



## *Handbook standard budgets*

*on the design, construction and application of  
standard budgets*

# *Handbook standard budgets*

*on the design, construction and application of  
standard budgets*

## *Handbook standard budgets*

*on the design, construction and application of  
standard budgets*

### Statement EC

the project Standard Budgets has received funding by the European Community Program for Employment and Social Solidarity – Progress (2007-2013).

The sole responsibility lies within the author. The Commission is not responsible for any use that may be made of the information contained herein.

## Content

<b>CONTENT</b> .....	<b>4</b>
<b>NIBUD</b> .....	<b>6</b>
<b>CHAPTER 1 INTRODUCTION</b> .....	<b>7</b>
1.1 WHAT ARE STANDARD BUDGETS USED FOR? .....	7
1.2 HOW ARE STANDARD BUDGETS CONSTRUCTED? .....	8
1.3 HOW ARE STANDARD BUDGETS DISSEMINATED? .....	8
<b>CHAPTER 2 THE DESIGN OF STANDARD BUDGETS</b> .....	<b>10</b>
2.1 DEFINITION .....	10
2.2 STARTING POINT: EXAMPLES FOR CONSUMERS .....	12
2.3 POLITICAL IMPLICATIONS .....	15
2.4 STANDARD BUDGETS FOR HIGHER INCOME LEVELS.....	16
2.5 BALANCING THE BUDGET .....	18
2.6 CLASSIFICATION OF THE EXPENDITURES .....	20
2.7 PRICING .....	22
2.8 GROUPING THE HOUSEHOLDS.....	22
2.9 LOCAL AND REGIONAL STANDARD BUDGETS .....	24
2. 10 UPDATING OF THE STANDARD BUDGETS .....	25
<b>CHAPTER 3 THE CONTRUCTION OF STANDARD BUDGETS</b> .....	<b>26</b>
3.1 SPENDING CATEGORIES.....	26
3.2 COST-BEARERS .....	27
3.3 THE ROLE OF INCOME .....	27
3.4 GROSS OR NET INCOME? .....	28
3.5 UNIVARIATE ANALYSES .....	28
3.6 MULTIVARIATE ANALYSES .....	29
3.7 EXPERIENCE OF COUNSELORS AND EXPERTS .....	31
3.8 PRICES.....	32
<b>CHAPTER 4 THE APPLICATION OF STANDARD BUDGETS</b> .....	<b>33</b>
4.1 INFORMATION .....	33
4.2 PURCHASING POWER CALCULATIONS.....	34
4.3 POVERTY LINES .....	35

4.4 CREDIT SCORES, RENT NORMS .....	36
4.5 LIFE TIME EXPENDITURE PATTERNS / SIMULATING THE FUTURE .....	38
4.6 COMMERCIALIZATION .....	39
<b>ANNEX 1 THE EUROSTAT HOUSEHOLD EXPENDITURE CLASSIFICATION IN 4 DIGITS.....</b>	<b>40</b>
<b>ANNEX 2: THE EXTENDED NIBUD CLASSIFICATION .....</b>	<b>44</b>
<b>ANNEX 3: DISTRIBUTION CODES FOR THE CALCULATION OF THE COSTS OF CHILDREN. ....</b>	<b>46</b>
<b>ANNEX 4: LOAN-TO-INCOME RATIOS FOR MORTGAGES 2008 .....</b>	<b>48</b>
<b>ANNEX 5: SHORT OVERVIEW OF THE COST-BEARERS OF NIBUD .</b>	<b>51</b>

## Nibud

Nibud (Nationaal Instituut voor Budgetvoorlichting) is an independent foundation from the Netherlands, financed by the national government and the private financial sector (banks, insurance companies) and the revenues of its products. Its goal is to promote a rational planning of the family finances, because this is considered to be an important part of the family welfare.

Nibud pursues this goal by offering advice, information and education both to the general public directly and through their financial advisers indirectly. The latter, who are in this respect 'intermediaries' for Nibud, include public servants, teachers and all consultants in the fields of mortgage, insurance, saving and loaning.

The general public is reached through the mass media by means of free publicity and through Nibud booklets on a range of family budget subjects. The 'intermediaries' are supported by means of an annual Budget Handbook (including a large number of reference budgets) and software. Furthermore, Nibud offers instruction facilities for these professionals.

Special attention is given to the stimulation and supporting of budget education in schools, among other things by developing suitable software. Also Nibud is the main partner in a large scale bi-annual survey among youngsters.

Nibud is not a consumers' organization. Its object is not how people spend their money or what they buy, nor their legal position as consumers. The object is the planning of their income and expenditure, and how to use the tools of financial management (such as estimating and book-keeping, but also loaning, saving, insuring) to keep them in balance. And, of course, information on costs, subventions, taxes, benefits, allowances. Nibud was founded in 1980. The office is based in Utrecht and has a staff of twenty.

## CHAPTER 1 INTRODUCTION

Standard budgets are expenditure patterns for different types of households to live on a designated level of well-being. Given the household composition, the disposable income and some other characteristics (like housing situation, possession of a car), an expenditure pattern is given that suits the situation of the individual household.

### 1.1 What are standard budgets used for?

Standard budgets can be used for a variety of aims. For these different aims, one can use different forms of standard budgets.

#### *Poverty measurement*

Standard budgets have widely been used for poverty measurement: a minimum basket of goods and services is set up for different household types. A family with an income below this level of a certain standard budget is considered poor. The Dutch Social and Cultural Planning Bureau (SCP) is using a standard budget as their base for poverty measurement.

But standard budgets can also be used in quite another way, namely as a tool for budget information and debt counseling. Nibud has an experience of more than 25 years in using them in different areas. The most important issues are the following:

#### *Budget information, debt counseling*

Households that cannot make ends meet, can be helped by presenting a standard budget to them for their situation. They can compare their own expenditures to the standard budget, and they can get ideas on what expenditure groups spending can (or should) be cut. With that, problems of over indebtedness may be tackled. Not only the individual household, but also debt advisers can make use of these standard budgets. Households can also simulate what might happen to their spending when their circumstances change. What does a child cost? Does that loan fit in my budget? What happens if I move from one place to another?

On the Nibud website one can calculate a standard budget for one's own household:

<https://service.nibud.nl/pba/ad.aspx>.

#### *Credit scores*

Having standard budgets, it is possible to calculate what a certain household can borrow (loan to income-ratios). Nibud has developed a methodology based on standard budgets that can indicate whether a loan can be repaid by a household. Nibud at the moment calculates the loan-to-income ratios for mortgages in the Netherlands. These ratios are included in the Code of Conduct of the Dutch mortgage suppliers. Nibud is in discussion with the financial sector to extend this to other forms of credit. Also housing corporations can check the standard budgets in their rent-policy.

### *Purchasing power calculations*

With standard budgets it is possible to trace differences in income and expenditures of a certain type of household due to (changes in) policies. Standard budgets can make visible which household groups are faced with problems making ends meet. They can also be used to show the poverty trap, in which case households are worse off when working than with a social benefit. Nibud advises local authorities in their policy for social assistance. The Dutch parliament decided that Nibud should also calculate poverty-trap effects for households for all new proposals for law that effects budgets of households. Linked to the Nibud-standard budgets, the Central Bureau of Statistics of the Netherlands is planning to develop a personal inflation-meter, based on national price indexes and expenditures of one's individual household.

For special interest groups, more specific standard budgets can be made. Like for elderly, living in an institutional household or for persons with a specific disease or handicap. The interest groups make visible to their members how they can make ends meet. They can also make visible to national authorities how the financial situation of their members actually is. And whether new regulations influence that financial situation.

Standard budgets are a reference for households spending patterns, never a prescription how an individual household should spend its money. Personal circumstances and the real life experiences of low income households should always be taken into account.

## 1.2 How are standard budgets constructed?

Standard budgets can be based on empirical data (e.g. budget surveys) or they can be constructed by budget experts. Standard budgets based on empirical data fit to "reality", but often show deficits for households with a low income. These standard budgets are thus not quite useful for budget information and debt advice (where balanced budgets are needed). On the other hand, constructed budgets by experts may be criticized because of their subjective nature.

That is why a detailed and transparent procedure is needed to take the advantages of both approaches, while minimizing their disadvantages.

Standard budgets can easily be made by constructing an expenditure pattern for households with a minimum income, based on experience of for example debt counselors. More sophisticated standard budgets, as developed and used in the Netherlands are usually built in a modular way. They combine data from a variety of sources, including household-surveys and by using econometric techniques.

## 1.3 How are standard budgets disseminated?

The easiest way of disseminating standard budgets is with the help of software, where the individual situation of a household can be entered. Software to make standard budgets can be used in a wide range of applications: electronic cashbooks and personal



finance software. But also the financial sector can use standard budgets to help clients in their decision to buy certain financial products as loans, mortgages, renting a house and insurances.

But of course, it is also possible to make tables for specific households.

## CHAPTER 2 THE DESIGN OF STANDARD BUDGETS

### 2.1 Definition

Standard budgets are a list of goods and services that a family of a specific size and composition need to live at a designated level of well being, together with the estimated monthly or annual costs of these goods and services<sup>1</sup>. It is also possible that standard budgets are not related to a specified type of family, but to a specified social class or occupational group. Important in the definition is that a standard budget is related to a list of goods and services (a basket) needed to live at a certain level of well being. In other words, a standard budget is an overview, mostly constructed by specialists, showing what should be needed at a certain level of well being. This means that the real expenses of a certain household are not considered as standard budgets, nor the averages of household expenditure surveys made by, for example, a national bureau of statistics. As we shall see in chapter 3, the results of expenditure surveys can play an important role in the construction of standard budgets, for example as reference figures.

#### Well-being

There are several points in the definition that deserve more explanation. To begin with, the definition deals with a certain level of well being. In most applications a kind of minimum level of living is used. Nibud has standard budgets related to the minimum income level, others are speaking of basic needs or modest but adequate. Nibud also has 'standard budgets' for higher levels of income, serving as a reference for those types of families. They are for example used for the construction of credit scores.

#### Lists

Another issue in the definition is that there is a list of goods and services needed to live on a designated level of well being. When a standard budget is made as a 'minimum requirement', a list of all goods and services that are considered as necessary at the minimum level, must be made. The judgment about what is in- or excluded in that list or basket is highly subjective. Lists must be made about the number of spoons, blankets, shoes and so on. Often, these lists are made by 'experts', for example professionals working in the field of family counseling.

After the list has been made, the items must be priced to get the monthly costs, defined as the price divided by the life time in months. The expected life time is also a highly subjective variable. For most goods, the exact life time is difficult to estimate. Moreover, the life time of a good and the price are correlated: the higher the quality, the longer the good can be used, but the higher the price. May be, an expensive item is cheaper

---

<sup>1</sup> Gordon M. Fisher, An overview of recent work on standard budgets in the United States and other Anglophone countries, US department of Health and Human Services, 2007, page 1.

during the longer lifetime on a monthly basis, but not affordable for a household with a low income.

