

## CHAPTER 6 – ELSI SCALE CALIBRATION

This chapter provides a description of what it means to be at different points on the ELSI scale. The description is in terms of the consumption items, amenities, and recreations which typically are available, and are lacking at different living standards. This provides a basis for interpreting scale scores and is referred to as scale calibration. Calibration enables those who use the ELSI scale to judge how different scores should be viewed in terms of public or personal conceptions of hardship and affluence, enabling scale information to contribute to public debate and government policy analysis of issues of social and individual well-being and to assist in clarifying the normative issues that arise (such as operationally defining poverty in a way that reflects public sentiment).

To calibrate the scale, two subsets of items were identified, and access to these items was examined across the ELSI living standards continuum. One subset comprises items whose absence would be commonly regarded as implying deprivation. These items are referred to as 'basics'. The second subset comprises things that many people regard as desirable but few regard as indispensable. These items are called 'comforts/luxuries'. The information on basics and comforts/luxuries provides the primary calibration of the scale. It is augmented by a secondary set of concomitant information, which relates to the serious financial problems, accommodation problems, and (for EFUs with dependent children) the enforced lack of child basics. The calibration data are present first in a statistical form and are then brought into a series of brief illustrative case histories (vignettes). These provide concrete examples of the meaning of the ELSI score ranges. Finally, to permit succinct description, labels for the score ranges are offered. It is open to users of the scale to judge whether they find these labels helpful and whether they wish to employ them.

### Information Chosen for Primary Calibration

This section defines the two groups of items that were identified and used as the basis for the calibration of the ELSI scale. These two item sets relate to basics and to comforts/luxuries.

#### ***Basic Items***

The basic items relate to things whose absence would be widely regarded as implying deprivation. Examples of such items are staying in bed longer to save on heating costs and keeping costs down by going without fresh fruit and vegetables, postponing visits to the doctor, and not picking up a prescription. For succinctness, such items are referred to as 'basics'.

Several criteria were used to determine whether a particular item would be classified as a basic. Underlying these criteria is the conception that people with a low standard of living have a strong need to economise on spending, and are unable to participate in many of the consumption activities that they would like to do. Conversely, people with a high standard of living are relatively free from a need to economise, and can participate in a wide range of consumption behaviours.

It was considered that, for an item to be considered a basic,

1. the item should be regarded as important by most people, determined by the responses to the ratings of the item's importance
2. the item should be commonly regarded as important to an acceptable living standard
3. the item should have good discrimination power at the lower end of the scale: those with a *low* score on the ELSI should have a relatively *high* probability of having an enforced lack of the item, but an enforced lack should be rare amongst those in the upper part of the scale
4. the item should be regarded as desirable by most people: people who do not have the item should indicate they want it
5. the response pattern of the item across the score range should be invariant across sub-populations (e.g., working-age people, older people, Māori, non-Māori).<sup>1</sup>

Based on the above criteria, a set of 19 items was selected as the basics. Of these, 10 were enforced lack items. These were:

- being unable to give presents to family or friends on birthdays, Christmas, or special occasions (for reasons of cost)
- not having a telephone
- not having secure locks
- not having a washing machine
- not having heating available in all main rooms
- not having a good bed
- not having warm bedding in winter
- not having a winter coat
- not having a good pair of shoes
- not having home contents insurance.

The remaining nine basics were economising behaviours that the respondent reported having engaged in 'a lot' (as contrasted with 'a little' or 'not at all') to help keep down costs. These economising behaviours were:

- gone without fresh fruit and vegetables a lot to help keep down costs.

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<sup>1</sup> Assessment of the items in relation to criteria 1, 3, 4, and 5 were based on analysis of item characteristics, using the data from the importance ratings and the data used to calculate the enforced lacks of items. Where importance ratings were not sought for a given item (e.g., the economising items) then the relevant literature has been used as a guide (e.g., Layte, Nolan, and Whelan, 2000; Nolan and Whelan, 1996).

- bought second-hand clothing instead of new clothing a lot to help keep down costs
- continued wearing shoes that were worn out a lot because you couldn't afford replacements
- put up with feeling cold a lot to save on heating costs
- stayed in bed longer a lot to save on heating costs
- postponed or put off visits to the doctor a lot to help keep down costs
- gone without glasses you needed a lot because you couldn't afford them
- not picked up a prescription a lot to help keep costs down
- not gone to a funeral (tangi) you would like to have gone 'a lot' because of the cost

In the survey questions on the economising behaviours it was left to the respondent to judge what constituted 'a lot'. The use of this standard format in the interviews required the respondent to interpret that phrase in a way that was appropriate to the behaviour being asked about. In relation to some of the behaviours (e.g., going without fruit and vegetables), it was probably taken to mean 'frequently', while in relation to others (such as going to funerals), it was probably taken to mean 'on a significant number of occasions'.

The respondents' score for lacking basics was the sum of the total number of basics that were lacked for reasons of cost as a proportion of the total number of basics from the calibration item set that they wanted.<sup>2</sup> The score was thus a measure of the extent to which the respondent was unable to have the basics that they wanted. A value of .25, for example, indicates that the respondent lacked a quarter of the basics wanted.

### ***Comfort/Luxury Items***

Comforts and luxuries are conceived as things that many people regard as desirable but few regard indispensable. They give the owner a higher standard of living than is provided by basics alone. Examples of comfort/luxury items used in this research are having a holiday overseas at least once every three years, pay (subscription) television, and access to the internet. Other items include, never buying cheaper cuts of meat or less meat than wanted, or never putting off buying new clothing.

The following criteria were used to determine whether an item would be classified as a comfort/luxury:

1. the item should be regarded by most people as a comfort or luxury (rather than a basic item)
2. the item should have good discrimination power in the upper half of the ELSI scale: those with a *high* score on the scale should have a relatively high probability of having the comfort/luxury; those in the lower region of the scale should have a low probability of having it

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<sup>2</sup> All basics derived from economising item were included in the denominator as participants were not asked whether they 'wanted' these things: it is assumed that the behaviours referred to in the economising items (e.g., going to the doctor when ill) were wanted by everyone.

3. the response to the item across the score range should be invariant across sub-populations (e.g., working-age people, older people, Māori, non-Māori).

While basics are wanted by almost everyone, preferences are more varied in relation to luxuries. While virtually everyone wants fresh fruit and vegetables, not all want an overseas holiday. For this reason, the criteria for selecting comforts and luxuries do not include requirements for them to be important to most people or wanted by most people.

