average of each of these deciles. The concentration figures and absolute values can be found in Tables 7 to 11 in Appendix 7.

The comparisons between all owner-occupiers taken together, described in points 1 and 2 above, is shown in Figure 3.7. Figure 3.8 shows a comparison between gross and net housing expenditures of mortgage holders (points 3 and 4 above). The distribution of housing quotas (points 5 and 6 above) is shown in Figure 3.9.
Figure 3.7 Distribution around the average (concentration figures) of the housing expenses of all owner-occupiers taken together, according to income category, in four countries, various years


Figure 3.7 shows that in all countries, monthly gross housing expenses (that is, mortgage repayments) rise strongly with rising income. This differentiation is strongest in France. The central part of the figure includes the effect of the APL subject subsidy regulation; this system has subsidized low-income buyers of newly-built French houses since the late 1970s. In practice the system has helped large numbers of the middle classes. Housing expenses after subject subsidies in upper income households are therefore rather higher, and this has the effect of increasing the differentiation of housing expenditure. It should also be remembered that about half of all French households pay (a retrospective) income tax, while the other half is exempted entirely by reason of low income. When corrected for this fact, differentiation is reduced.

Comparison of the distribution of housing expenditure of all owner-occupiers taken together after fiscal effects turns out to be possible only between the Netherlands and Sweden. The average owner-occupier in the Netherlands pays a smaller net outlay than his counterpart in Sweden (see Table 3.6). However, there is a smaller difference in outlay between low-income and high-income households in the Netherlands. The possibility of deducting mortgage interest payments from taxable income is less advantageous to high-income groups in Sweden than it is in the Netherlands; moreover,
these Swedish equalization-reversing fiscal effects are more than compensated for by income-dependent housing subsidies in that country.

Figure 3.8 shows that the gross housing expenses of mortgage holders are less strongly differentiated than those of all owner-occupiers taken together (Table 3.7). In Belgium and the Netherlands, monthly mortgage outlays begin to increase only above the modal income level (decile 5).

In France, the APL subject subsidy system provides substantial reductions in the housing expenditures of middle-income mortgage holders, so that housing expenditure rises even more strongly towards the higher income brackets.

The claim that the Dutch fiscal system contributes towards the equalization of housing expenses for the different income groups would certainly seem to be borne out by the figures on mortgage holders. Compared to their counterparts in the UK and Sweden, where owner-occupiers enjoy a subject subsidy system and tax-deductibility has been maximized, low-income Dutch mortgage holders have relatively high housing expenses.

Figure 3.8  Distribution around the average (concentration figures) of the housing expenses of all mortgage holders, according to income category, in four countries, various years


1  the Netherlands (1989), Belgium, France and the UK (1988).
2  For the UK, the figures have been given for the lowest 25%, the median and the highest 25% of income distribution, respectively.
Note that the distribution of the cost reductions provided by housing subsidy systems and the automatic tax-deductibility of interest payments in various income brackets cannot be determined from the British statistics.

As the income of the average owner-occupier in the Netherlands is lower than that of his counterpart in France and the UK, his housing quota is higher. Moreover, the Netherlands has a large number of mortgage holders compared with France and Belgium, which means that the average quota of all owner-occupiers taken together is higher. This doubtless accounts for the differences in distribution of the pre-tax relative housing costs of all owner-occupiers taken together (Figure 3.9, left-hand side). For most owner-occupiers in the Netherlands (deciles 4 to 10), this value fluctuates around 15% (the average). In Belgium and France, the pre-tax housing quota rises gradually from 4% to 10%, falling again slightly in the lower income deciles.

The distribution of housing costs as a percentage of income after tax could be compared between Dutch and British mortgage holders (Figure 3.9, right-hand side). On average, Dutch net housing expenditures were NLG 87 per month smaller, but the average net household income per month of British mortgage holders was NLG 501 higher, so the average net housing quota was lower in the UK than in the Netherlands.

**Figure 3.9** Distribution around the average (concentration figures) of the housing quota and net (after-tax) housing quota of mortgage holders, according to income category, in four European countries, various years

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2. No income deciles are available for the UK, but the values have been calculated for the lowest 25%, the median and the highest 25% of income distribution.
The paucity of information which such averages actually provide is evidenced by a closer examination of the distribution around these Dutch and British averages. In the Netherlands, the net housing quota falls with increasing income (the extremely high quotas in the first two income deciles actually apply to very few households).

In the UK the opposite is the case; the housing quota is 3.2% higher in the highest quartile than it is in the lowest. The reasons for this should be sought in the discrepancies in the two countries' fiscal treatment of house-owners and the existence in the UK of subject subsidies for owner-occupiers.