### Three types

Fisher<sup>2</sup> distinguishes three types of standard budgets.

- First the *detailed budget approach*. In these standard budgets all the items are described in detail. It is obvious that developing these budgets requires a lot of investigation and hence manpower.
- In the *categorical approach*, expenditure amounts are only specified for a number of consumption categories. They show the outcome of the detailed budget approach, but without the detailed investigation. They are based on experiences of budget counselors, for example.
- The third type is based on *average consumers expenditure*. The results of household expenditure surveys may serve as source for this type of standard budgets. A disadvantage is that actual spending may be inadequate for a certain (minimum) level of well being due to resource constraints. In this paper we will describe and use these three types of standard budgets and explain how they are interrelated.

### Advantages and disadvantages

The use of standard budgets has advantages and disadvantages<sup>3</sup>. The first point of criticism is that standard budgets are neither objective nor scientific because there are always a lot of arbitrary judgments in developing them.

Furthermore, the budgets may often reflect the ideas of experts and not those of the people involved.

On the other side, standard budgets can also have their advantages.

- First its transparency, certainly when the expenditures are described in detail. Number of items, price and life time are given and everybody can give its own judgment.
- Second, standard budgets are flexible: it is easy to take out or to include a specific item or to change assumptions when the world around us changes.
- Third, the standard budgets reflect the ideas of the makers of it, mostly a group of experts. This may be seen as a disadvantage, because consumers may have other preferences than the experts. Another possibility is to ask (a group of) consumers to reach consensus about the content of the standard budget in so called consensus groups. If consensus can be reached and the outcome is recognized by large parts of the population and by policy-makers, it can play an important role in society. It is possible to have only members of the target group to participate in the decision process, but also mixed groups can be formed to discuss the items.

---

<sup>2</sup> Fisher, o.c. page 3.

<sup>3</sup> See for example Fisher, o.c. page 3 and 4.

- Fourth, standard budgets (must) reflect the relationships that exist between actual household spending and behavioral patterns. For example, nutritionists can calculate the (minimum) nutritional requirements for different persons as children, men, women et cetera. These requirements could be fulfilled in a very cheap way by making a diet of some cheap ingredients, but in reality people will have their own food consumption patterns. In other words, the diets used in standard budgets must reflect the food consumption behavior of the target group. This of course holds for all the other expenditure items. The advantage of such an approach is that consumers and policy makers recognize the standard budgets as real what augments their credibility and applications.

It depends on the use of the standard budgets, whether the (dis)advantages are real and to what extent. If used for consumers budget information, the advantage of transparency by the details of the basket can be a disadvantage because of its redundancy of details. A categorical budget in for example 15 to 20 expenditure items will be much better for that goal.

### **Reading guide**

In the remainder of this chapter we will discuss several aspects related to the design of standard budgets. The following aspects will be discussed:

- the starting point of making standard budgets (examples for consumer)
- standard budgets for higher incomes
- the question whether standard budgets must be balanced
- grouping of the expenditures
- pricing
- grouping of the households,
- the need for regional or local standard budgets
- the updating of the standard budgets.

## **2.2 Starting point: examples for consumers**

From the beginning of his existence, Nibud as a budget information institute used 'examples of spending-patterns' for different types of households with a minimum income, and they still form an important instrument in the budget information. The examples are sent to people that can't make ends meet. Nowadays, people can make a budget plan for their own situation on internet, using a standard budget as a reference. Often, these people do not have a good idea how they could spend their income and a standard budget for their type of household is in many cases something to hold on. Of course, there can be more problems why people can't make ends meet, but a standard budget is a good first instrument. The minimal standard budget is sent to the consumer together with an explanation on the construction and interpretation of it. An example of a minimal standard budget is given in table 1.

TABLE 1: A Nibud minimal standard budget for a couple with children.

Amounts in euro's per month	couple 1 child 8 years old	couple 2 children 6 and 14 years old	couple 3 children 10, 12 and 14 years old
<b>January 2008</b>			
<b>INCOME</b>			
Minimum income	1201	1201	1201
Holidays allowance	59	59	59
Child allowance I	83	83	83
Child allowance II	77	179	273
Educational subsidy	0	49	49
Health insurance subsidy	123	123	123
Tax reduction health	11	11	11
<b>TOTAAL INKOMSTEN</b>	<b>1554</b>	<b>1705</b>	<b>1799</b>
<b>EXPENDITURES</b>			
Rent	203	203	203
Gas and other fuels	74	74	74
Electricity	51	62	69
Water	17	21	22
Local taxes	* (45)	* (45)	* (45)
Telephone, cable and internet	46	46	46
Insurances*	249	249	249
School- and study costs	8	55	63
Subscription a.s.o.	*	*	*
Transport	*	*	*
<b>FIXED COSTS</b>	<b>648</b>	<b>710</b>	<b>726</b>
Clothing and footwear	132	160	185
Furniture, equipment, garden a.s.o.	108	120	129
Health	39	43	47
Hobby	*	*	*
Going out	*	*	*
Holidays and weekends	*	*	*
<b>RESERVATION EXPENDITURES</b>	<b>279</b>	<b>323</b>	<b>361</b>
Food and snacks	341	398	515
Smoking	*	*	*
Cleaning materials	13	15	18
Personal care	48	67	86
Housekeeper	*	*	*
Pets	*	*	*

<b>Diverse (stamps, flowers)</b>	<b>23</b>	<b>26</b>	<b>28</b>
<b>Gifts</b>	*	*	*
<b>Local transport, bike</b>	<b>33</b>	<b>45</b>	<b>57</b>
<b>HOUSEHOLD MONEY</b>	<b>458</b>	<b>551</b>	<b>704</b>
<b>POCKET MONEY</b>	*	*	*
<b>For the items marked with an *</b>	<b>170</b>	<b>121</b>	<b>4</b>
<b>TOTAL INCOME/EXPENDITURES</b>	<b>1554</b>	<b>1705</b>	<b>1799</b>

Source: Nibud, Budgethandboek 2008, Utrecht, 2008, page 176.

As can be seen, total income is not only the minimum income level of social welfare, but also consists of all the other income components a household with a minimum income has, like child allowance and tax allowance in the Netherlands. Individual households living on the social minimum level can have a higher income for example because of extra tax reduction, but never a lower income.

In the expenditure pattern, only the inevitable expenses for all households of that specific composition are given, not the so called free expenditures. These inevitable expenses, also called the 'basic basket', guarantee a minimum level of well being for that type of household, given the current social and economic conditions in the Netherlands. The other expenditures that are not included in the basic basket are denoted by an asterisk (\*) like hobbies, transport and so on. These expenditures are either free, or individually determined so that a minimum is difficult to be established. The expenditures in the basic basket are inevitable for each household apart from exceptions, like households that grow a lot of their own food. The figures of the expenditures are all based on newly bought items and shopping in reasonable cheap shops, but not the lowest with the lowest prices. Households do not have to buy second hand items. Nor they are depending on receiving free items from friends or family. See also the paragraph 'pricing' below and chapter 3.

The advantage of the approach with a basic basket is that in most cases after buying the basic basket there is often a certain amount for free spending left, either for the expenditures with an \* or for higher expenditures on the basic basket. Note that a free amount was not the goal of these specification. The components of the basket are chosen without looking at the actual income.

In the few exceptions that the basic basket costs more than the minimum income (for example large households or youngsters) the standard budgets were published with a negative balance.

Total disposable income is the starting point for the expenditures. Figures for expenses as food, furniture, energy and so on used to be based on the experience of budget

counselors. Nowadays, the amounts are mostly based on detailed descriptions of baskets.

These standard budgets, where income is the starting point for the expenses, are used for budget information purposes only. They were not used as an instrument for poverty measurement. In the communication, the figures were never communicated as 'minimum figures', but as one example how to spend a minimum income.

## 2.3 Political implications

The expense data in the standard budgets are, as mentioned before, sufficient to live on a minimum level of well being for most households that do not have (individually) extra costs, given the current social and economic conditions in the Netherlands. The standard budgets could thus be used and developed further without the sensitivities or tensions that can be caused by measuring poverty. Later on, these standard budgets were also used as input for a poverty indicator, though not by Nibud. See also chapter 4.

Because of their transparency, the standard budgets were eagerly used by other parties to claim proof of their opinions. Some politicians could argue that the minimum income level was enough (there are hardly deficits), others argued that the minimum level is not enough (see what you can't do with such a budget).

Politicians, interest groups, the press and individual citizen groups always have arguments to criticize the budgets because of its transparency. Often, this criticism is focused on details that hardly affects the total budget, but it can cast doubt on the designers of the budget.

That is why it is very important that the making of a standard budget is done by independent and neutral organizations.

Nibud has always pointed at the main goal of the standard budgets (information for the public). It is up to the other parties to draw conclusions from these budgets that would apply to larger groups in society. Nibud can of course advice how that can be done and warns if it is not done in a proper way.

Nibud's answer on the question whether the social minimum is enough to make ends meet is as follows. If we look at these standard budgets, we see a positive result. That means that it is possible to make ends meet if:

- you ask for all the income support you are entitled to; and if
- you can manage your money very, very well; and if
- you do not have large extra personally inevitable costs

Of course, it is not easy to meet all these three conditions for someone living on a minimum income.

The above described Nibud standard budgets for information purposes have the net income as a starting point. Standard budgets that are principally used as poverty indicators, must have the expenditures as point of departure. A basket of goods and services that are thought necessary for a certain level of well being is defined and the total expenditures per year or month are calculated. Households that do not have an income equal or higher than the total costs of the defined basket are considered poor. This use of standard budgets is much more politically sensitive than the use for budget information only.

As described above there are standard budgets that take the income as starting point (mainly for information purposes) and that take the expenditures as point of departure (mainly for poverty measurement purposes). Nibud combines the two approaches by taking the income as starting point, and guaranteeing a certain (minimum) level of living. As Nibud uses the standard budgets for budget information, it is obvious that a balanced budget is what suits the needs of households: they want a standard budget to compare their own expenditures with, and to plan a balanced budget for their own. See below and chapter 3 how balanced standard budgets are constructed by Nibud.

## 2.4 Standard budgets for higher income levels

Once the standard budgets described above for households with a minimum income were used by Nibud, the call for standard budgets for household with higher income levels emerged. Households with higher incomes also face problems with their spending and therefore reference material had to be made. Like for the standard budgets for a minimum income level, the goal was to have balanced standard budgets for different types of households with higher income levels. These standard budgets are used as reference for making one's own budget: if people don't know how much they spend on a certain item, these reference data can give them a point of orientation. It also gives them an idea on which items they spend relatively more or less than similar households. That is important information to cut spendings when making a balanced budget for their own household.

Because higher incomes generate an endless number of standard budgets, Nibud decided to make a computer program to generate standard budgets in a flexible way. The program was designed in such a way that a standard budget could be made for all types of households, and for all incomes above the minimum level. The software for the household expenses, together with calculations on the income side (taxes and subsidies) made it possible to make a program that covered a complete income and expenses scheme of households that could be used by intermediates like debt counselors. Not only standard budgets can be calculated, but also rights on national subsidies and tax deductions. Tables with standard budgets for higher incomes are published yearly in the Nibud Budgethandboek. See table 2 for an example.