Based on the above criteria, a set of 13 items was selected as the comforts and luxuries. Of these, six related to possessions or recreational activities. These were:

- have a holiday away from home every year
- have a holiday overseas at least once every three years
- pay television (e.g., Sky)
- personal computer
- access to the Internet
- a best outfit for special occasions

Four of the comfort items were economising behaviours that the respondent reported having engaged in 'not at all' (as contrasted with 'a little' or 'a lot'). These behaviours were:

- not at all buying cheaper cuts of meat or less meat than you would like to buy to help keep costs down
- not at all putting off buying clothing for as long as possible to help keep costs down
- not at all doing without or cutting back on trips to the shops or other local places to help keep down costs
- not at all spending less time on hobbies than you would like to help keep down costs

The remaining comfort items were specified as respondent self-ratings of a 'high' standard of living (rather than 'fairly high', 'medium', 'fairly low', or 'low'); 'very satisfied' with their standard of living (contrasted with 'satisfied', 'neither satisfied nor dissatisfied', 'dissatisfied', or 'very dissatisfied'); and of having 'more than enough' income to meet their day-to-day needs (rather than 'enough', 'just enough', or 'not enough').<sup>3</sup> The items were:

- self-assessment of standard of living
- satisfaction with standard of living
- adequacy of income to meet everyday needs.

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<sup>3</sup> While the data set provided a relatively large item pool from which to select basic items from, there is less choice in the selection of comfort and luxury items. In addition, initial analysis indicated that a set of comforts and luxuries based solely on ownership restrictions and economising behaviour gave fewer than was desirable for the purpose. On the basis of the plotted function for the self-ratings of standard of living and adequacy of income (dichotomised), these items were added to the item pool to increase the pool to an adequate size.

## Concomitant Information for Calibration

This section describes measures which provide concomitant information helpful to the interpretation of the ELSI scale scores. This concomitant information offers an additional perspective of the meaning of the scores because the items used are not part of the ELSI scale. The items are of three types: serious financial problems; accommodation problems; and child basics (for EFUs with dependent children).

### ***Serious Financial Problems***

Incidence of serious financial problems was assessed using six items which examined the extent to which the respondent had experienced financial difficulty in the preceding 12 months. The items were:

- you couldn't keep up with payments for electricity, gas or water
- you couldn't keep up with payments for mortgage or rent
- you couldn't keep up with payments for such things as hire purchase, credit cards, or store cards
- you borrowed money from family or friends to meet everyday living costs
- you received help in the form of food, clothes or money from a community organisation such as a church
- you pawned or sold something to meet everyday living costs.

### ***Accommodation Problems***

These items measured the extent to which the respondent had problems with their current accommodation. Exploratory analysis of the 15 accommodation items included in the survey suggested that three items (problems with pollution, noise, and other problems) did not fit well with the others, and were not contributing to the construct measured by the other 12 items.<sup>4</sup> Those 12 items that were retained were:

- problems with draughts
- problems with dampness
- problems with plumbing
- wiring
- interior paintwork
- windows
- roof
- doors
- problems with piles or foundations
- exterior paintwork
- fencing

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<sup>4</sup> For instance, the item-to-total correlations for these three items was below .40, suggesting they were not strongly related to the underlying construct.

- paving.

### ***Child Basics***

As well as a number of general questions that were intended to measure the living standards of New Zealanders, questions on child basics were also included in the survey. Items pertaining to children were used to assess ownership restrictions, social participation restrictions, and economising behaviour. Preliminary analysis of these items suggested that several items were unsuitable for measuring living standards, predominately due to differences in the extent to which sub-groups experienced an enforced lack or regarded the item as important. At a conceptual level, also, some items were deemed inappropriate because they related only to children of certain ages (e.g., access to childcare services for younger children; ownership of a Playstation for older children). When the doubtful items were removed, a total of 12 items remained for the provision of concomitant information about the living standards amongst EFUs with children. These items were all expressed as enforced lacks, and were:

- did not have children's friends over for a meal because of cost
- did not have enough room for children's friends to stay the night because of cost
- did not have children's friends over for a birthday party because of cost
- did not have suitable wet weather clothing for each child because of cost
- did not have a pair of shoes in good condition for each child because of cost
- did not have a child's bike because of cost
- not bought books for home because of cost
- postponed child's visit to the doctors a little or a lot
- postponed child's visit to the dentist a little or a lot
- child went without cultural lessons a little or a lot
- child wore bad fitting clothes/shoes a little or a lot
- limited space for children to study or play a little or a lot.

## **The Distribution of Hardships, Comforts and Concomitant Information across the Living Standard Continuum**

### ***Basics and Comforts***

Figure 6.1 shows the mean percentage of wanted basics that are lacked (because of cost) at each living standard level. These figures have been calculated as follows: for each person, the number of basics wanted but lacked (because of cost) is expressed as a percentage of the number of basics wanted by that person. For example, for a person who wants 18 of the designated basics but lacks six of them (because of cost), the percentage is  $(6/18) \times 100 = 33$  percent. For a person who wants 16 of the basics but lacks four (because of cost), the percentage is  $(4/16) \times 100 = 25$  percent. The average of these percentages is then calculated for all of the people at a particular ELSI level. This is done for each level.

As would be expected, the Figure 6.1 shows a progressive, inverse relationship between the lack of basics and standard of living. Of the calibration items, EFUs in level 1 lack on average 35 percent of the designated basics that they wanted; EFUs in 2 lack on average 22 percent of the basics; and EFUs in level 3 lack 11 percent of the basics. Those who were in level 4 lack six percent of the basics, while those in 5 lack 2 percent of the basics. EFUs in level 6 and 7 effectively do not lack any basics.

Figure 6.1: Basics lacked: percent of wanted basics that are lacked because of cost: average percentage at each living standard level

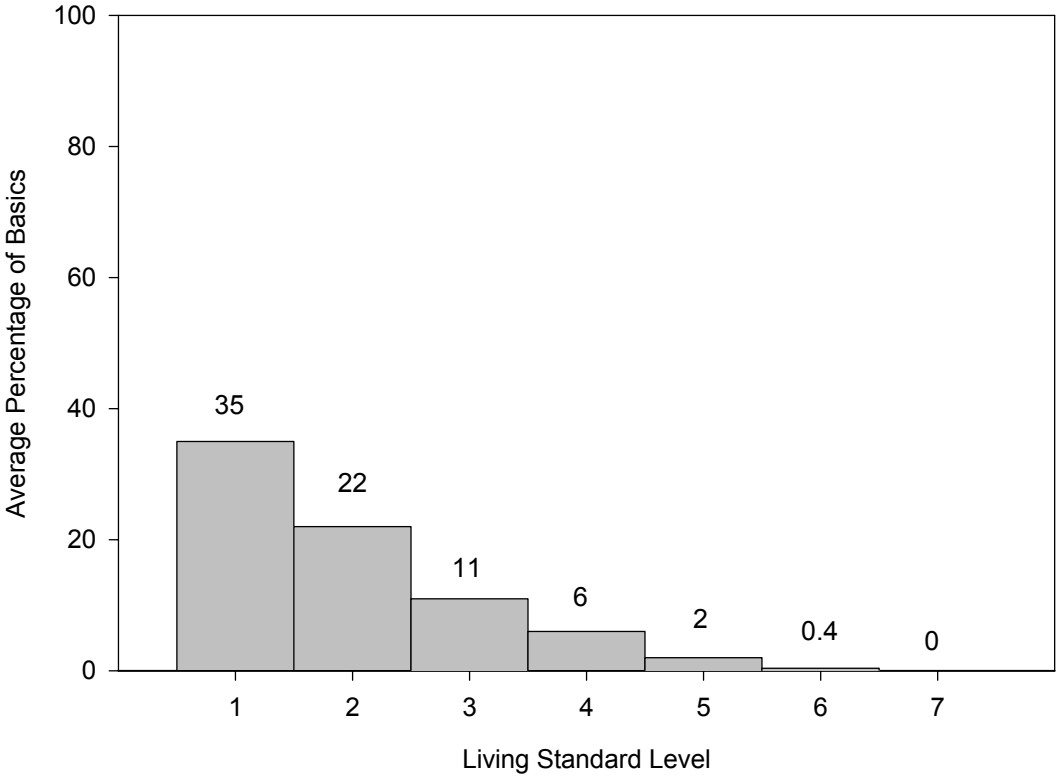


Figure 6.2: Comforts/luxuries: percent of wanted comforts/luxuries that are attained: average percentage at each living standard level

