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USING BUDGET STANDARDS TO ASSESS THE WELL-BEING OF FAMILIES

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The series is indebted to Diana Encel for her continuing editorial contribution.

Tony Eardley
Editor

Abstract

This paper describes the methods used by the Budget Standards Unit at the Social Policy Research Centre to develop a set of indicative budget standards for a range of Australian households. Some of the results from the project are then compared with estimates of actual household expenditures derived from the Household Expenditure Survey conducted by the Australian Bureau of Statistics. The sensitivity of budget standards to some of the key assumptions and judgements made in developing them is illustrated in two examples: housing costs and spatial variations in prices. The paper concludes that one important contribution that budget standards research can make to discussion of the adequacy of household incomes is in providing a transparent framework for selecting items needed to maintain a particular standard of living and translating them through prices into the budgets required to purchase them.

1 Introduction

The release earlier this year of the results from the Social Policy Research Centre (SPRC) budget standards study represents the latest chapter in a long line of Australian research on budget standards. Over ninety years ago, Justice Higgins relied on a rudimentary budget standard to assist in the determination of the basic wage in his 'Harvester Judgement' - a decision which was to influence the course of working family incomes until the basic wage itself was abandoned in 1967. Thereafter, despite further development of the topic in the 1920s by A.B.Piddington in his work as the Chairman of the Royal Commission on the Basic Wage and subsequently, as well as by Professor Wilfred Prest at the University of Melbourne in the war years, budget standards have fallen out of favour for much of the postwar period.

In the early 1980s, for example, the Social Welfare Policy Secretariat argued in its *Report on Poverty Measurement* (1981: 39) that there was a need for 'debate about the nature and minimum amounts of goods and services which may comprise an austere but tolerable standard of living', but saw severe practical and conceptual difficulties with the budget standards approach - based in part on evidence that those working in welfare agencies seemed unable to agree on what constitutes a minimum standard of living in modern Australian society. In developing its budget standards, the Budget Standards Unit (BSU) research team became all too aware of these practical and conceptual difficulties, but the Budget Standards Report (Saunders et al., 1998) represents an attempt to overcome them in ways which produce new insights into the lifestyles and living circumstances of Australian families at the end of the 1990s.

How well this task has been achieved will be for others to judge. If people find the BSU budget standards useful, then the judgements and assumptions that have been made in developing them will either receive endorsement or be modified. Either way, the standards themselves will gain legitimacy. Some will argue that it is unreasonable to expect those who wish to use a budget standard to be expected to go to the trouble of understanding all of the judgements, limitations and qualifications that apply to them. Indeed, many critics of the budget standards method see the tendency to treat a budget standard as an objective statistic, rather than a normative indicator, as one of its most serious weaknesses - and its greatest danger.

The BSU response to this kind of criticism has been to argue that our budget standards are indicative and intended to generate debate about our methods, assumptions and judgements. The fact that these judgements and assumptions are made explicit in our Report provides a basis for others to debate their relevance. My view is that for a budget standard to be *useful,* it must be *used* and this will only occur when potential users have a degree of *understanding* of how the standard was derived and a degree of agreement with what it represents. The best way to understand how a budget standard was developed and what it means is to use it.

This paper contributes to that process by describing how the BSU budget standards were developed, by comparing the estimates themselves with alternative indicators of well-being and by exploring some aspects of the sensitivity of the standards to price variations. The paper is organised as follows: Section 2 introduces the budget standards concept and explains in general terms how the BSU standards were developed. Section 3 presents some of the results from the budget standards project and compares the estimates with actual household expenditures derived from survey data collected by the Australian Bureau of Statistics (ABS) in its *Household Expenditure Survey* (HES). Section 4 discusses the sensitivity of the estimated budget standards in two illustrative dimensions: housing costs and spatial variations in prices. Section 5 summarises the main conclusions.

2 Explaining the BSU Approach

General Considerations

A budget standard estimates what is needed, in terms of material goods and services, by a particular type of family in order to achieve a particular standard of living in a particular place at a particular time. The definition is important in three regards. First, it emphasises that attention focuses on the *material dimensions of well-being* rather than its psychological or subjective determinants. Secondly, the definition draws attention to the *specificity* of any measure of the standard of living, in the sense that it depends not only on how family circumstances influence family needs and what this implies for what items to include - the ‘what’ issue, but also on the context within which these needs are met - the ‘where’ and ‘when’ aspects. Perhaps most significant of all, the definition highlights the fact that, in principle at least, it is possible to develop a budget standard that corresponds to *any standard of living*.