**Table 2: Standard budgets for households with an income up to € 5.000,- per month.**

<b>Composition of the household:</b>		<b>House:</b>							
<b>2 adults</b>		<b>Rented house, average rent</b>							
<b>1 child 1 - 12 year</b>		<b>Town house</b>							
<b>1 child 13 - 17 year, secondary school</b>		<b>Central heating</b>							
		<b>5 rooms</b>							
<b>TOTAL INCOME</b>		<b>2005</b>	<b>2250</b>	<b>2500</b>	<b>3000</b>	<b>3500</b>	<b>4000</b>	<b>4500</b>	<b>5000</b>
<b>TOTAL EXPENDITURE</b>	<b>1877</b>	<b>2005</b>	<b>2250</b>	<b>2500</b>	<b>2894</b>	<b>3122</b>	<b>3348</b>	<b>3578</b>	<b>3803</b>
Rent	366	375	384	403	420	420	420	420	420
Gas and other fuels	74	76	78	80	82	82	82	82	82
Electricity	62	64	66	68	69	69	69	69	69
Water	21	22	23	23	24	24	24	24	24
Local taxes	45	46	49	50	51	51	51	51	51
Telephone, cable and internet	46	55	72	83	95	97	99	101	103
Insurances*	249	249	249	249	249	249	249	249	249
School- and study costs	55	55	55	55	55	55	55	55	55
Subscription a.s.o.	25	40	66	90	121	135	149	164	178
Transport	45	69	120	172	257	309	360	412	463
<b>FIXED EXPENDITURES</b>	<b>988</b>	<b>1051</b>	<b>1162</b>	<b>1273</b>	<b>1423</b>	<b>1491</b>	<b>1558</b>	<b>1627</b>	<b>1694</b>
Clothing and footwear	160	160	160	160	182	210	237	265	292
Furniture, equipment	93	110	145	180	234	265	296	327	358
Maintenance house, garden	27	33	41	48	53	53	53	53	53
Health	43	43	43	43	43	43	43	43	43
Hobby, going out, holidays	60	93	161	230	342	409	475	542	608
<b>RESERVATION EXPENDITURES</b>	<b>383</b>	<b>439</b>	<b>550</b>	<b>661</b>	<b>854</b>	<b>980</b>	<b>1104</b>	<b>1230</b>	<b>1354</b>
Food and snacks	398	401	411	423	446	462	478	494	510
Other household money	108	114	127	143	171	189	208	227	245
<b>HOUSEHOLD MONEY</b>	<b>506</b>	<b>515</b>	<b>538</b>	<b>566</b>	<b>617</b>	<b>651</b>	<b>686</b>	<b>721</b>	<b>755</b>
<b>BALANCE</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>106</b>	<b>378</b>	<b>652</b>	<b>922</b>	<b>1197</b>

Note: The figures in the first column are basic expenditures.

Source: Nibud, Budgethandboek 2008, Utrecht, 2008, page 206.

Starting point for the standard budgets for higher incomes are the budgets for households with a minimum income. These budgets guarantee a basic level of income. Households with higher incomes spend more on most items, but at the same time there are scale-effects: though the total amount spend on for example food rises, the average spending per person in the household goes down. Most of these effects were calculated

with the data of the Household budget surveys. In this way the 'average' expenditures are calculated for a specific type of household and with a certain total disposable income. To make the calculations for the expenses of a household, besides the total disposable income only a few variables are needed:

- composition of the household, age, sex of the members, and the school the children attend;
- own or rented house;
- type of the house: flat, country house, detached house;
- type heating: central heating or not;
- numbers of owned cars. Per car the new value, number of kilometers per year and whether the car is bought new or second hand
- own risk medical insurance.

With these variables and the total disposable household income, a complete standard budget can be calculated. In this method there is no need to specify a detailed basket of goods and services for every household and income level. For a detailed explanation of the data and calculations, see annex 5.

There are some disadvantages related to this method. Trends in expenditures on for example furniture are calculated with income data up to about € 5.000 per month, and often a simple linear regression is calculated. It is doubtful whether the extrapolation to incomes higher than € 5.000 per month is valid. But because no other data are available, these approaches are the best there are.

Another point is that the expenses are calculated as an average per item for that type of household and a certain level of disposable income. But sometimes a household cannot afford an average expenditure on all items as calculated. The sum of the averages expenditures as calculated by the software will exceed disposable income for some income levels, especially the lower ones. Because we want a balanced budget, as we use the standard budgets for budget information purposes, a recalculation must be made in order to make the budget balanced.

## 2.5 Balancing the budget

There are several ways to make the standard budgets balanced. An important point is that in the definitive standard budget, the expenses may never be below the basic expenditures. This guarantees a minimum level of living. Two methods to make the budgets balanced are:

A All the expenses are adjusted proportionally, but they may not be lower than the basic expenditures. If for example the sum of the calculated expenditures is 2500 euro, while the total disposable income is 2200, all items are reduced with  $(25-22)/25$  percent, given the minimum basic expenditure. After one round, it is possible that the budget is

still not in balance, because one or more items could not be lowered by the full percentage due to the minimum basic expenditure. The procedure is repeated until there is a balanced budget, or until all items are on the basic expenditure level. In that case a balanced budget is not possible with the basic expenditures.

B To adjust an expenditure to the proportion it exceeds the basic expenditure. An expenditure that exceeds its corresponding basic amount more than another, will be adjusted proportionally more. In this method the basic basket is always guaranteed.

Nibud has chosen for the second method, considering that if the relative amount the average calculation exceeds the basic amount is higher, it is also easier to adjust that amount in order to get a balanced budget.

This methodology to make standard budgets for higher incomes – the increment of the expenditures for higher incomes – can only be used when the items (not the amount) in both standard budgets and the way of life for both income groups do not differ too much. When there are huge differences in for example housing conditions or food consumption (as own food production) between groups of households, separate calculations must be made.

Another possibility is to make additional items that are optional in the basket, for example a car. If there is a car in the household, the costs of a car are calculated, and otherwise some costs for public transport are included. Other optional items are smoking, a motor, a caravan or a second home etcetera. The costs of such an additional item must be substantial, otherwise it has no sense to do so. Moreover, relative large groups should make use of these items and their costs should not have too much variance. As few people have a second home in the Netherlands and the costs of it vary much, it has no sense to include that item in the Dutch standard budgets.

### **Purposes**

The standard budgets for higher incomes are used for a variety of purposes. In the first place as reference material for consumers, making a personal budget. They are also the basis of the construction of credit scores for mortgages, rent norms etcetera. See chapter 4 for more information.

## 2.6 Classification of the expenditures

### **Eurostat-classification**

The expenditures in the standard budget must be classified in some way. The classification of the expenditures used in the Eurostat publications of the expenditure surveys is built up in digits: the so called Classification of Individual Consumption by Purpose adapted to the needs of Harmonized Indices of Consumer Prices (COICOP-HIPC). One digit is the main classification, two and more digits give a further specification. At the end with 9 digits all the goods and services are classified. Annex 1 gives the Eurostat classification up to 4 digits. The results are not published at a lower level. This classification is designed by statisticians and fits in the complete scheme of the national accounting system. The same classification is also used in the price statistics to estimate the inflation. This gives possibilities to use the (partial) price indexes for the updating of the standard budgets from one year to another.

### **Frequency of payments**

The question is whether the statistical classification used by Eurostat is appropriate for the presentation of standard budgets for information purposes.

Nibud uses another classification that is based on the frequency of payment and whether spendings are based on a contract. Expenditures are classified by Nibud in three main groups:

#### *A: fixed expenditures*

These are expenditures that are often arranged by a contract such as the rent, mortgage, subscriptions and so on. The payment of these expenditures often happens in fixed terms: once a year, once a month or so. Because there is a contract, a household cannot adjust the expenditures in the very short run. First, the current contract has to be terminated and then the contract stops. For items in the basic basket as housing and energy, other (cheaper) contracts should be made in order to ensure these basic needs.

#### *B: Reservation expenditures*

Reservation expenditures are non-regular expenses. Some of these expenditures are rather big: think about a car or furniture. Often, a household has to reserve or save a long time for these expenditures. Contrary to the other expenditures, these savings are not real expenditures but an average on what households spend during one or more years on these items. One month or year the expenses can be zero, another month, they may be hundreds or thousands of euros.

#### *C: Household money*

Household money are the daily and weekly expenses on food, personal care and so on. These expenses are rather flexible, given the basic expenditures.

Annex 2 gives an overview of the Nibud classification. Some items are split in sub-items to be more specific. This classification applies to the Dutch situation. In other countries another classification may be more suitable or there may be items that must be added or omitted. In the design of the classification one must bear in mind that the items must not be too small, however sometimes it is inevitable. In the Nibud case, water is a very small item, but every household is confronted with it, so it must be recorded in the list.

The household money is split up in sometimes small details. This is done for information purposes: it must be clear for the user what belongs to that household money and sometimes a figure for such an item can be very informative. Think about personal care or smoking: is it comprised in the household money or not and how do people spend on it?

The Nibud classification in subitems gives the possibility to present the standard budgets at different levels. See annex 2 for the Nibud classification with subitems.

### **Necessity**

For the use of standard budgets other classifications of the expenditures than the above for presentation purposes can be useful. For the application of standard budgets we shall see in chapter 3, it will be important to know which expenditures can be adjusted and which not. Two aspects are important here: the necessity of the expenses and the possibility for the household to change the expenses of that item. These are important aspects when making a personal advice for a client.

Nibud made a selection of the expenditures that must be done by every household in the Netherlands, the so called *basic basket*. This basic basket reflects the minimum standards of living. The expenditures comprised in the basic basket are given by an amount in table 1. Of the main expenditures only transport and hobbies/holidays are excluded from the basic basket. Transport is very individually (and can than be inevitable), hobbies and holidays are difficult to precise and are strictly speaking not basic expenditures. In order to calculate the standard budgets Nibud defines basic values for these expenditures, but if necessary they can be zero when other expenditures do not permit it.

Besides these general basic basket, there can be other reasons that some expenditures are inevitable for a certain household. There are inevitable expenditures that can apply for certain groups of households. Older people may on the average have higher heating costs, because they want it warmer in the house and because they are more at home. Disabled people can have extra medical costs and so on. In standard budgets especially for these groups, one can take account for these extra expenditures. Data for these expenditures can come from experts in a certain field or from specialized surveys

amongst these groups.

At last, households themselves can have different reasons why an expenditure is inevitable. It can range from extra heating costs for an old, badly isolated house to money gifts to the church or family. Standard budgets cannot take this into account, and these adjustments must be made at the individual level when making a personal advice.