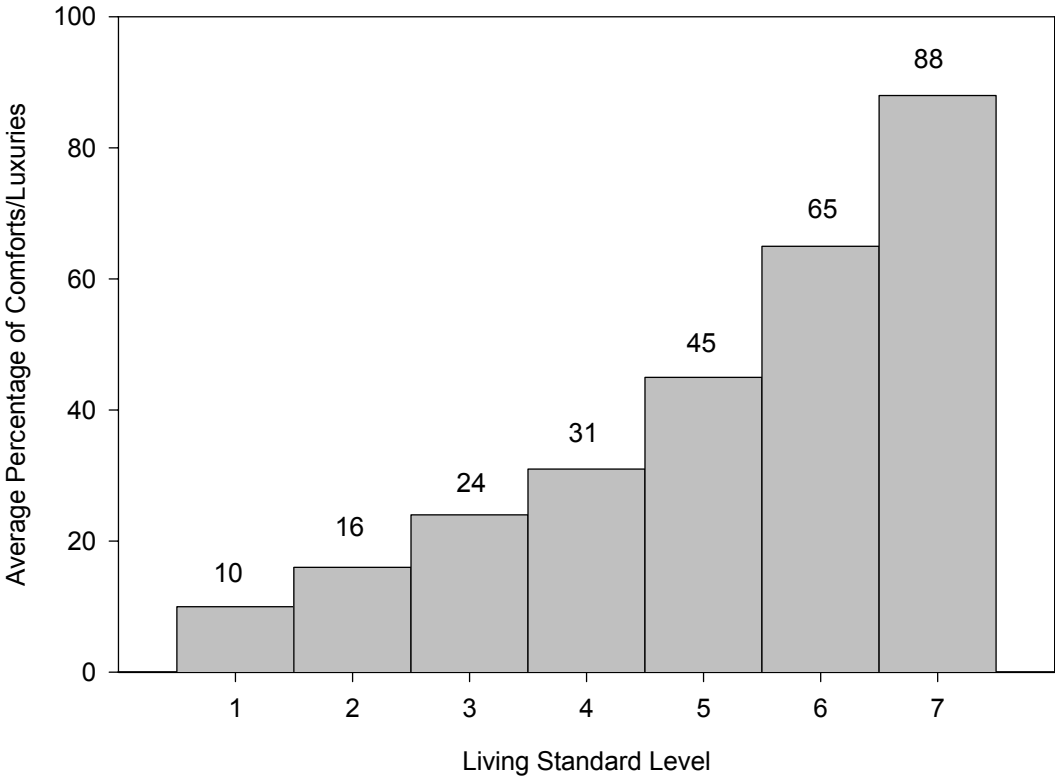


Figure 6.2 shows the mean percentage of wanted comforts/luxuries that people have at each living standard level. These figures have been calculated as follows: for each person, the number of the designated comforts/luxuries that the person has is expressed as a percentage of the number of comforts/luxuries the person wants. For example, for a person who wants nine of the designated comforts/luxuries and has six of them, the percentage is  $(6/9) \times 100 = 67$  percent. The average of these percentages is then calculated for all of the people at a particular ELSI level. This is done for each level.

Figure 6.2 shows that people at low ELSI levels have few comforts from the calibration item set; whereas people in the top two levels have the majority of the comforts they want. On average, people in level 1 have 10 percent of the comforts they want; people in level 2 have 16 percent of the comforts; people in level 3 have 24 percent of the comforts; people in level 4 have 31 percent of the comforts; people in level 5 have 45 percent of the comforts; people in level 6 have 65 percent of the comforts; and people in level 7 have 88 percent of the comforts.

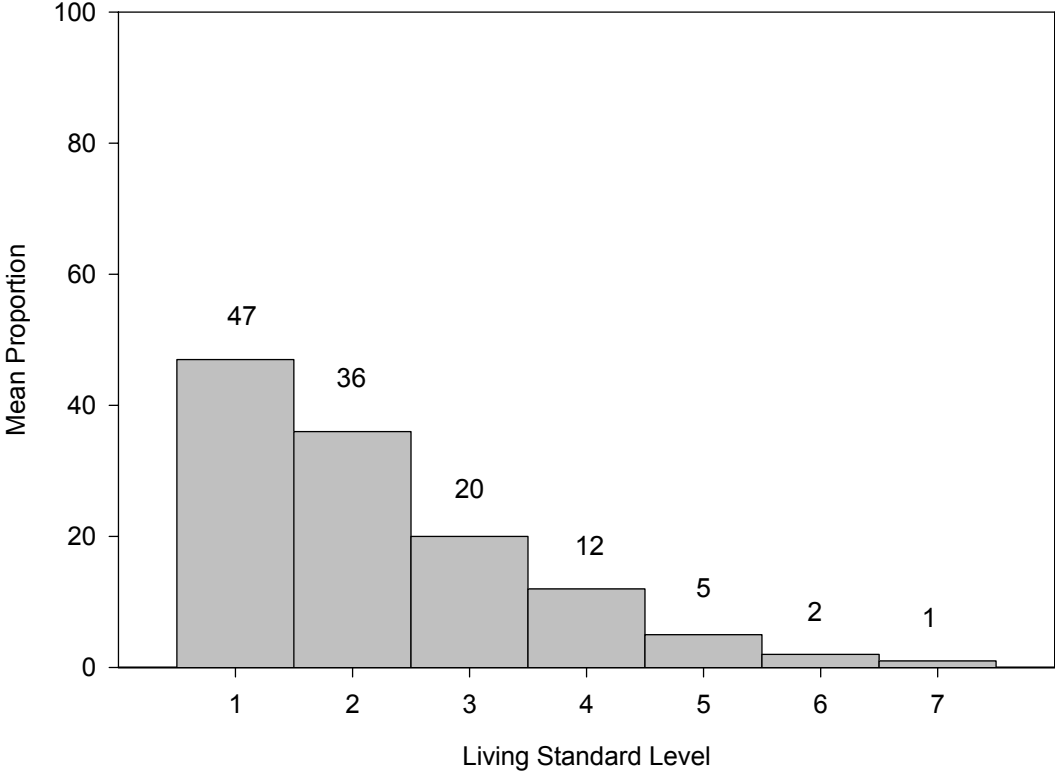
**Serious Financial Problems**

The calculation of the average proportion of financial problems across the living standards continuum is presented in Figure 6.3. The pattern is similar to that found between living standard level and the enforced lack of basics (Figure 6.1). With the results showing the expected inverse relationship



between serious financial problems and living standards. People in level 1 have an average of 47 percent of the listed serious financial problems. The proportions decline progressively across the living standards levels, with people in levels 6 and 7 having almost none of the listed problems.