3.7 Social rented housing policy

Table 3.8 shows, in broad terms, the policy standpoints and instruments that have been recently employed in the various countries studied. In the Netherlands, governmental policy up to the end of the 1980s has been partly directed towards the alleviation of a housing shortage, the result of relatively high growth in population and household numbers. Building production is relatively high and the housing stock relatively young. In cash terms, most money is still spent on house-linked subsidies (object subsidies), as is also the case in Sweden. The core issues in the Nota Volkshuisvesting in de Jaren Negentig have also characterized the other countries’ approach to housing redistribution and the strengthening of housing market forces. The dismantling of the object subsidy system and the rise in subject subsidy expenditure (in the form of individualized rent rebates) are the result. In Denmark and the UK, by the second half of the 1980s subject subsidy expenditure had already outgrown object subsidy costs. In the Netherlands, continuing governmental investment in new housing and a growing number of rent rebate applications have produced a rise in social rented housing expenditure, while in other countries object subsidies have been rapidly dismantled, leading to a standstill, or even a decrease, in this expenditure. In France and West Germany, the government began, in the early 1990s, to become more involved, since - as is also the case in Denmark and in the UK - the quantitative and qualitative housing shortage has become more pressing.
Table 3.8  General trends in social rented housing policy and its financing between 1985-1990, and direct governmental expenditures in 1988 (expressed as a percentage of Gross National Product) in seven Western European countries

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* To indicate the broad developments in social rented housing policy since 1945, four stages of this development have been delineated:

I  Strong governmental involvement, whose main aim is the alleviation of housing shortages.

II  Concern for housing quality.

III  Concern for housing distribution issues and specific target groups, and the withdrawal of government to make way for market forces.

IV With the renewed rise of quantitative and/or qualitative housing shortages, governments in some countries (France and West Germany) begin to concern themselves once more.

¹ Very recent policy shift.

² Object subsidies as a percentage of the GNP in England, subject subsidies and tax advantages as a percentage of GNP in Great Britain (England, Scotland, and Wales, excluding Northern Ireland).

³ Combined expenditure of the federal government and federal states.
4

SUMMARY AND CONCLUSIONS

4.1 Introduction

This study has principally examined the background to, and the usefulness of, macro and micro housing expenditure quotas in the following seven European countries: the Netherlands, Belgium, Denmark, France, Great Britain, West Germany and Sweden. We described the relative shortcomings of the use of the macro housing quota as a way of comparing between the housing expenditures of households at a given moment in time. We also looked briefly at possible ways of dealing with these shortcomings, and the consequences of these techniques on the size of the housing quota. We then analysed the results of a study on micro housing expenditure quotas.

4.2 The macro housing quota

On the basis of the analyses set out in Chapter 2, we come to the conclusion that the information provided by the National Accounts is of very limited usefulness in any comparative appraisal of the relative size of the housing expenditures of individual households in different countries. The National Accounts provide insight only into the differences between countries in the price and volume of housing consumption at macro level. Serious problems arise in these comparisons, however, if a link is drawn between these outlays and 'total household expenditures' in order to say something about the relative size of housing expenditure. This assertion is borne out by the following five important obstacles:
- different countries employ different definitions of the quota;
- it is impossible to divide consumption figures into figures for the owner-occupied and rented sectors;
- different countries calculate the quota in different ways;
- it is impossible to correct for differences in housing quality;
- the National Accounts' methodology gives rise to problems;
- the National Accounts record housing subsidies in a particular way.

With regard to the differences in quota definitions, the problem was encountered that
the concept of ‘housing consumption’ was operationalized in different ways in different countries.
Not only the components, but also the methods used to calculate rent and imputed rent vary from country to country. The attribution of imputed rent to owner-occupied houses proved to be a serious problem.
A third disadvantage of using the National Accounts is the indivisibility of expenditures in the rented and owner-occupied sectors. No distinction can be made between housing consumption in the rented sector and that in the owner-occupied sector. A distinction can, however, be made between housing and energy consumption; in this case, one can no longer speak of a macro housing quota, but of a rent(able value) quota.
Another indeterminacy is caused by the fact that no distinctions can be made between houses of different quality, while different countries can display considerable differences on this respect. No reliable statistics exist which provide insight into the quality of the housing stock in the countries studied.
Besides these four conceptual and analytical problems, the use of the macro housing quota to make comparisons is also obstructed by the National Accounts’ own methodology. For instance, apparent between-country differences in private family consumption levels are partly the result of the way in which the consumption of government-subsidized goods and services is recorded. In particular, the way in which each separate country’s social security system is implemented determines differences in the size of total family consumption (the denominator of the macro housing quota).
Finally, there is a problem to do with the particular way in which the National Accounts record housing subsidies: cost price-reducing object subsidies are recorded as ‘government transfers to third parties’, whose chief effect is the lowering of the cost of housing. Subject subsidies, however, such as individual rent rebates, are held to be ‘income transfers’ from government to family households; the effect of this is that the relative proportion of family consumption spent on housing increases while the price of the subsidized consumption good - the house - remains the same. The consequence of this approach is that any shift from object to subject subsidies can have profound effects on the housing quota in a country, even if the absolute government expenditure figures on housing subsidies remain the same.