### **Knowledge**

Another classification of the expenditures can be the extent to which people know their own expenditures or how easy they can be retrieved. This is important to know in the case of advising a client: which figures must be given by the client and for which figures the adviser has to rely on reference data. For most households the fixed expenditures are known, or easy to retrieve with for example via the bank book. Also the household money is a figure that most people will know. There will be more problems with expenditures like traffic or furniture. Most people won't know how much they spend on the average on furniture in the last five years. Reference figures from standard budgets give then additional information.

## **2.7 Pricing**

For standard budgets based on average consumer's expenditure (either from surveys and / or experience) there is no need for pricing, but if the standard budgets are made with baskets, the items must be priced. There are different types of prices.

In the first place there are fixed tariffs or prices. It is possible that for some types of goods (energy) there are nationally fixed prices, or ranges of prices. In those cases the fixed price is the one to be used. For other items, there may be only a few suppliers with a narrow range of prices. Think about energy with suppliers that could not be chosen freely by the consumers or the limited number of newspapers in the Netherlands. In these cases a (weighted) average price can be a good solution.

There are however also a lot of items with a wide variety of prices and quality: furniture, clothes and so on. As mentioned before, there must be a logic relationship between the price and life time of a good. For these goods, Nibud uses the micro data of the price index surveys of the Central Bureau of Statistics in the Netherlands. For the price index thousands of prices for a certain item are recorded. For a certain item, for example a coat, all coats are sorted by price: the lowest first, the highest at the end. The price at 25 percent from the bottom is taken as the price for the basic basket. It is not the lowest price, but a little higher, and it is assumed that an item with that price will correspond with the assumed life time. For more detailed information see the next chapter.

## **2.8 Grouping the households**

Using a computer program to calculate a standard budget for a certain type of household, the program must be flexible enough to make a standard budget for all

possible types of households, no matter the exact age of the members of the family and the income. However, when standard budgets are to be published on paper, a selection must be made. The selection must be made in such a way that that with a minimum of selection criteria a maximum number of households can be presented. For information purposes households should recognize themselves in the selected households, and the selections must be distinctive: the minimum incomes or the expenses must differ (significant) to justify a standard budget.

For the Netherlands, first of all a some basic types of households were selected based on composition because they have a distinct minimum income : singles, single parents and couples. For singles and single parents, there is no distinction between men or women: the incomes are the same, and the expenditures do not differ that much (only food, see chapter 3). For households with children, three categories were made: a lone parent or couple with one child of 8 year, two children of 6 and 14 year and three children of 10, 12 and 14 year. Also for the children, no distinction was made in boys and girls because there are few differences in expenditures. The selection of the ages of the children is more or less arbitrary and based on the demand for standard budgets by consumers. Finally, for retired people of 65 years and older standard budgets are also made for singles and couples. This results in the following standard budgets that are published by Nibud for households with a minimum income:

- single, younger than 65;
- single, older than 65;
- couple without children, younger than 65;
- couple without children, older than 65 years;
- couple, younger than 65, one child 8 years;
- couple, younger than 65, two children, 6 and 14 years;
- couple, younger than 65, three children, 10, 12 and 14 years;
- lone parent, younger than 65, one child 8 years;
- lone parent, younger than 65, two children, 6 and 14 years;
- lone parent, younger than 65, three children, 10, 12 and 14 years;

In the standard budgets for households with a minimum income, all the households have a rented house. The rent in the standard budgets is equal to the amount the household has to pay itself including the rent subsidy. This is a rather low amount, so that for higher incomes it emerged that also standard budgets should be made with an average rent (see table 2). Because starters on the housing market pay rather more than the average rent, also standard budgets for higher incomes were made for higher rents (one and a half times the average rent). For home owners the same applies. This results for the higher incomes in the same households as mentioned above, but per type of household four standard budgets are published:

- average rent;
- 1 ½ times the average rent;
- average mortgage;

- 1 ½ times the average mortgage.

An example is given already in table 2.

The above grouping of households applies to the Dutch situation. In other countries other considerations or other target groups can give other types of households. These standard budgets are published yearly in the 'Nibud Budgethandboek', and they are widely used by budget-advisers, but also by policymakers of financial institutions to make for example credit scores.

## 2.9 Local and regional standard budgets

In the paragraph above, an explanation was given for the choice of the types of households for the Nibud standard budgets that are published on paper. Software does not have this problem, because software is able to calculate all types of households and incomes. Another question is whether there should be standard budgets on local or regional level.

Nibud did not choose to make local standard budgets, because nor the baskets, nor the prices differ much in the Netherlands. As mentioned before, the prices are set at such a level, that almost every household can get the items at those prices. Of course, there are exceptions as older people sometimes are unable to reach a cheap shop. Only local taxes can differ at the local level, and although the differences between cheap and expensive communities are substantive, they are only a small part of total expenditures (about 2½ % on the average). For national use, an average local tax rate is sufficient. In chapter 4 the MERs are described: purchasing power calculations at the local level to advice the local authorities on their income policy. In these calculations, of course the local figures are taken.

In the United States there is a project that develops standard budgets at a local level: the Self-Sufficiency Standard<sup>4</sup>.

It depends on the situation in a country and the target groups whether local or regional standard budgets should be made. If there is rather unbalanced income distribution in a country, even at the minimum level, separate standard budgets can be made for these groups or regions. Also quite different living conditions, for example the self sufficiency in food production for a household, can be an argument to take this into account. See for an example the work of the Norwegian Institute SIFO<sup>5</sup>.

---

<sup>4</sup> See: <http://www.sixstrategies.org/>

<sup>5</sup> See: [http://www.sifo.no/page/Links/Meny\\_engelsk\\_hoyre/10418/10424](http://www.sifo.no/page/Links/Meny_engelsk_hoyre/10418/10424)



## 2. 10 Updating of the standard budgets

Standard budgets are highly dependent on prices, incomes and changes in subsidies and so on, no matter if they are used for poverty measurement or budget information. In the Netherlands social welfare income and subsidies change twice a year: on the first of January and July. This makes that Nibud updates the standard budgets at these moments.

Prices change continuously. When a detailed basket of goods and services is used, the updating of the prices can be a lot of work, certainly when not an overall price index is used but individual prices that must be recorded in shops and so on. For that reason Nibud uses – if possible - detailed partial price indexes to update the basket. The prices of clothes, food and furniture are updated with the most detailed price index possible. Other prices are easier to obtain, like energy prices or the prices of newspapers or mobile telephones. For some items, specialized institutes exist in the Netherlands, of which figures can be an input for the Nibud standard budgets. For a more detailed explanation of the sources of the data used by Nibud the next chapter and annex 5.

## CHAPTER 3 THE CONSTRUCTION OF STANDARD BUDGETS

In this chapter, we will describe the construction of the standard budgets into more detail.

For the construction of standard budgets, we would like to approach the circumstances of an individual household as good as possible. It is very hard if not impossible to be prescriptive in the exact spendings an household has to make.

Each individual household has its own preferences. A lot of these preferences are the result of emotional and psychological factors. Although it may be tempting to look further into these matters, we will limit ourselves to clearly measurable factors that influence the household spendings. This is particularly done, because households themselves and their advisors should be able to find the input-data easily.

### 3.1 Spending categories

There are millions of possible spendings an household can make. In super markets alone, people have to choose between thousands of products. We do not want to make such detailed budgets. It is necessary to group spendings together. Criteria for this grouping can be set up as:

- what are clearly divided categories in terms of how they are paid? If you get different bills for gas use and for electricity, you could separate them.
- what is left to the responsibility or the choice process of the individual household? We don't exactly care about what a person eats; we are only concerned that his spending on food does not exceed € xx per week.
- necessity. What individual articles or services is considered necessary? If health insurance is regarded to be necessary, one should enter it as a distinct category.
- identification of cost-bearers (see below)

It is always possible to make further groupings. You could for example group all kinds of distinct insurances under the header "insurances". Another example: the spendings on heating, electricity and water could be added into one category energy. Or you could group all costs belonging to a car together (petrol, taxes, insurance, repair costs).

Nibud makes a clear distinction in terms of the way of payment, as explained in chapter 2.

## 3.2 Cost-bearers

After identification of the spending categories, we have to identify which household characteristics influence the level of expenditures of these categories. We will call the characteristics that do influence the spendings *cost-bearers*.

Different spending categories can have different cost-bearers. Some of them are connected in a natural way: the spendings on food are for example influenced by the kind of persons in a household (their age, their gender), the number of persons (because of economies of scale) and the household income. The kind of dwelling or the value of the car does not have a direct influence on the spendings on food.

Other cost-bearers may be caused by national regulations. For example, the spendings on health insurance is in the Netherlands connected to the number of adults in an household and independent of the income or from the number of children in an household.

So, it is important to identify the various cost-bearers for the different spending categories. Perhaps you should reconsider the distinction of the various spending categories if you cannot identify a logical cost bearer for a particular category.

## 3.3 The role of income

Income should not play a role when defining the basic basket (see chapter 2.2). The contents of that basic basket are based on what is considered necessary for every household, irrespective of their income.

It is of course tempting to check whether households with a minimum income can afford that basic basket and to see which groups of households in particular are worse off. However, income should not be the basis of selecting the items that take a place in the basket.

For higher incomes, the basic basket is not a good approach to resemble their situation. These households with higher incomes can afford more “luxury” items and will also spend on other categories, like cars or holidays abroad.

As they have a lot of possibilities to choose from, we cannot make specific, detailed baskets for higher incomes. Some households like a bigger car, others want to have a long holiday abroad or want to buy a more expensive house.

So, if we want to approach the spending pattern of households with a higher income, we cannot do so in a detailed way. We have to limit ourselves to spending categories, like “recreation”, “food”, “mobility”.

### 3.4 Gross or net income?

For information purposes, it would be the best to resemble the actual choice process as much as possible. Only those spendings have to appear in the budget, for which the household itself has the responsibility to pay. If taxes and social security payments are automatically deducted from the salary slip, they do not have to appear in the spendings categories. Of course, you have to adapt the definition of income to fit the choice process.

Another issue is subsidizing of costs. If a subsidy means that a product is sold against a lower price, we should not increase the income of the household with the subsidy, but denote the actual price for which the household can buy that item.

If, on the contrary, the subsidy is actually given to the household so that they can buy the product at market prices, we should increase the income with the subsidy and denote the actual market prices.

So, if low-income households can go to the theatre at a discount, we should include the discounted price and we should not increase the income. If, on the other hand, people receive extra income to support visits to the theatre, we should include that extra income in the total income and we should include the actual price of a theatre ticket in the spendings.

### 3.5 Univariate analyses

To “predict” these spending categories, one could make analyses on National Budget Surveys. In these surveys, a sample of households writes down their spendings. In this way, empirical data are available.

A simple way to analyse these surveys is to calculate average spendings on spending categories for different household groups. However, often the sample is too small to make detailed average budgets for all kinds of groups.