Figure 6.3: Average percentage of serious financial problems at each living standard level

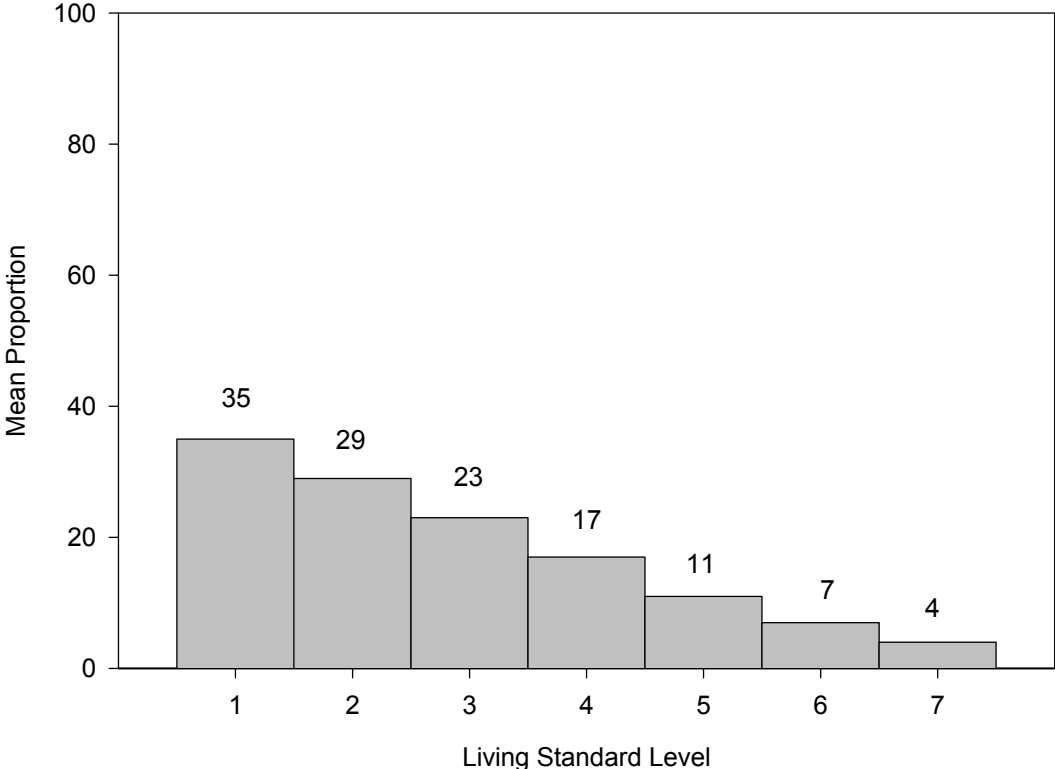


**Accommodation Problems**

The results on accommodation problems have a similar pattern to those for serious financial problems and lack of basics. The prevalence of accommodation problems decreases as living standards increases (Figure 6.4). At level 1, the average proportion of accommodation problems is 35 percent; by level 7, it has decreased to 4 percent.<sup>5</sup>

<sup>5</sup> The relatively high incidence of accommodation problems, even at the high end of the living standards continuum, is indicative of the sensitivity of this measure in identifying, in many cases, minor problems with people’s accommodation. There is some evidence that the underlying latent variable influencing the responses to the accommodation problems is not living standards (as measured by ELSI), but some related construct. For instance, even those with high living standards may not be greatly concerned with fixing sticking windows or repainting a faded ceiling. The relationship between ELSI and accommodation quality could provide a fruitful topic for future investigation.

Figure 6.4: Average percentage of accommodation problems at each living standard level

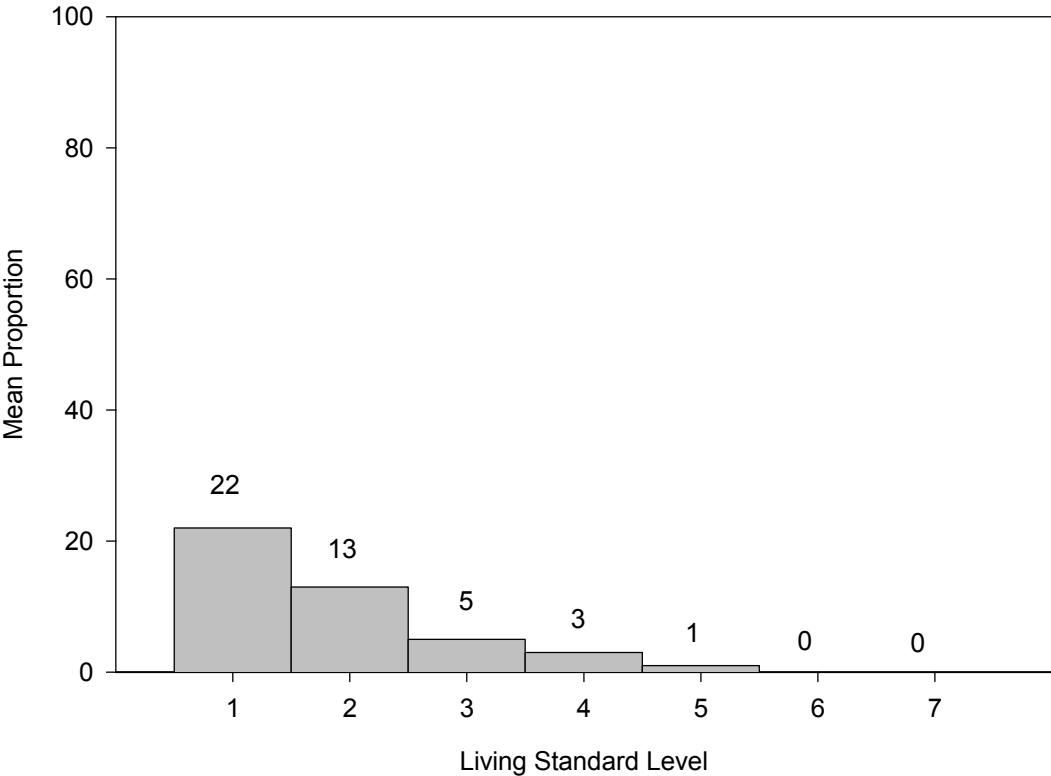


**Child Basics**

Analysis of the enforced lacks of the child-specific basics shows a similar pattern to that for the primary set of basics – that is to say, the prevalence of enforced lacks of child basics decreases as living standards increases. This relationship is plotted in Figure 6.5. At level 1 EFUs with dependent children lack an average of 22 percent of the child-specific basics; EFUs in level 5 lack on average one percent; and EFUs in 6 and 7 effectively do not lack any child basics.