The budget standards method begins by specifying the needs that have to be met in order to maintain a given standard of living, then identifies the goods and services required to meet these needs, and finally costs them and adds them up to produce a total budget. If provided with this amount of resources (either as cash or perhaps as access to the identified services free of charge) a family of a given type will have the *opportunity*, through consumption of goods and services, to achieve the standard of living to which the budget itself corresponds. (This statement ignores the impact of income tax which, if it would reduce the income corresponding to a derived budget standard, would need to be added to the budget to arrive at the gross income required to purchase the budget out of after-tax income). Whether the family actually chooses the same or a similar or an entirely different pattern of consumption will depend upon the tastes and preferences of family members. However, if a family is denied the resources that correspond to a particular budget standard, than it will not be able to meet *all of the needs* on which that standard is based.

This last observation explains why budget standards have had a long association with research on poverty, where poverty is defined as a level of resources adequate to sustain a minimum standard of living in which only basic needs - physical *and* social - can be met. If this poverty standard is socially endorsed as an adequacy benchmark, then the circumstances of families with insufficient resources to allow them to maintain the standard is a cause for social concern and provides a rationale for social policy intervention. The nature of such intervention will depend upon the specification of the poverty standard and there may be disagreement over this, but such debate is independent of how the budget standards themselves are developed. To estimate a budget standard is one thing; to use it as a benchmark to measure poverty or income adequacy generally is another.

Development of a measure of the standard of living which allows the position of different families to be compared is one of the most challenging tasks confronting social policy research. Although the notion of standard of living features prominently in discussions of social trends and social policies, there are many difficult issues associated with defining and measuring the standard of living. The conceptual problems were highlighted some years ago by this year's Nobel Laureate in Economics - Professor Amartya Sen - in his Tanner Lectures presented in 1985 at the University of Cambridge (Sen, 1988), which he began by observing that:

> While people are not prone to ask each other, 'How is your standard of living these days?' (at least, not yet), we do not believe we are indulging in technicalities when we talk about the living standard of the pensioners, or of the nurses, or of the miners, or - for that matter - of the chairman of the Coal Board. The standard of living communicates, and does so with apparent ease. And yet the idea is full of contrasts, conflicts and even contradictions. Within the general notion of the standard of living, divergent and rival views of the goodness of life co-exist in an unsorted bundle. (Sen, 1988: 1)

Later in these Lectures, Sen explains the difference between a person's standard of living and their well-being, the latter (broader) notion making no qualifications as to the nature of the person's life, whereas the former makes 'exactly that qualification' (Sen, 1988: 28). Sen argues that whereas undertaking 'sympathetic' tasks such as helping others may make a person feel and actually be better off, they do not add to their standard of living. In moving from well-being to living standard, it is necessary to adopt a narrower focus which ignores influences on one's well-being that arise from outside of one's own life. It is well-being in this internalised, objective sense that corresponds to the notion of standard of living that a budget standard attempts to capture.

Some of the practical problems involved in defining and measuring the standard of living in an Australian context were identified by Brownlee (1990) in a literature review conducted in the early stages of the Australian Living Standards Study undertaken by the Australian Institute of Family Studies (AIFS). That study decided to use a multi-dimensional framework covering living conditions in fourteen spheres of life including, in addition to economic resources, health, education, recreation, security, social and political participation, access to information, family relationships *and* personal well-being. Such an approach provides considerable flexibility, but begs the question of how to combine achievements in each of the different spheres into a single measure. The key issue here, as Travers and Richardson (1993: 21) observe, is what weights to use when combining each item. Although this problem can be avoided by sticking with 14 separate indicators, this does not allow the living standards of different groups to be compared and thus provides only limited information for research and policy purposes.