In the Dutch situation, and probably also in other European categories, income and family size play an important role. We use the following method to make the average budgets:

- 1) Group the households with the same family size together and count how many households of that family size there are in the sample. Say, 315 households of 1 person, 235 households of 2 persons, a.s.o..
- 2) Sort these households on income and make equal groups of at least 50 households. In this case ( $315/50=6,3$ ) 6 groups of 1 person and ( $235/50=4,7$ ) 4 groups of 2 persons.
- 3) Calculate the average budgets for these groups. This is the average net income and the average of the spending categories.
- 4) Normally, when calculating these averages, you will not get a rounded, neat average income (for example 1500 euro), but something like 1479 euro. To

make reference budgets for households with an income of 1500 euro, you can interpolate between the results of the surrounding incomes.

Note that these are average budgets. These budgets are not balanced. In the Netherlands, we often find that the total of spendings exceeds the total of income.

There could be various reasons for this:

- households did not note all their income
- households experienced a fall in income during the year or did not receive income in the whole year.
- households may have used savings to cover their expenses
- households may have taken loans

These latter two may especially apply, when large items have been bought, like a car or when a renovation of the house takes place.

As they are not balanced, we can hardly use them for educational means.

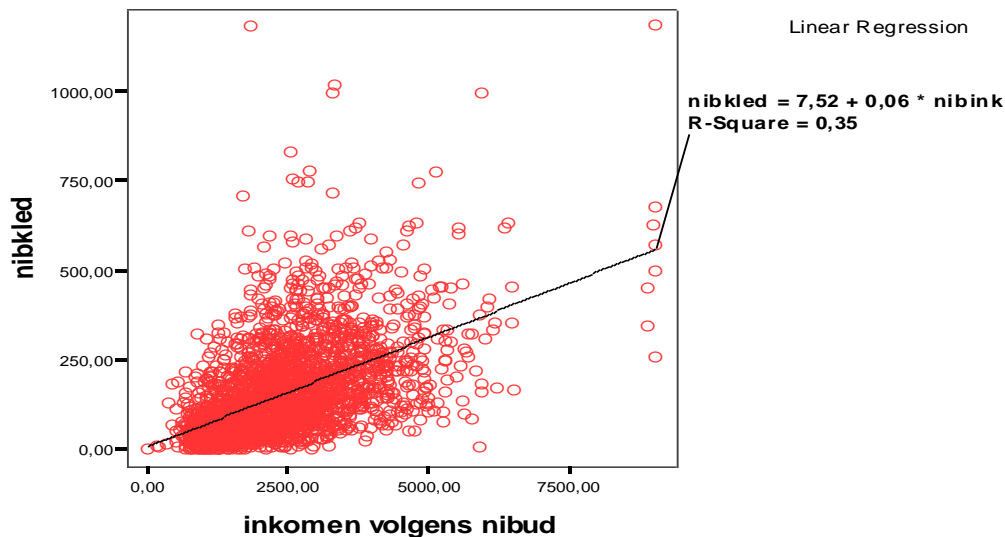
Another disadvantage of these average budgets, is that only two household characteristics are taken into account. That is not specific enough. If we want to add more household characteristics, the number of available data is often too small. Moreover, the household characteristics often are connected. Households with children have a higher income on average, they own their house more often and so on. To take these aspects into account simultaneously, we have to turn to multivariate analyses.

### 3.6 Multivariate analyses

In the multivariate analyses, one can see the quantitative influence of all possible cost bearers, including net income. Most used analysis method is *regression analysis*. Most statistical software packages offer this method.

We will not elaborate about the finesses of this method, but only give the meaning of it. With regression analysis, one tries to predict the endogeneous characteristic  $y$  from household  $i$  out of other exogeneous characteristics ( $x_1, x_2, x_3$ ) from household  $i$ .

In formula:  $y(i) = b_0 + b_1 * x_1(i) + b_2 * x_2(i) + b_3 * x_3(i) + \dots$



Here is an example how it works. In this graph, each household is depicted as a small circle. On the horizontal axis one finds the net monthly income of the household, on the vertical axis, the average monthly spendings on clothing from that household. Regression analysis calculates the best fitting line through this cloud of points. Best fitting means that the total distance from all points to the line is as small as possible. In this case, regression analysis gives the formula:

Monthly spendings on clothing ( $y$ ) = 7.52 ( $b_0$ ) + 0,06 ( $b_1$ ) \* monthly income ( $x_1$ ).

So, if the monthly income of a specific household is 2000 euro, a prediction for its monthly clothing spendings is  $7.52 + 0,06 * 2000 = 128$  euro.

You can improve this estimate (diminishing the distance from the actual point to the prediction) by inserting more household characteristics as predicting variables, for example the number of persons in the household.

In this case we try to predict the spendings on a certain category out of the household characteristics like income, household composition, characteristics of the house, and so on. In fact, you want to include all possible cost-bearers.

We try to explain human behavior from some household characteristics. As human behavior is mostly dependent on psychological and sociological factors, this explanation will not be perfect. Far from that. Mostly, you will be able to explain less than 50% of the variation in the actual spendings. In the graph above, income predicts 35% of the variation of the spendings in clothing.

In regression analysis, you also get an overview, what household characteristics have a significant influence and what characteristics only have a marginal influence. With this information, you could improve the model and leave out the characteristics that do not have an impact.

Some cost-bearers are quite logical. However, with the analysis you can also investigate whether other possible characteristics have an influence. However, you have to be aware of the risk of *spurious correlation*. Spurious correlation occurs when one characteristic A is closely related to another characteristic B, and B is closely related to C. Then, A is also related to C, but that does not mean that A is caused by C. For example, more babies are born in regions where storks occur more frequently. It is tempting to conclude from this that storks bring the babies. What is happening in reality, is that storks occur more often in the countryside, where more religious people live, who tend to have larger families than non-religious families, who live in the city more often.

You should also beware not to enter too many household characteristics or household characteristics that are difficult to know for the household itself. The households have to give their input to establish a standard budget for themselves. They will hesitate to do so, when they have provide too much data or data that they will not be able to find easily.

### **Possible extensions**

Until now, Nibud makes regression analyses for about 20 spending categories independent from each other. We do not make cross-analyses in which the spending on one category influence the spending on another category. This may lead to circular reasoning. Only exception is that we take someone's rent to estimate the value of the dwelling. This value is an input for the calculation of local taxes, which depends on house prices.

In economic literature, there is a stream to estimate *complete demand systems*. Besides household characteristics, also price information is taken into account to explain spendings. If the price of an article rises, it is to be expected that the spendings will be lower. And if prices of other goods rise, it could be that the spendings increase. To estimate these effects, you need to have *longitudinal* data, i.e. data over time.

The Dutch budget survey is cross-sectional of nature, so we limited ourselves to household characteristics only.

## **3.7 Experience of counselors and experts**

Disadvantage of the use of budget surveys, is that they are some years old. When changes occur in legal arrangements for a certain spending category, the outcomes of the budget surveys cannot be used to inform the public anymore for that spending

category. In that case, we have to adapt the outcomes with the use of other data sources.

Adaptation also occurs when other data sources provide more accurate estimates. For the costs of a car, we make use of a sample from the Consumer's Union and the Driver's Association. In this sample, the costs of a car are connected to a lot more characteristics of the car than in the budget survey.

For various spending categories, you can cooperate with expert organizations. Also, organizations of special interest groups, like the Councils of elderly people, handicapped people, ethnic minorities, large families, a.s.o can be consulted.

These councils are mostly very interested when adjusted standard budgets can be developed, especially for their groups.

### 3.8 Prices

In chapter 2.7, we noted that the used price concept is the price of the first-quartile (25%). A lot of these prices come from the Division Consumer Prices of the Dutch Central Statistics Bureau. They gather prices to measure the inflation. Every 5 year, we can make use of their databases to measure the first quartile of a lot of articles. In the years between, we make use of the published price indexes.

For goods that the Bureau does not measure, we have own research.



## CHAPTER 4 THE APPLICATION OF STANDARD BUDGETS

Standard budgets are made with a certain purpose. In the chapters above, a number of applications are already mentioned, like for information and purchasing power calculations. In this chapter we will explain the different applications of standard budgets based on the experiences of Nibud and the existing literature in more detail. Besides budget information and purchasing power calculations, we will also discuss the use of standard budgets in the fields of poverty lines, credit scores and personal finance planning. These applications show that standard budgets have a much broader use than only budget information in the field of debt counseling, poverty lines or academic interest, where the most projects on standard budgets have their starting point. Moreover, these applications are very interesting for commercial firms, like the financial sector.

Therefore, at the end of this chapter we will dedicate some words on the commercialization of standard budget, with which we mean how to earn some money with standard budgets. As described, the development and updating of standard budgets is a costly process, that can be financed by subsidies, but also in the market there are a lot of possibilities to earn some money back.

### 4.1 Information

Standard budgets are a rich source for information services in a wide range of applications. A first distinction can be made if the information applies to the whole budget or just a part of it. Information on the complete budget can be given through leaflets, software or internet. Software and internet give the possibility to present figures to the user that are suited to his situation. Also, calculations as summing the expenditures and checking the balance with total disposable income can be done automatically. Additional information can be given how to make a budget balanced and where possibilities for cutbacks in expenditures occur. From a prevention point of view, this is a perfect instrument to teach people how to spend their money and how to avoid problematic debts.

It is however the question whether people can make a budget on their own. This also depends on the medium used. People with reading problems, may be better off with a software tool, just like people that have difficulties doing calculations. On the other hand, not everybody has internet yet or does not have the skills to manage these types of internet applications. Written information has the advantage that one can make a budget on his own pace and first read the instructions. If for some reason or another one cannot make a budget on his own, some kind of help will be needed by a counselor.

Also information concerning just a part of the budget has a wide range of applications. Think for example on information on energy consumption in energy savings programs,

or the costs of furniture in the long term in order to estimate a reasonable amount for monthly savings for that purpose. Also the possibility of incorporating the monthly costs of a new car or a new house into the budget is an application of this type. More details will be given below in the paragraph on credit scores.

Quite another application of standard budgets is to split the budget into the expenditures or costs per person. It is possible then to calculate for example the costs of children or the costs of a boarder, or a living-in parent. These questions reach Nibud quite often and special leaflets, brochures and software are made for this.

When the baskets of the expenditures are made independently of the income, the total (minimum) costs of different baskets reflect also the differences in costs of an additional person. For example, if the basket of a household of a man and a woman costs 1000 euro, and the basket of a household with a man, wife and a child of 5 year 1200 euro, the costs of that child are 200 euro. However, as we have seen, Nibud uses balanced standard budgets with the income as starting point. These type of standard budgets do not reflect the real costs of a specific person in the household because income is the restricting variable. People can not spend more than what they earn in the long run. The same holds for global standard budgets made without detailed baskets, or the results of budget surveys.

To use these global budgets for calculations as costs of children or boarding money we need to split up the expenses of the household into two parts: the specified person(s) and the rest of the household. For that purpose Nibud developed for all the expenditures so called distribution codes. A distribution code gives the part of the total expenditure per item that can be distributed to a certain person (or certain persons) in a household. Annex 3 gives the codes for the distribution of the expenditures of a household between parent(s) and child(ren). These codes were developed together with the Central Bureau of Statistics in the Netherlands in order to calculate the costs of children with the use of the expenditure surveys. The costs of children are used for policy advice regarding child allowance or for the calculation of child alimony.