It is noteworthy that the incidence of enforced lacks of child basics is less, at each living standard level, than the corresponding figure for the primary set of basics. Without further analysis (which has not been attempted) it is not possible to say why this occurs. However, two lines of speculation present themselves. It is possible that child basics, as a set, provide a more stringent test of hardship than the primary set of basics, and that a particular incidence of child lacks indicates a greater degree of hardship than the same incidence of lacks from the primary set. It is also possible that poor families tend to shield their children from the worst effects of hardship with the consequence that the children are less exposed to hardship than the adult family members. (cf. Gordon et al., 2000; Middleton, Ashworth, and Braithwaite, 1997).

Figure 6.5: Child-specific basics lacked: for EFUs with children, percent of wanted child-specific basics that are lacked because of cost: average percentage at each living standard level



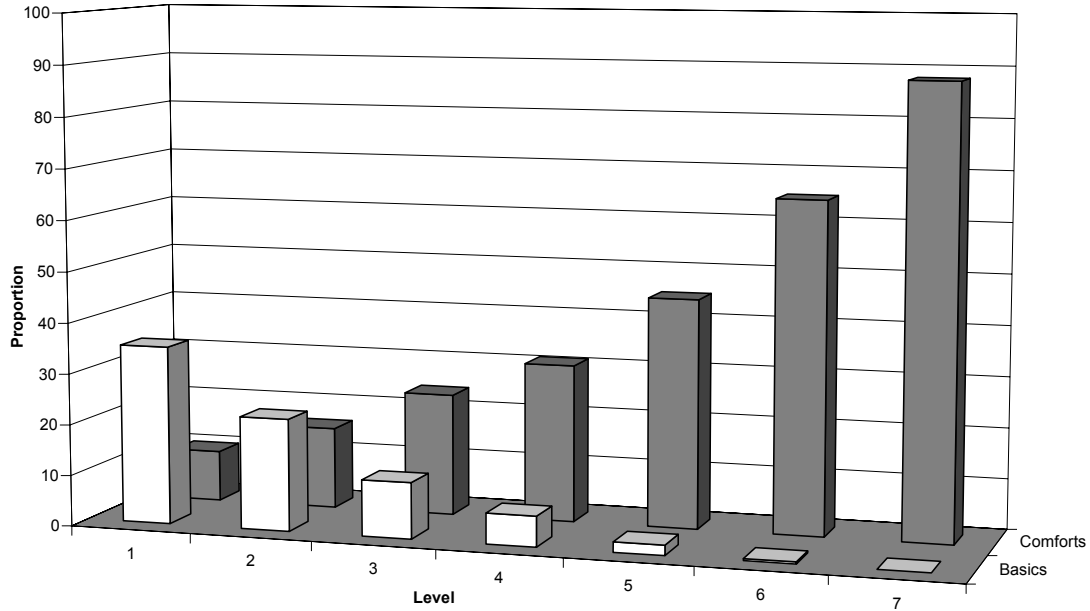
**Integrating Basics, Comforts and Concomitant Information**

The presentation separately of the results of the comforts and the enforced lack of basics offers a first look at the meaning of the ELSI score range. However, a fuller picture can be obtained when, for any particular level, both types of information are considered concurrently. This provides a simple statistical portrait of each level's living standard, which is thus characterised by the extent to which calibrated basics are lacked and comforts are enjoyed. A clearer sense of the way in which living standards differ from one level to the next is conveyed by combining the results into the figure presented below (Figure 6.6). The figure shows that even people with the lowest standard or living (level 1) still have a small number of the comforts that they want. This finding is consistent with other research which suggests that people often make trade-offs in their consumption behaviour. For some people with limited resources, it will be more important to have some of the items designated as comforts/luxuries than to have all the basic items. Different tastes, preferences, and priorities will result in people making different trade-offs between basics and comforts.

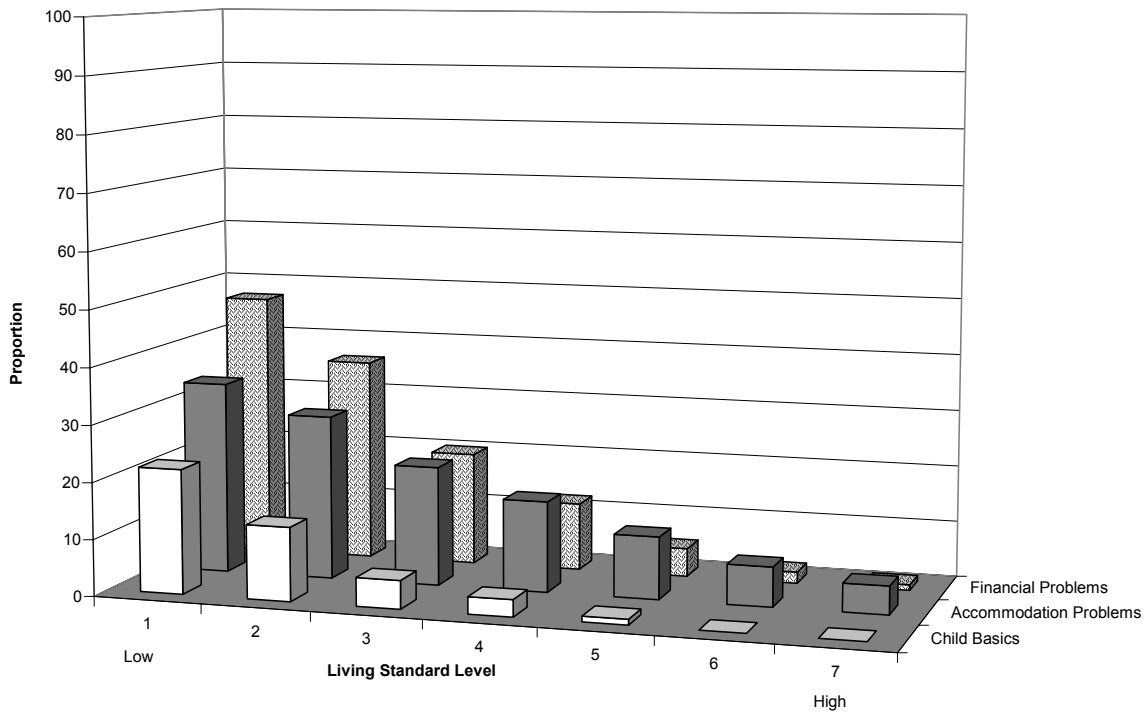
The results shown for a person at a particular time can also be expected to reflect not only their current resources but also their consumption history (which may have involved the acquisition of durable comfort items when that person had a higher income than they do now). Figure 6.7 shows the

concomitant information (serious financial problems, financial problems, and child basics) integrated into one graph.