Unlike the AIFS approach, most studies of living standards have adopted a single measure, generally one that incorporates two dimensions: the amount of *resources* available and the *needs* that have to be met. The measure of economic well-being preferred by most economists uses disposable income to reflect the level of available resources, with adjustment by an equivalence scale used to capture the needs of different families. The resulting measure of equivalent disposable income forms the basis of the Henderson poverty framework and is widely used in empirical studies of poverty and income distribution (Saunders, 1997a). Even within this narrow paradigm, some have argued for the use of resource measures other than income (e.g. expenditure - see Saunders, 1997b), or for income to be adjusted to reflect wealth holdings (as is done, in a simplified manner in the after-housing costs poverty line).

In contrast, the budget standards approach treats resources and needs in a closely related but integrated manner. Thus, rather than adjusting resources by the use of an equivalence scale that has been derived independently to provide a measure of the standard of living, the budget standards approach identifies and costs needs by developing a basket of goods and services which, when priced, indicates the level of resources required to purchase the items that satisfy those needs. This seems a preferable approach, in part because it takes needs - and the cost of meeting them - as the starting point for measuring the standard of living, but also because it makes it explicit that additional needs will involve additional resources if the standard of living is to remain constant. Furthermore, the budget standards approach makes it possible to assess the resource cost of meeting *specific* needs (e.g. those associated with working or looking for work, or due to the presence of children) in order for an economic unit such as the family to maintain the same standard of living. This appears to be the sense in which Sen regards the notion of living standard as one which communicates with ease.

The BSU project was set the task of developing a budget standard for a broad range of household types at two separate standards: a modest but adequate standard and a low cost standard. (Each household was assumed to contain either single people or nuclear families, and so the term ‘family’ can be used interchangeably with ‘household’). The *modest but adequate standard* is one which affords full opportunity to participate in contemporary Australian society and the basic options it offers, lying between the standards of survival and decency and those of luxury. It attempts to describe the situation of households whose standard of living falls somewhere around the median standard experienced in the Australian community as a whole. The *low cost standard*, in contrast, is seen as one which may require frugal and careful management of resources but still allow social and economic participation consistent with community standards and enable the individual to fulfil community expectations in the workplace, at home and in the community. Whilst not seen as a minimum standard, the low cost standard is one below which it would become increasingly difficult to maintain an acceptable standard of living because of the increased risk of deprivation and disadvantage. In round terms, the low cost standard corresponds to what is achievable at about one-half of the median standard in the community.

These two concepts have evolved from the budget standards research now conducted in an increasing number of countries. Most of the industrial countries that have developed a budget standard (of which there is now a long list, including Canada, Denmark, Finland, Germany, Sweden, the UK and the US) have adopted a variant of one or both of these concepts, the original specifications of which were initially developed in research undertaken by the US Department of Labour over 70 years ago and refined in the 1980s by the work of the Expert Committee on Family Budget Revisions chaired by Harold Watts (Watts, 1980).

A budget standard must incorporate both normative and behavioural factors. The former may have an official or quasi-official status if they take the form of official guidelines published by the relevant authorities. Many countries, for example, have nutritional guidelines developed and endorsed by such bodies as the National Health and Medical Research Council (NH&MRC) or its equivalent and these can be used to develop a food budget. In other areas, where there are no established social norms available, budget standards are based on expert recommendations which have no official status. The BSU housing budgets, for example, are based on a specification of housing needs derived using a normative occupancy standard which specifies the number of bedrooms required to house households of differing size and composition.

These normative standards must also to some extent reflect the actual behavioural patterns of the population if their relevance is not to be severely circumscribed. In the area of food, for example, a diet consisting mainly of lentils and brown rice may meet the NH&MRC dietary guidelines, but be of little relevance to the actual eating habits of the vast majority of Australians. It is thus often necessary to modify budgets derived directly from the existing normative standards by using behavioural data that ground them in the reality of everyday experience and custom. The difficulty is how this can be achieved without undermining the ability of a budget standard to reflect normative judgments about *needs*, as opposed to the resource *constraints* that also influence actual patterns of behaviour.

Since one of the main uses to which a budget standard can be put is to provide an *independent* benchmark for assessing the adequacy of incomes and standards of living, it is important that the standards themselves do not mirror the effects of the constraints under which different families operate. A budget standard must thus attempt to identify and cost the *needs* of families in ways that are independent of how effectively these needs are being met within current resource constraints, but also be responsive to patterns of behaviour that reflect both needs *and* constraints.