## 4.2 Purchasing power calculations

With the help of the standard budgets, one can compare the financial situation of different households. One can see whether the minimum income of a certain group of households is sufficient to cover the spendings of the appropriate standard budget. And, if that is the case, how much money is “left over” to cover possibly individually inevitable spendings or for free spendings.

It may be the case that some groups just manage to make ends meet with a minimum income and other groups have quite some money left over. In the Netherlands, we see that large families cannot cover the costs of the basic basket from a minimum income. On the

other hand, the basic basket of single parents could be paid with less difficulties from their minimum income.

This can be interesting information for the government institution that provides the minimum income. It could give them insight which groups are more in danger to get financial problems and which groups need extra financial support.

In the Netherlands, the standards for minimum income are mainly decided on a national level. The insight that low-income families with children are financially most vulnerable led to some adaptations in the subsidy structure for children.

Local governments also have some possibilities to support low incomes in the Netherlands. Nibud gives advice to quite a lot of municipalities about this in a so-called *Minima-Effect Report*. In that report, we make local standard budgets.

For most goods, we can take over nation-wide figures. Spendings that are determined locally, are local taxes, appropriate rents in that municipality, the subscription costs of local sporting clubs, etc. And of course, local arrangements are taken into account. Some local governments issue city-cards, with which low-income groups can buy articles at a discount.

Using standard budgets, one can compare which groups in are worse off in a municipality. Households can be categorized according to their household composition or according to household costs or according to their health status. Another grouping is made towards income: is someone working at a minimum wage really better off than someone living on social assistance? We sometimes experience these kinds of poverty traps in municipalities with extensive programs for the households on social assistance and without anything for the incomes just above a minimum level.

We can also compare the difference between the minimum income and the cost of the basic basket over time. Did it rise or decline in the past year(s) for the various groups of households ?

Nibud also calculates the effects of new government regulations together with the predictions of wage and price developments, on the budgets of about 100 standard households. Nibud does this twice a year: in September, when government plans are announced and in January when the new regulations passed through Parliament and come into effect.

### 4.3 Poverty lines

The basic basket can be regarded as the minimum necessity for each household. It is tempting to use the costs of a basic basket as a poverty line. Someone may be called poor if he cannot cover the costs of the basic basket.

A benefit of this approach instead of the more mathematical methods is the direct link with actual spendings of a household. If preferences shift over time, the basic basket will be changed, and because of that, the poverty line.

However, we think that the basic basket is not sufficient as a poverty line. Main objective is that the basic basket does not take the personally inevitable costs into account. These personally inevitable costs, like extra health costs, may be an important cause for (the feeling of) being poor in our opinion.

Therefore, some other “additional” baskets can be introduced to give room for some extra costs. See Annex 5.

The Dutch Social and Cultural Planning Bureau has experimented with the use of the basic baskets and some additional baskets as basis for a poverty line. See their report<sup>6</sup>.

## 4.4 Credit scores, rent norms

Nibud calculates three kinds of standard budgets for an individual household: a minimum budget, a reference/example budget and a balanced budget. If you confront the costs of these standard budgets with the income of the household, you can see whether there is room in the budget for other expenditures.

Ideally, the individual household uses the standard budgets to construct its own, individual budget. When doing so, the household can see whether a new financial obligation, like a mortgage can fit in.

However, financial institutions normally apply “average” figures to determine whether a loan could be given to someone. In this case, they can make use of the standard budgets. Nibud has developed a methodology for mortgages. This methodology is used by the National Guarantee Fund for mortgages. Since 2007, it is also part of the code-of-conduct for all Dutch mortgage issuers. The mortgage issuers have to comply to the resulting norm's system or they have to explain with good reasons why they deviate from it for an individual client.

We describe the methodology below:

### **Point of departure**

Nibud distinguishes between basic spendings and reference spendings. Basic spendings are minimal necessary costs for a certain spendings category. Basic spendings are dependent from household composition, but independent from income. Reference spendings are the average costs from a comparable household with a comparable income. These figures both depend on household composition and income.

Starting point for the loan-to-income ratios is that the basic spendings should still be available for the lowest incomes with a maximum mortgage. For higher incomes, the other costs should result on the average of the basic and the reference spendings.

---

<sup>6</sup> Beyond the Breadline, SCP, The Hague 2008, downloadable from <http://www.scp.nl/english/publications/books/9789037703719.shtml>

After subtracting the mortgage costs from the net income, there is an amount left between the basic and the reference spendings. It would not be realistic to do all expenditures on a minimum level when taking a maximal mortgage. However, with a maximal mortgage thus specified, a household has less to spend than comparable households with the same household composition and income.

This method is a “net-net” method. As interest payments on mortgages are tax deductible, the resulting room in the budget is recalculated into a gross amount.

### **Description of the data**

The loan-to-income ratios are norms for safe and responsible lending. With a maximal loan according to these norms, there is money enough to finance other spendings. The reference budgets for the other spending categories, are calculated from various sources by Nibud.

The calculations are made for a one-earner household of two persons without children. Both the costs of children and the subsidies for children are not taken into account. Simulations of other household types show that this does not affect the outcomes much. However, extreme situations are not taken into account.

To prevent relatively sudden changes, we use the average standard budgets of the past four years.

### **Fiscal aspects**

The loan-to-income ratios for mortgages are calculated each year on beforehand. For year t, the ratios of year (t-1) apply. This is caused by the passing time in approving the tables and by implementation into the bank’s software.

This means that the fiscal and social legislation of year t-1 is used. Only when large system changes take place, like the change in the Dutch health system in 2006, calculations can be made under the new legislation.

### **Description of the table**

The loan-to-income ratios are presented in two tables. One table is for households till the age of 65. The other table is to be used for households older than 65. This is because households above 65 are taxed differently.

Both tables take into account differences of interest percentages. Both tables have 5 columns with increasing interest percentages. The table starts with the gross minimum wage and continue to € 100.000. You can see the table for households below 65 years of age in Annex 4.

The percentage in the table gives the percentage of the gross income that can be used for gross mortgage payments.

### **Special aspects**

This method coincides with the Norms and Conditions of the Dutch Mortgage Guarantee Fund. Special attention ought to be given to the following aspects:

One should take into account other financial liabilities of the household (for example alimony, other credit) when calculating the room for mortgage payments;

For a two-earners household, the loan-to-income ratio for the highest income should be chosen. That ratio may be applied on total income.

A different method is made to account for non-deductible loans.

Possibly available wealth components, like savings or investments do not play a role when calculating the loan-to-income ratios.

## **4.5 Life time expenditure patterns / simulating the future**

Making a standard budget for one year is easy to extend for more years, especially when the calculations are done by software. Every year a person becomes a year older, the income can be expected the same or grow with a certain percentage per year. Also other variables can change during a period of time like the school of the children, or children that leave the house. Other variables remain stable for a longer period like the house or the type of car. In the calculations these changes can be accounted for, so an overview occurs of the lifetime of a household. All changes in expenditures become visible, but also changes in allowances, tax reductions etcetera when an income model is combined. The effects of mortgage, rent or credit can thus be shown in this type of simulations.

Because the budgets that are calculated yearly will be calculated as a balanced budget, it is possible that no deficits occur. Making the budget balanced as described in chapter 2 means that however two budgets are balanced, there can be differences in welfare: two households with the same disposable income but with different number of persons, can have a balanced budget, but the smaller household can do more: their welfare is highest. Comparing the figures for the different expenditure items give an insight in the course of the welfare. As the margins for a balanced budget are broader for higher incomes, these calculations for households with lower incomes will be more effective: here it is more difficult to make the budgets balanced.

In personal finance planning the above calculations are used, but often complemented with 'what if' calculations: what happens with my family if I die? Or: is my retirement pension enough to keep my welfare constant? Mostly these advices are made only using income as a variable. But changes in the number of persons in a household, retirement or disabilities will also change the expenditure pattern of the household. When a risk analysis is made to calculate the effects what happens if the earner dies, the earner will not generate costs anymore. It is thus important to take these changes in account.

## 4.6 Commercialization

The construction of standard budgets – at least when detailed baskets are used – brings a lot of work along. The same holds for the applications as credit scores or a personal budget on internet. The question is whether these costs can be (partly) earned back. Maybe the costs can be born by public funds, but also in the free market, besides web sponsoring through banners, are several opportunities to earn some money. Here the arguments of earning money and free budget information must be weighted against each other.

An internet application of a personal budget advice attracts a lot of visitors. Nibud also sells other products to these visitors with a web shop. A free personal budget advice on internet could trigger visitors to buy these items and generates thus a certain income. A next step is to ask money for the advice itself. With modern techniques it is possible to let the visitor pay within a few minutes, using for example a credit card or a mobile phone.

But there are more possibilities than paid services. Several financial institutions are interested in standard budgets to show their social responsibility. Think of banks, insurance companies, mortgage suppliers or credit institutions. They can make a (paid) link to the (free) personal budget advice, but another possibility is to sell (under certain conditions as representing the budgets correctly) only the calculations, so they can use them in their own website, in their own lay out suited to their wishes etcetera. Technically this can be done with a so called dll (dynamically linked library). The dll does only the calculations, needs as input all the variables that determine the expenses and has the standard budget as output. It has no page design for the input or output: that must be done in the application it is used for. For every update once a dll must be made, and can be sold to several buyers. Nibud uses the dll of the standard budgets also internally in combination with for example excel to make the series of standard budgets for the Budgethandbook or for local purchasing power calculations.

# ANNEX 1 The Eurostat household expenditure classification in 4 digits.

## Introduction

The Classification of Individual Consumption by Purpose adapted to the needs of Harmonized Indices of Consumer Prices (COICOP-HICP) is a classification of consumption expenditures by private households, prescribed the EU in order to determine the harmonized consumers price index (HICP). The HICP is developed to be able to compare the price indexes of all members of the EU. At the lowest 4-digit level the COICOP-HICP has 61 classes. The HICP and the sub-indices are published monthly. The most important difference with the national index (CPI) and the HICP is the basket on which both indexes are based.

Below the classification in 4 digits (levels) in headlines.