**Figure 6.6: Primary calibration information: Basics lacked and comforts/luxuries attained: Percentage for living standards level**



**Figure 6.7: Concomitant Information: child basics lacked, accommodation problems, financial problems: percentage for living standards levels**



## Labelling the Living Standards Levels

In presenting results for the ELSI scale, it is sometimes convenient to refer to the levels by means of verbal labels. There is an unavoidable element of arbitrariness in the assignment of such labels, and people will have different opinions about the words that sensibly might be used to characterise the living standards found at the different levels. With these caveats, the following labels are offered:

- Level 1 is a 'very restricted' standard of living.
- Level 2 is a 'restricted' standard of living.
- Level 3 is a 'somewhat restricted' standard of living.
- Level 4 is a 'fairly comfortable' standard of living.
- Level 5 is a 'comfortable' standard of living.
- Level 6 is a 'good' standard of living.
- Level 7 is a 'very good' standard of living.

Clearly these labels are relative to the levels of consumption and corresponding levels of satisfaction within the current New Zealand population. They do not offer insight or comparison between the living standards of New Zealand and other countries: a given level (e.g., level 3, labelled here as 'somewhat restricted') might be viewed as an extremely desirable standard of living in some undeveloped countries but regarded as very meagre in the wealthiest OECD countries. In choosing the labels, the term 'poverty' has been deliberately avoided because of the contention that surrounds the issue of where low living standards become 'unacceptably low' (i.e., poverty). This is a normative issue is not entered into here.

The labels are provided for whatever value they may have for users of the ELSI scale. Those who do not find them appropriate for their purposes should feel free to adopt their own.

## Living Standard Vignettes

An additional way of using the ELSI calibration data is to present a series of brief illustrative case histories (referred to here as vignettes) that are characteristic of economic family units at different living standard levels. This is done below. The vignettes are based on the statistical information concerning access to comforts and restrictions of basics, and the concomitant information regarding serious financial problems, accommodation problems, and restrictions in child basics. Vignettes are presented for economic family units without dependent children, and economic family units with dependent children. The vignettes do not describe particular people or economic family units; rather, they are composite pictures constructed from the statistical results.

***Economic Family Units in Level 1 (ELSI score range 0 to 15, which contains those with lowest living standards)***

*Statistical Description:* At this level people lack on average 35 percent of the basics they want, and have only about 10 percent of the comforts they want. Additionally, they have 47 percent of the serious financial problems, and 35 percent of the accommodation problems. Economic family units with children lack an average of 22 percent of the child basics.

*Level 1 Economic family unit without dependent children:*

Stephen is a benefit recipient. He is single and lives in a flat with three others. Since leaving school he has been unable to find work. Stephen has very few basics that he wants – he does not own a comfortable bed or have sufficient blankets to keep him warm in winter; he does not own a winter coat, and does not have a good pair of shoes. Instead, he continues to wear an old worn-out pair of shoes. He has no insurance, and economises a lot on fruit and vegetables. He became quite sick during the winter, but was unable to afford a visit to the doctor. Stephen does have one comfort – he enjoys rugby, and plays for his local club. Stephen has a number of financial problems – he is unable to make the minimum payments for his credit card, he sometimes borrows money from others, and relies on gifts of food and money from his family. Also, the flat that he is sharing is quite run down – as well as being draughty and damp, it has problems with the plumbing, and some of the doors don't close properly.

*Level 1 Economic family unit with dependent children:*

Catherine is a single mother who has an eight-year-old son; together they live in a house rented from a private landlord. Catherine's only source of income is the Domestic Purposes Benefit; last year she lost her part-time job when the local frozen food factory closed down. Catherine lacks many of the basics that she considers important – she often goes without fresh fruit and vegetables, relies on second-hand clothing, wears worn shoes, and cannot afford contents insurance for her home. She has poor eyesight, but has been putting off getting a new pair of glasses because of the cost. She does not have secure locks on her doors. Finally, she cannot afford to buy presents for her parents or for her sister at Christmas time. The one comfort for her is that she has recently been given a second-hand computer, which her son uses for his school assignments. Catherine has a number of financial problems – she is sometimes unable to pay her electricity bill on time, she is currently behind on her rent, and sometimes cannot make her hire-purchase repayments on time. In addition, she has problems with her accommodation – in particular, problems with the wiring, the outside paintwork, sunken piles, and a broken fence. Finally, she is feeling distressed that her limited finances restrict not only her own life, but also that of her son. Although she has been able to feed and clothe him adequately, he is a very sociable boy who would like to bring his friends home for a meal and to have them stay overnight. She has curtailed these activities because of the strain on her budget, and recently decided that she could not give him the birthday party that he had been hoping for, with invitations to all his friends.

*Terminology:*

For descriptive purposes, Level 1 is characterised in this report as a 'very restricted' standard of living.

***Economic Family Units in Level 2 (ELSI score range 16 to 23)***

*Statistical Description:* At this level people lack on average 22 percent of the basics they want and have only about 16 percent of the comforts they want. Additionally, they have 36 percent of the financial problems, and 29 percent of the accommodation problems. Economic family units with children lack on average 13 percent of the child basics.

*Level 2 Economic family unit without dependent children:*

Paul and Rebecca have been living together for just over a year. Both are still studying at university, and Rebecca will complete her degree next year. As neither of them qualifies for the student allowance, they are both dependent on what they receive from the living costs entitlement of the student loans scheme. Both work part-time: Paul at the supermarket and Rebecca as a waitress in a café. They lack some of the basics that they want – they cannot afford to heat their flat adequately, and they have to put up with feeling cold. Their bed is too small for them, and cost recently prevented Paul from going to an old school friend's funeral in another city. They have some comforts and luxuries that they want – Rebecca has a personal computer, which Paul also uses, and they have access to the Internet from home. They have some financial problems – last month they had to borrow some money from Paul's father to pay their rent on time, and they rely on the occasional gift from their parents (for instance, Rebecca's mum took her shopping for some clothes last week). They have quite a few problems with their flat, including broken paving, a leak in the roof, an uneven floor, and windows that do not open.

*Level 2 Economic family unit with dependent children:*

Matiu and Paula are a married couple with two children who are under the age of five, a boy and a girl. Recently they purchased their first home; an old two bedroom house with a small study and a workshop. A large proportion of their income now goes towards their mortgage repayments. Matiu works as a Human Resource Officer for a small forestry company. Until their first child was born, Paula also worked for the same firm. She has been offered the opportunity to return to work, but has been discouraged from doing so by the high childcare costs and the resultant small financial advantage that working would bring. Matiu and Paula lack some of the basics that they want – they do not have appropriate locks for their house and neither have a winter coat to keep them warm. Matiu has sometimes postponed visits to the doctor, and at times, failed to pick up prescriptions from the pharmacy. However, they do have several comforts that they want – they have a subscription television service and both have nice clothes for Sunday church. Matiu and Paula have some financial problems – last month they couldn't pay their phone bill or their credit card bill on time. In addition to this, their house needs work to be done on it – they have noticed some dampness through

the floor, the kitchen really needs a new coat of paint, and the fence is on a lean. Also, some of the electrical plugs don't always work. With regard to child basics, their son has grown out of his raincoat, and both children have clothes and shoes that are becoming tight because Matiu and Paula have been putting off buying replacements.