In contrast to absolute comparisons between countries, comparisons of households’ housing and energy consumption patterns over time are much less problematic. Over a period of time, the aberrations we have described will play no role, as long as their effect remains unchanged.
This, too, should be approached with some caution. Our analysis of the situation between 1975 and 1993 clearly demonstrated that the Netherlands had occupied a rather singular position; no other country showed such a steep rise in macro rent(able value) quota, one which gave the Netherlands an annual quota growth rate of 3.2% between 1975 and 1990. The second highest growth rate was shown by Sweden and France, with an annual average rise of 2.7% and 2.6% respectively, this growth in the other countries is at most 2.1%. During these years the Netherlands was marked by a relatively high rate of housing construction, linked to the country’s relatively small
housing stock, rapid population growth, and an increased proportion of smaller households. During the 1980s, housing consumption fell in relative terms because of a decrease in housing production; in the Netherlands and France, housing production continued to grow.

4.3 The micro housing quota

In order to obtain some sort of insight into the housing expenditures of individual households in the seven countries studied, Chapter 3 was devoted to a comparative analysis of the cash expenditures and net incomes of different households. These comparisons were supported by data drawn from national housing needs studies, population and housing censuses, and budget studies.

This analysis showed that in 1988, three countries had fairly comparable net rent quotas: Denmark (16.8%), West Germany (16.6%) and the Netherlands (16.4%). Since average household income is slightly higher in Belgium than in the Netherlands, and the net rent in both countries is the same at NLG 404, the Belgian net rent quota was also slightly lower (15.1%). The French net rent quota (12.6%) is considerably lower than in the other countries, but it should be remembered that French net income figures are given exclusive of any income tax; this makes comparison between French and other net rent quotas impossible.

The net rent quota in the UK (9.3%) was particularly low, a fact for which the country’s relatively high levels of individual rent subsidy are largely responsible. Tenants in the severely marginalized council house sector receive this subsidy as ‘housing benefit’.

It is much more difficult to compare the housing expenses of owner-occupiers than those of tenants in the seven countries studied, and we were able to provide only estimates of house-owners’ net housing quotas in these countries.

The net housing quota of mortgage-holding owner-occupiers was low in the Netherlands (13.4%) compared to Belgium (18.6%) and France (16.0%), in comparison with the UK (13.9%).

These figures were not available for Denmark, West Germany and Sweden. However, it was possible to estimate the housing quota of all owner-occupiers taken together. Once again, this is lowest in the Netherlands (11.6%), despite the fact that the proportion of owner-occupiers in the Netherlands not holding a mortgage (23%) is relatively low. The housing quota of all owner-occupiers taken together is highest in Sweden (30.0%) and Denmark (28.7%), although the comparison with Denmark is complicated by the fact that the figures hinge on imputed rent calculations made by the Danes themselves. The West German housing quota in this group is quite low (14.9%).

In contrast to mortgage-repaying house-owners, the housing quota for all owner-occupiers taken together is lower in Belgium (9%) and France (7.7%) than it is in the Netherlands (11.6%). This can be explained by the relatively large proportion of paid-up house-owners in Belgium (53%) and France (52%).
When we compare the net housing quota of all owner-occupiers in a country with that of its tenants, in most countries the house-owners' quota is slightly the lower of the two (the exceptions to this are Sweden and Denmark). Given that in many countries more than half of all house-owners have finished paying off their mortgages, this finding is less surprising than it may seem.

Of the four countries for which the mortgage-holding house-owners' housing quota is known, only in the Netherlands do owner-occupiers have a lower quota than tenants.

4.4 Conclusions

Given the limitations attached to the use of the macro housing quotas based on the National Accounts, we conclude that it is precarious to compare the size of macro housing quotas between countries with the intention of delineating the net housing expenditures of individual households within these countries. For this reason such comparisons of macro housing quota size are problematic and to be discouraged. Some of these problems would be resolved, however, if the OESO or Eurostat were to draw a distinction in their work between the imputed rent of owner-occupied homes and the rent levels in rented ones. This information is indeed available, at the various national statistical bureaus; in 1992, this distinction was made for the first time in the National Accounts drawn up by the Netherlands. Nevertheless, serious comparison problems remain, especially with regard to the owner-occupied sector.

The use of national survey data offers substantially more possibilities for making international comparisons in the housing expenditures of individual households, and comprehensive random sample surveys are available in many countries. One important difficulty, however, is that different countries frequently employ very different definitions. The present study represents a first attempt to resolve this problem, an attempt which has also recognized the important fact that any adaptation of this information ought to be based on existing reports of these various national studies. In this respect, considerable improvements would be achieved if research representatives from these various countries were to come to clear agreements beforehand on the best way to approach the adapted computation of existing basic research material in each country. An abiding problem here is that many of these surveys are carried out at intervals of more than one year; this means that developments cannot be followed yearly but only periodically.

Since discussions and cooperation between European countries on matters of social rented housing policy have clearly increased in recent years, the time would seem to be ripe for the improved harmonization of national statistics. An appropriate starting point would be the annual statistical review published by the European Commission, the ‘Statistics on Housing in the European Community’.
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