Level	Code	Description
1	A	COICOP/HICP Classification
2	01 - 12	Individual consumption expenditure of households
2	01	Food and non-alcoholic beverages
3	01.1	Food
4	01.1.1	Bread and cereals
4	01.1.2	Meat
4	01.1.3	Fish
4	01.1.4	Milk, cheese and eggs
4	01.1.5	Oils and fats
4	01.1.6	Fruit
4	01.1.7	Vegetables
4	01.1.8	Sugar, jam, honey, chocolate and confectionery
4	01.1.9	Food products n.e.c.
3	01.2	Non-alcoholic beverages
4	01.2.1	Coffee, tea and cocoa
4	01.2.2	Mineral waters, soft drinks, fruit and vegetable juices
2	02	Alcoholic beverages, tobacco
3	02.1	Alcoholic beverages
4	02.1.1	Spirits
4	02.1.2	Wine
4	02.1.3	Beer
3	02.2	Tobacco
4	02.2.0	Tobacco
2	03	Clothing and footwear
3	03.1	Clothing



4	03.1.1	Clothing materials
4	03.1.2	Garments
4	03.1.3	Other articles of clothing and clothing accessories
4	03.1.4	Cleaning, repair and hire of clothing
3	03.2	Footwear
4	03.2.1/2	Shoes and other footwear including repair and hire of footwear
2	04	Housing, water, electricity, gas and other fuels
3	04.1	Actual rentals for housing
4	04.1.1/2	Actual rentals paid by tenants including other actual rentals
3	04.3	Maintenance and repair of the dwelling
4	04.3.1	Materials for the maintenance and repair of the dwelling
4	04.3.2	Services for the maintenance and repair of the dwelling
3	04.4	Water supply and miscellaneous services relating to the dwelling
4	04.4.1	Water supply
4	04.4.2	Refuse collection
4	04.4.3	Sewerage collection
4	04.4.4	Other services relating to the dwelling n.e.c.
3	04.5	Electricity, gas and other fuels
4	04.5.1	Electricity
4	04.5.2	Gas
4	04.5.3	Liquid fuels
4	04.5.4	Solid fuels
4	04.5.5	Heat energy
2	05	Furnishings, household equipment and routine maintenance of the house
3	05.1	Furniture and furnishings, carpets and other floor coverings
4	05.1.1	Furniture and furnishings
4	05.1.2	Carpets and other floor coverings
4	05.1.3	Repair of furniture, furnishings and floor coverings
3	05.2	Household textiles
4	05.2.0	Household textiles
3	05.3	Household appliances
4	05.3.1/2	Major household appliances whether electric or not and small electric household appliances
4	05.3.3	Repair of household appliances
3	05.4	Glassware, tableware and household utensils
4	05.4.0	Glassware, tableware and household utensils
3	05.5	Tools and equipment for house and garden
4	05.5.1/2	Major tools and equipment and small tools and miscellaneous accessories
3	05.6	Goods and services for routine household maintenance
4	05.6.1	Non-durable household goods
4	05.6.2	Domestic services and household services
2	06	Health

3	06.1	Medical products, appliances and equipment
4	06.1.1	Pharmaceutical products
4	06.1.2/3	Other medical products, therapeutic appliances and equipment
3	06.2	Out-patient services
4	06.2.1/3	Medical and paramedical services
4	06.2.2	Dental services
3	06.3	Hospital services
4	06.3.0	Hospital services
2	07	Transport
3	07.1	Purchase of vehicles
4	07.1.1	Motor cars
4	07.1.2/3/4	Motor cycles, bicycles and animal drawn vehicles
3	07.2	Operation of personal transport equipment
4	07.2.1	Spare parts and accessories for personal transport equipment
4	07.2.2	Fuels and lubricants for personal transport equipment
4	07.2.3	Maintenance and repair of personal transport equipment
4	07.2.4	Other services in respect of personal transport equipment
3	07.3	Transport services
4	07.3.1	Passenger transport by railway
4	07.3.2	Passenger transport by road
4	07.3.3	Passenger transport by air
4	07.3.4	Passenger transport by sea and inland waterway
4	07.3.5	Combined passenger transport
4	07.3.6	Other purchased transport services
2	08	Communication
3	08.1	Postal services
4	08.1.0	Postal services
3	08.x	Telephone and telefax equipment and telephone and telefax services
3	08.2/3.0	Telephone and telefax equipment and telephone and telefax services
2	09	Recreation and culture
3	09.1	Audio-visual, photographic and information processing equipment
4	09.1.1	Equipment for the reception, recording and reproduction of sound and pictures
4	09.1.2	Photographic and cinematographic equipment and optical instruments
4	09.1.3	Information processing equipment
4	09.1.4	Recording media
4	09.1.5	Repair of audio-visual, photographic and information processing equipment
3	09.2	Other major durables for recreation and culture
4	09.2.1/2	Major durables for indoor and outdoor recreation including musical instruments
4	09.2.3	Maintenance and repair of other major durables for recreation and culture
3	09.3	Other recreational items and equipment, gardens and pets
4	09.3.1	Games, toys and hobbies

4	09.3.2	Equipment for sport, camping and open-air recreation
4	09.3.3	Gardens, plants and flowers
4	09.3.4/5	Pets and related products including veterinary and other services for pets
3	09.4	Recreational and cultural services
4	09.4.1	Recreational and sporting services
4	09.4.2	Cultural services
3	09.5	Newspapers, books and stationery
4	09.5.1	Books
4	09.5.2	Newspapers and periodicals
4	09.5.3/4	Miscellaneous printed matter and stationery and drawing materials
3	09.6	Package holidays
4	09.6.0	Package holidays
2	10	Education
3	10.x	Pre-primary and primary, secondary, post-secondary non-tertiary, tertiary education, and education not definable by level
4	10.x.0	Pre-primary and primary, secondary, post-secondary non-tertiary, tertiary education, and education not definable by level
2	11	Restaurants and hotels
3	11.1	Catering services
4	11.1.1	Restaurants, cafés and the like
4	11.1.2	Canteens
3	11.2	Accommodation services
4	11.2.0	Accommodation services
2	12	Miscellaneous goods and services
3	12.1	Personal care
4	12.1.1	Hairdressing salons and personal grooming establishments
4	12.1.2/3	Electric appliances for personal care and other appliances, articles and products for personal care
3	12.3	Personal effects n.e.c.
4	12.3.1	Jewellery, clocks and watches
4	12.3.2	Other personal effects
3	12.4	Social protection
4	12.4.0	Social protection
3	12.5	Insurance
4	12.5.2	Insurance connected with the dwelling
4	12.5.3	Insurance connected with health
4	12.5.4	Insurance connected with transport
4	12.5.5	Other insurance
3	12.6	Financial services n.e.c.
4	12.6.2	Other financial services n.e.c.
3	12.7	Other services n.e.c.
4	12.7.0	Other services n.e.c.

## Annex 2: The extended Nibud classification

### FIXED EXPENDITURES

#### Repayments, savings

- Alimony ex-partner
- Alimony child
- monthly payments debts
- extra savings

#### Rent, mortgage

- Rent
- Service costs
- Interest mortgage
- mortgage pay off
- Insurance mortgage

#### Energy

- Gas
- Electricity
- Water

#### Local taxes

- Property tax
- Garbage collection rate
- Sewerage charges
- Taxes from the watermanagement institution

#### Telephone/cable/internet

- Fixed telephone
- Mobile telephone
- Cable-TV
- Internet-provider

#### Insurances

- Basic health insurance
- Additional health insurance
- Liability insurance
- Fire and theft insurance
- House rebuilding insurance
- Funeral insurance
- Life insurance

#### School- and study costs

- Contribution study loan children
- School costs
- Kindergarten

#### Subscriptions

- Subscriptions newspaper, magazine
- Membership fees
- Church donations

#### Transport

- Taxes (per car)
- Insurance (per car)
- Maintenance (per car)
- Depreciation (per car)
- Fuel (per car)
- Garage rent
- Public transport

### RESERVATION EXPENDITURES

#### Clothing and footwear

#### Furniture, equipment

#### Maintenance house and garden

#### Non-insurable health costs

#### Recreation

**HOUSEHOLD MONEY**

**Household money**

- Food
- Cleaning costs
- Personal care
- Other household money
- Pets
- Pocket money \*
- Smoking

Note: \*

## Annex 3: Distribution codes for the calculation of the costs of children.

<b>Living expenses</b>	$(\text{number of rooms used by the children} / \text{total number of rooms}) * 0,5 * \text{total living expenses (rent, mortgage)}$
<b>Energy</b>	$0,1 * \text{expenses on energy}$
<b>Local taxes</b>	Nothing (are independent of the presence of children)
<b>Telephone costs</b>	Distributed based on a regression equation calculated with data of the Budget survey CBS. Total expenses telephone = $27 * \text{number of adults} + 4 * \text{number of children}$ Part of the children: In case of 2 parents $(4 * \text{number of children} / 4 * \text{number of children} + 54) * \text{total expenses telephone}$ In case of 1 parent: $(4 * \text{number of children} / 4 * \text{number of children} + 27) * \text{total expenses telephone}$
<b>Health insurance</b>	No costs for basic insurance for children Additional health insurance: real costs
<b>Other insurances</b>	For all the other insurances (except life Insurance) the same facto is used as for furniture (see below)
<b>Study costs children</b>	Total amount spent on children
<b>Subscriptions and memberships children</b>	Total amount spent on children
<b>Car costs children</b>	$(\text{number of kilometers especially for the children} / \text{total number of kilometers}) * \text{total car costs}$
<b>Total transport costs children</b>	$(\text{car costs children} + \text{public transport costs children} + \text{bike and motorbike costs children} + \text{other transport costs children})$
<b>Household money, food</b>	$(Tc+Tp) / (\text{Total amount household money} / 30)$ The costs per day for food for children depend on their age: 1-3 year: € 2,69 4-6 year: € 3,52 7-9 year: € 3,99 10-12 year: € 4,48 13-15 year: € 4,97 16-18 year: € 5,18 19-21 year: € 5,16 Tc= total costs of food for all children per day Tp= costs of food for the parents per day Tp = 10, in case of 2 parents Tp = 5 in case of 1 parent
<b>Clothing children</b>	Total amount spent on children
<b>Furniture and equipment</b>	$2/3 * (\text{number of rooms used by the children} / \text{total number of rooms}) * \text{total expenses furniture}$
<b>Maintenance house and garden</b>	$2/3 * (\text{number of rooms used by the children} / \text{total number of rooms}) * \text{total expenses maintenance of the house and garden}$
<b>Health costs</b>	Total amount spent on children
<b>Recreation</b>	Proportional amount: if there are 2 children and 2 parents, the costs of the children is 2/4 of the total amount.
<b>Domestic help</b>	Nothing
<b>Kindergarten</b>	Total amount spent on children
<b>Presents for children</b>	Total amount spent on children

<b>Pocket money</b>	Total amount spent on children
<b>Clothing money children</b>	Total amount spent on children