*Terminology:*

For descriptive purposes, Level 2 can be characterised as a 'restricted' standard of living.

***Economic Family Units in Level 3 (ELSI score range 24-31)***

*Statistical Description:* People in this level lack on average 11 percent of the basic items they want and have 24 percent of the comfort items they want. Additionally, they have 20 percent of the financial problems and 23 percent of the accommodation problems. Economic family units with children lack an average of 5 percent of the child basics.

*Level 3 Economic family unit without dependent children:*

Tony and Suzanne are both middle-aged and live in their own home. Tony has been out of work for about three years as a result of a serious workplace accident; he continues to receive regular treatment, but is unlikely to ever return to full-time work. Their main source of income is from Suzanne's job: she works as a receptionist for a real estate agent. Living on only one income has meant that their mortgage repayments now make a substantial drain on the amount of money they have to spend. They lack several basics that they would like – they no longer have contents insurance for their home, and Suzanne has postponed getting new reading glasses. However, they have some of the comforts that they desire – each year they go camping with friends; Suzanne is able to buy some nice clothes, and Tony is able to spend time on his hobbies: wood-carving and glass-blowing. Recently they have had to replace the washing machine, a cost that ran down their finances, so last week they had a garage sale to sell off unwanted possessions to help them meet some of their day-to-day expenses. Their house needs some maintenance work that they have been putting off – they have problems with the plumbing, the interior paintwork, and some of their windows stick.

*Level 3 Economic family unit with dependent children:*

Frank and Kelesi were both born in Tonga but moved to New Zealand about three years ago, shortly after they were married. Two years ago they had their first child, a son. Frank works at the petrol station, mainly on night shift, and Kelesi works one day a week for a commercial cleaning company. They have had to economise on some basic items that they want – they are unable to heat all their main rooms during winter, so instead just heat the lounge. Also they have an old bed that has begun to sag. They have been intending to replace it, but are presently unable to do so because of the cost. Frank and Kelesi have some comforts and luxuries – they have some nice clothes for special occasions, they have Sky TV, and Kelesi has joined the social netball team associated with their local church. They have one financial problem – they have high repayments for a number of hire-



purchases, and sometimes they cannot pay the bill on time. Also, they have several accommodation problems – their flat is draughty, one or two doors do not open properly, and their boundary fence is in need of repair. Finally, although they have been able to provide most of the basics needed by their son, and are building up a small collection of books for him, their flat is not particularly suitable for a family with a child, and provides very little space where he can safely play.

*Terminology:*

Level 3 can be characterised as a ‘somewhat restricted’ standard of living.

***Economic Family Units in Level 4 (ELSI score range 32 to 39)***

*Statistical Description:* At this level people lack on average 6 percent of the basics they want but have 31 percent of the comforts they want. Additionally, they have 12 percent of the financial problems and 17 percent of the accommodation problems. People with children lack 3 percent of the child basics.

*Level 4 Economic family unit without dependent children:*

Fiona is 27 years old. She works as a payroll officer in the head office of a bank. For the last year she has been living alone in a house rented from a private landlord. With one exception, Fiona has almost all the basics that she wants – she has been putting off a visit to her optician because of problems she is having with her contact lenses – which she is afraid she may need to replace and would be a major expense for her. She has some of the comforts that she wants – she enjoys cooking and likes being able to afford more expensive cuts of meat; last month she bought a new computer on hire-purchase, and with it she is now able to surf the internet from home. She has just returned from a 10-day trip to Sydney where she caught up with some old friends who moved there a couple of years ago. Fiona has one financial problem. She has a large amount of debt on her credit card and she is having difficulty paying this back. Fiona also has some problems with her accommodation – the interior paintwork is shabby and some of the piles have sunk.

*Level 4 Economic family unit with dependent children:*

Jim is a sole parent with two teenage sons. He works as a car salesperson in the Manawatu, and owns his own home. Jim has most of the basic items that he wants although cost prevented him last month from attending the funeral of his uncle who lived in the South Island. He has some of the comforts that he considers important – he has regular holidays away from home with his children; he has pay TV, and he has a computer with internet access. Jim has one financial problem – electricity and gas bills can be expensive in winter, and he sometimes has difficulty making payments on time. In addition he has been putting off some needed home repairs – replacement of several cracked window panes and some leaky spouting. Jim is unable to afford one child basic – recently his elder son’s bike was stolen, and at present Jim isn’t able to replace it.

*Terminology:*

This level can be described as a 'fairly comfortable' standard of living.

***Economic Family Units in Level 5 (ELSI score range 40 to 47)***

*Statistical Description:* People in this level lack on average 2 percent of the basics they want, and have 45 percent of the comforts they want. Additionally, they have 5 percent of the financial problems and 11 percent of the accommodation problems. Economic family units with dependent children lack 1 percent of the child-specific basics.

*Level 5 Economic family unit without dependent children:*

Teddy, aged 32, and Leilani, aged 31, live together in a two bedroom flat. Teddy, who comes from England, works in a helpdesk call centre while Leilani does temping work as a PA. They met four years ago when Leilani was living in London on her OE. When Leilani returned to New Zealand last year, Teddy accompanied her. In a few months they intend to marry, something that they are now saving for. They would like to start a family in a couple of years time. They lack almost none of the basics that they want, and have many of the comforts that they desire – they have a computer with internet access; both wear nice clothes; and Teddy has just joined the local tramping club and begun to purchase outdoor gear. They regard their income as more than adequate to meet their everyday expenses. They have no financial problems, and a only a minor problem with their accommodation – a couple of windows rattle in the wind.

*Level 5 Economic family unit with dependent children:*

Tu and Mary have been married for 18 years. They have two children aged 11 and 14. Tu describes himself as Māori, and Mary describes herself as Pakeha. Twelve years ago they bought their first house. They lack almost none of the basics that they want, and have many of the comforts that they desire – they have regular holidays away, Sky TV, a computer with an internet connection, and they are able to buy high quality steak for the barbecue in summer. They feel very satisfied with their standard of living. They have no financial problems. In recent months, Tu has been making use of the fine weather to do quite a lot of work on their house and the only task remaining on his list is the replacement of some rusty roofing iron. Both their children are doing well at school and are able to participate in the activities that they want to. For instance, Mary spends most Saturday mornings driving her elder child and others in his cricket team to the sports ground, as well as cutting the oranges, and washing the team's uniforms after the game. They do not lack any child-specific basics.

*Terminology:*

Level 5 is described as a 'comfortable' standard of living.

### ***Economic Family Units in Level 6 (ELSI score range 48 to 55)***

*Statistical Description:* At this level people lack a negligible proportion (0.4 percent) of the basics they want and they have 65 percent of the comforts they want. Additionally, they have two percent of the financial problems and 7 percent of the accommodation problems. Economic family units with children lack none of the child basics.