## Annex 4: Loan-to-income ratios for mortgages 2008

Gross income per year in €	Interest percentages				
	<=4,500%	4,501-5,000%	5,001-5,500%	5,501-6,000%	>=6,001%
17000	23,9%	24,1%	24,3%	24,5%	24,7%
17500	24,9%	25,1%	25,3%	25,5%	25,7%
18000	25,9%	26,1%	26,3%	26,5%	26,7%
18500	26,8%	27,1%	27,4%	27,7%	28,0%
19000	27,3%	27,6%	27,9%	28,2%	28,5%
19500	27,6%	28,1%	28,6%	29,1%	29,6%
20000	27,9%	28,5%	29,1%	29,7%	30,3%
20500	28,0%	28,7%	29,4%	30,1%	30,8%
21000	28,1%	28,9%	29,7%	30,5%	31,3%
22000	28,1%	29,0%	29,9%	30,8%	31,7%
24000	28,2%	29,1%	30,0%	30,9%	31,8%
25000	28,3%	29,3%	30,3%	31,3%	32,3%
25500	28,4%	29,4%	30,4%	31,4%	32,4%
26000	28,6%	29,6%	30,6%	31,6%	32,6%
26500	28,8%	29,8%	30,8%	31,8%	32,8%
27000	28,9%	29,9%	30,9%	31,9%	32,9%
27500	29,0%	30,0%	31,0%	32,0%	33,0%
28000	29,2%	30,2%	31,2%	32,2%	33,2%
28500	29,3%	30,3%	31,3%	32,3%	33,3%
29000	29,4%	30,4%	31,4%	32,4%	33,4%
29500	29,6%	30,6%	31,6%	32,6%	33,6%
30000	29,7%	30,7%	31,7%	32,7%	33,7%
30500	29,8%	30,8%	31,8%	32,8%	33,8%
31000	29,9%	30,9%	31,9%	32,9%	33,9%
40000	30,0%	31,0%	32,0%	33,0%	34,0%
41000	30,1%	31,1%	32,1%	33,1%	34,1%
42500	30,2%	31,2%	32,2%	33,2%	34,2%



(continued)					
Gross income per year in €	Interest percentages				
	<=4,500%	4,501-5,000%	5,001-5,500%	5,501-6,000%	>=6,001%
43500	30,2%	31,3%	32,4%	33,5%	34,6%
44000	30,3%	31,4%	32,5%	33,6%	34,7%
44500	30,5%	31,6%	32,7%	33,8%	34,9%
45000	30,6%	31,7%	32,8%	33,9%	35,0%
45500	30,7%	31,8%	32,9%	34,0%	35,1%
46000	30,8%	31,9%	33,0%	34,1%	35,2%
46500	30,9%	32,0%	33,1%	34,2%	35,3%
47000	31,0%	32,1%	33,2%	34,3%	35,4%
47500	31,1%	32,2%	33,3%	34,4%	35,5%
48000	31,2%	32,3%	33,4%	34,5%	35,6%
48500	31,3%	32,4%	33,5%	34,6%	35,7%
49000	31,4%	32,5%	33,6%	34,7%	35,8%
49500	31,5%	32,6%	33,7%	34,8%	35,9%
50000	31,6%	32,7%	33,8%	34,9%	36,0%
50500	31,7%	32,8%	33,9%	35,0%	36,1%
51000	31,8%	32,9%	34,0%	35,1%	36,2%
51500	31,9%	33,0%	34,1%	35,2%	36,3%
52000	32,0%	33,1%	34,2%	35,3%	36,4%
52500	32,1%	33,2%	34,3%	35,4%	36,5%
53000	32,2%	33,3%	34,4%	35,5%	36,6%
53500	32,3%	33,4%	34,5%	35,6%	36,7%
54000	32,4%	33,5%	34,6%	35,7%	36,8%
54500	32,5%	33,6%	34,7%	35,8%	36,9%
55000	32,6%	33,7%	34,8%	35,9%	37,0%
55500	32,7%	33,8%	34,9%	36,0%	37,1%
56000	32,9%	34,0%	35,1%	36,2%	37,3%
56500	33,0%	34,1%	35,2%	36,3%	37,4%
57000	33,1%	34,2%	35,3%	36,4%	37,5%
59000	33,7%	34,8%	35,9%	37,0%	38,1%
61000	34,1%	35,2%	36,3%	37,4%	38,5%
63000	34,6%	35,7%	36,8%	37,9%	39,0%
65000	35,0%	36,1%	37,2%	38,3%	39,4%
67000	35,4%	36,5%	37,6%	38,7%	39,8%
69000	35,7%	36,8%	37,9%	39,0%	40,1%
71000	36,0%	37,1%	38,2%	39,3%	40,4%
73000	36,2%	37,4%	38,6%	39,8%	41,0%
75000	36,3%	37,5%	38,7%	39,9%	41,1%
77000	36,4%	37,7%	39,0%	40,3%	41,6%
79000	36,5%	37,8%	39,1%	40,4%	41,7%
81000	36,5%	37,9%	39,3%	40,7%	42,1%
83000	36,6%	38,0%	39,4%	40,8%	42,2%
91000	36,7%	38,1%	39,5%	40,9%	42,3%

101000	36.8%	38.2%	39.6%	41.0%	42.4%
--------	-------	-------	-------	-------	-------

## Annex 5: Short overview of the cost-bearers of Nibud

In this Annex we give a short description of the cost bearers of the Nibud-classification. We make a distinction between the basic budgets and the example/reference budgets.

*Rent:* The amount is specified as the minimum rent that households on social minimum have to pay themselves. If the rent is higher, those households get a subsidy. For higher incomes, the average costs are used from the univariate analyses. We distinguish between the rent and between the mortgage for house-owners. For personal advices, we always ask for the individual costs. Higher rents or mortgage payments than average are an important source for individually unavoidable costs.

*Energy (heating, electricity, water):* For the basic basket, this is 90% of the price at average use for different types of households. Elderly have more heating costs than younger persons. Heating costs are dependent on characteristics of the house: type of building (apartment, house in a row, lone house), year of building, energy labeling of the house.

These data are provided by a semi-governmental research organization.

*Local taxes.* Local taxes are levied by the local municipality and by the water management authorities. Costs depend on family size and/or value of the house. For local use of the standard budgets, we use the local regulations; for national use, we use averages provided by a research centre for local taxes.

*Phone, cable-Tv, internet.* This amount is specified by Nibud itself, based on the cheapest way how to get connected. As technical developments are rather fast in this area, this leads to yearly adaptations in the basket. Nowadays, the amount is based on a pre-paid phone and internet via the TV-cable. There is no distinction for family size. For higher incomes, the income-dependency is estimated from the Budget Surveys.

*Health insurance.* In the basket, there is the obligatory health insurance, an average additional insurance and a small insurance against dentist's costs. Prices are provided by comparison web sites and/or the Health Ministry itself. Costs depend on the number of adults in the household. Children are insured against no costs and there is no income-dependency in these costs. Low-income households get a health insurance subsidy.

*Other insurance.* In the basket, there is:

- liability insurance: costs per family size

- furniture insurance (against fire, theft, weather): costs per estimated value of furniture (see there)
  - for adults below 65: funeral insurance.
  - for house-owners: rebuilding insurance. Dependent on value house.
  - car insurance is included in car costs.
- Income dependency comes from the Budget Survey. With that, also other types of insurance start playing a role (like life insurance, juridical insurance)

#### *Schooling and study costs*

Amounts come from own research per schooling type. They are calculated as median amounts per child. Low-income households get a subsidy for schooling costs.

*Kindergarten, child care:* They are in the basket when both parents work or for working single-parents. Costs are calculated as the hours needed times the average hourly tariff. There is an income-dependent subsidy.

*Transport .* For each household member, the costs of a bike and 15 public transport-zones per month are included in the basic basket. For higher incomes, the costs of transport come from regression analysis on the Budget Survey. Family size and income are the cost bearers. For individual advice, we calculate the costs of the car of the household from data of the value of the car, whether it is new or second-hand and the no. of kms per year. These calculations are based on a sample of the Driver's Association and the Consumer Organization.

*Clothing.* Amounts are based on a Nibud-basis basket. They depend on gender and age. Prices come from the Statistics Office. For children, there are scale-effects. We expect that second and further children could wear some of the clothes of their older brothers and sisters.  
For the example budgets, income dependency and economies of scale are estimated from the Budget Survey.

*Furniture and maintenance.* Amounts are based on a Nibud-base basket. Furniture is based on the family size with a distinction of one adult, two adults and articles per child. Prices come from the Statistics Office or own research. Especially for the electric appliances, price indexes are hampered by quality corrections. For inflation purposes, prices of new, improved appliances are corrected because of the higher quality of the new products. In the Nibud basket, we include widely available products. Improvements in quality are in this way incorporated in the costs of living.

The costs of maintenance depend on the size and type of the house. For simplicity, we specify an appropriate housing type per family size. A single person is supposed to live in an apartment, a pair with children is supposed to live in a house-in-a-row, for example.

For higher incomes we use separate calculations for household who rent a house and house-owners. Income, type of housing and family size are the cost-bearers.

*Health costs.* These are costs that are not covered by the insurance. In the basic basket, general costs are included, like pain-killers, tape, etc. For specific handicapped or chronically ill people, additional baskets can be specified.

*Food.* Amounts are based on a diet, made by the Food Centre, an information centre for Food. Prices come from the Statistics Office. The diets are made per gender and age-category.

We specify economics of scale, as large families can have advantages by buying larger quantities at a cheaper price or cook more efficiently. The costs of the Food Centre diet holds for a two-person household. For a single person, the costs are 4% higher; for 3-person households, the costs are 17% lower. For 4 or more persons, the costs are 26% lower. These economics of scale are calculated from Budget Surveys.

Daily costs for food per person for various family sizes				
	1 person	2 persons	3 person	4 or more persons
child 1-3 y.o.		€ 2,59	€ 2,15	€ 1,92
child 4-6 y.o.		€ 3,38	€ 2,81	€ 2,50
child 7-9 y.o.		€ 3,82	€ 3,17	€ 2,83
child 10-12 y.o.		€ 4,29	€ 3,56	€ 3,17
child 13-15 y.o.		€ 4,78	€ 3,97	€ 3,54
child 16-18 y.o.	€ 5,19	€ 4,99	€ 4,14	€ 3,69
adult	€ 5,01	€ 4,82	€ 4,00	€ 3,57

### Example

A family, consisting of a father, a mother, an 11-year old boy and a 13-year old girl could spend € 3,57 + € 3,57 + € 3,17 + € 3,54 = € 13,85 on food.

*House cleaning.* In the basic basket, an amount per household and an extra amount per family member, based on Nibud-research.

*Body care.* In the basic basket, there is an amount per person.

*Other:* An amount per household and an extra amount per person are included in the basic basket.

These three last categories are grouped as “Other household costs”. In this category, also costs for pets and smoking are included. For “other household costs” predictions are made via regression analysis on income and family size.

## 1.2 Additional baskets

The basic basket is a minimal basket. Articles that might become subject of discussion whether they are necessary or not, are left out of the basket. However, to show what it means to live from a minimum income, we also specify some additional baskets. In these baskets, articles are presented that households could choose to spend their money on.

We use three additional baskets: the most expensive A, a bit cheaper B and the cheapest and smallest, named C.

In the table below, you see what is in those baskets.

	<b>A</b>	<b>B</b>	<b>C</b>
Extra (public) transport	X	X	X
Membership of a sport- or hobbyclub	X	X	X
Membership and use of the public library	X	X	X
Subscription on a paper	X	X	X
Pocket money for the children	X	X	X
Recreation (5% of total budget)	X	X	X
Subscription on one weekly magazine	X	X	
A pet (dog)	X	X	
One household member smoking cigarettes	X		
extra clothing for adults	X		