#### *Level 6 Economic family unit without dependent children:*

David and Elizabeth have been married for over 40 years. David is 72 and Elizabeth is 68. They have owned their own home freehold for nearly twenty years and are now receiving New Zealand Superannuation, which augments the modest income they receive from some investments. They lack none of the basics that they want, and have almost all of the comforts that they want. They have regular holidays staying with friends and family. David enjoys having time to spend in the garden, and has recently built a hot-house. Elizabeth was recently persuaded by a friend to join a sketching club, and joins in regular excursions to draw buildings of historic interest. They both feel able to purchase new clothes when they want to, including the new suit that David bought for his granddaughter's wedding. In addition to pay TV, they have a personal computer, and access to the internet. They had always hoped to go on a major overseas trip. Since childhood Elizabeth has dreamed of seeing the Pyramids; however, they have reluctantly decided that this would make too big a dent in their modest capital. Despite this, they feel their income is more than adequate to meet their needs. They have no financial problems, and their house is generally in good condition; although there are some minor items of section maintenance that need attention.

#### *Level 6 Economic family unit with dependent children:*

Glen and Helen have a daughter aged 14 and a son aged 12. Glen is self-employed: he runs a plumbing business; Helen works part-time as a bank teller. They lack none of the basics that they want, and have almost all the comforts that they want – Helen is able to spend time making pottery; she can buy new clothes when she wants to, and can go away on holiday reasonably often. Glen can watch live sport on TV, surf the internet, and go shopping when he feels he wants to buy something. They don't economise on buying the types of food that they like to eat. They regard their income as more than adequate to meet their day-to-day needs. They have no financial problems at all, and only a very minor accommodation problem – although their bathroom is functional, the décor is a little dated. They are rather indulgent towards their children. They have encouraged the musical interests of their daughter, who has regular clarinet lessons, but are concerned that they have been a little too generous in buying skating clothing for their son. Their children lack no child basic items.

*Terminology:* People in this category are described as having a 'good' standard of living.

***Economic Family Units in Level 7 (ELSI score range 56 to 60, which contains those with highest living standards)***

*Statistical Description:* At Level 7 people lack none of the basics that they want, and have the majority (88 percent) of the comforts they want. Additionally, almost none have any of the listed financial problems, and they have on average only 4 percent of the accommodation problems. Economic family units with children lack none of the child basics.

*Level 7 Economic family unit without dependent children:*

John and Sue have been married for 31 years. They have two children aged 23 and 26. Their youngest recently left home when she purchased her first house, while their older daughter is 'in between flats' at the moment. John is a branch manager for a large building supplies company; Sue works in an administrative position for a government department. Despite them both having a good income, they had to be quite careful with their money while they supported their children through university. Now that their children have finished studying, and they have finished paying off the mortgage, they are enjoying having more freedom in how they spend their money. They have all the basics, and a lot of the comforts and luxuries that they want. The one exception to this is that they are unable to afford a new boat. They have been using their existing boat for a few years, but would like something bigger. They accept that it will take them a few years to save enough money to buy the type of boat that they want. Overall, they feel they have a high standard of living and their income is more than adequate to meet their needs. They have no financial problems, and their house is in excellent condition.

*Level 7 Economic family unit with dependent children:*

Toby and Nicola are both in their mid thirties. They have one child aged 2½, a boy. Both are working full-time in professional positions – Toby as a commercial lawyer and Nicola as a project manager. They bought their first home five years ago, and anticipate paying off their mortgage next year. They intend to move into a bigger house before they have their next child. To enable both of them to work full-time, it is necessary that their son is in childcare; however, this does not put a dent in their budget. They lack none of the basics, and have nearly all of the comforts that they want – they buy what they want as the need arises. They are very satisfied with their standard of living, and feel they have a high standard of living. Their income is more than adequate to meet their needs. Their accommodation is in excellent condition and they like to keep it this way. For instance, they have just repainted and repapered the lounge after their son drew on the walls with his felt tip pen. They have no financial problems, and are lacking no child-specific basics.

*Terminology:*

For descriptive purposes, people in this level can be described as having a 'very good' standard of living.

## **Concluding Comment**

The analysis presented in this chapter provides a basis for the interpretation of ELSI scores. This has been done by providing a contrast between the extent to which EFUs at different living standards levels lack basics and have comforts and luxuries. The analysis is augmented by concomitant information concerning serious financial problems, accommodation problems, and restrictions in child basics for EFUs with children. The statistical results are complemented by a series of illustrative vignettes to demonstrate the way in which different standards of living are typically manifested across the living standards continuum. As would be expected, the results demonstrate a systematic pattern in the mix of basics lacked and comforts attained across the levels. Those with low scale scores reported an enforced lack of a substantial proportion of basics, and had few comforts. Those with high scale scores reported no enforced lacks at all and had most of the comforts they wanted. Similarly, the concomitant information showed a decrease in financial problems, accommodation problems, and restrictions in child basics were associated with an increase in living standards. The calibration results are summarised in Table 6.1, on the following page.

*Table 6.1: Calibration summary, 2000*

ELSI Score Range	ELSI Level	Calibration Results	Label
0-15	Level 1	<ul style="list-style-type: none"> <li>• Lack 35% of basics</li> <li>• Have 10% of comforts/luxuries</li> <li>• Have 47% of the financial problems</li> <li>• Have 35% of the accommodation problems</li> <li>• Lack 22% of the child basics</li> </ul>	'very restricted' living standard
16-23	Level 2	<ul style="list-style-type: none"> <li>• Lack 22% of basics</li> <li>• Have 16% of comforts/luxuries</li> <li>• Have 36% of the financial problems</li> <li>• Have 29% of the accommodation problems</li> <li>• Lack 13% of the child basics</li> </ul>	'restricted' living standard
24-31	Level 3	<ul style="list-style-type: none"> <li>• Lack 11% of basics</li> <li>• Have 24% of comforts/luxuries</li> <li>• Have 20% of the financial problems</li> <li>• Have 23% of the accommodation problems</li> <li>• Lack 5% of the child basics</li> </ul>	'somewhat restricted' living standard
32-39	Level 4	<ul style="list-style-type: none"> <li>• Lack 6% of basics</li> <li>• Have 31% of comforts/luxuries</li> <li>• Have 12% of the financial problems</li> <li>• Have 17% of the accommodation problems</li> <li>• Lack 3% of the child basics</li> </ul>	'fairly comfortable' living standard
40-47	Level 5	<ul style="list-style-type: none"> <li>• Lack 2% of basics</li> <li>• Have 45% of comforts/luxuries</li> <li>• Have 5% of the financial problems</li> <li>• Have 11% of the accommodation problems</li> <li>• Lack 1% of the child basics</li> </ul>	'comfortable' living standard
48-55	Level 6	<ul style="list-style-type: none"> <li>• Lack 0.4% of basics</li> <li>• Have 65% of comforts/luxuries</li> <li>• Have 2% of the financial problems</li> <li>• Have 7% of the accommodation problems</li> <li>• Lack 0% of the child basics</li> </ul>	'good' living standard
56-60	Level 7	<ul style="list-style-type: none"> <li>• Lack 0% of basics</li> <li>• Have 88% of comforts/luxuries</li> <li>• Have 1% of the financial problems</li> <li>• Have 4% of the accommodation problems</li> <li>• Lack 0% of the child basics</li> </ul>	'very good' living standard