Although there are dangers in relying too heavily on behavioural data when developing a budget standard, there are many areas where this is the only practical option. In the case of clothing and footwear or household furnishings and services, for example, there are few available social norms to guide development of a budget standard. In these instances, all that can be done is to incorporate those which do exist (e.g. in relation to accepted standards of workmanship and materials), but to base the budgets on informed judgments regarding what kinds of items correspond to each standard, what their quality should be, how long they are likely to last and what their price is.

This inevitably means that the purely normative basis for a budget standard is compromised. But this does not make a budget standard any more arbitrary than any other living standard or poverty indicator. As US poverty expert Patricia Ruggles has argued:

> … even though there is no one ‘right’ bundle of consumption needs for the poor that all experts would agree on, we do know enough to eliminate a very large number of clearly wrong answers. In this sense, an expert-determined market basket need not be seen as essentially arbitrary, even conceding that an exact ‘scientific’ determination of needs is not really possible. (Ruggles, 1990: 49)

In practice, the best that can probably be hoped for from a budget standard is that it incorporates those community norms that are in existence but is also informed by expert judgments and existing patterns of behaviour, to the extent that these are known from available data.

The fact that a budget standard runs into criticism as a measure of what it costs to achieve a particular standard of living reflects the inherent difficulty of that task. Once estimated, a budget standard provides not only a monetary measure of equivalence - how much different households require to meet their needs at the same standard of living - but also allows the actual difference between the living standards of different households to be quantified in statements like: ‘Household A’s resources, relative to its needs, means that its standard of living is X per cent (or $Y) above that of Household B, given its resources and needs’. Given the enormous conceptual difficulties surrounding the notion of living standard identified by writers like Sen, it is no surprise that a budget standard *like any alternative measure* is subject to controversy and debate.

The BSU Approach

It is not appropriate to explore here in detail how the BSU budget standards were developed, or to outline the many assumptions, judgments and data on which they are based. These details are spelt out in the 630 pages of the Budget Standards Report, to which interested readers are referred (Saunders et al., 1998). It is, however, worth emphasising that the budget standards estimates were exposed to external review at several stages of their development, including by a Steering Committee comprised of experts in nutrition, health economics, housing, clothing needs, consumer behaviour, social security, the measurement of living standards and family budgeting. The preliminary estimates were also presented to a series of focus groups who provided valuable advice on how the standards related to their own experiences and values and identified areas where revisions were necessary. Finally, the estimates were compared with data on actual expenditure patterns using data from the *1993-94 Household Expenditure Survey* (ABS, 1995a and b), an aspect addressed in more detail later.

In specifying and costing the BSU budgets, and in differentiating between the low cost and modest but adequate standards, the total budget for each household was split into nine main budget areas: housing, energy, food, clothing and footwear, household goods and services, health, transport, leisure and personal care. In areas such as food, clothing and footwear, health and personal care, the budgets were mainly developed separately for each individual and then aggregated to the household level. In contrast, in areas such as housing, energy and transport, the unit of analysis was effectively the household, as it was only possible to specify needs and identify items at this level because most items are consumed jointly by members of the household. In between these two extremes are many items of furniture and consumer durables which meet both individual and household needs.

A budget standard was derived at one or both of the low cost and modest but adequate standards for a range of households that varied according to overall size, the age and gender of individual members, the labour force status of adults and the housing tenure of the household. Not all of these factors can be set independently of each other. Thus, the low cost standards generally assume that adult household members are either unemployed or not in the labour force, whereas the modest but adequate standards assume that at least one (working-age) adult is in full-time employment. In general, the low cost standards apply to households in (private or public) rental accommodation, whereas many of the modest but adequate budgets assumed that the household is a purchaser. (Most of the standards for older households assume that they own their homes outright). In total, 46 separate budgets were developed and costed: 26 at the modest but adequate standard and 20 at the low cost standard.

In determining which items (goods, services and activities) to include in the budgets, an 'ownership rule' was applied, under which only those items owned, services used or activities undertaken by at least 50 per cent of households were included in the modest but adequate budgets. The low cost standards were based on a corresponding 75 per cent rule, this being used in effect to identify which items, services and activities are 'necessities'.

Application of this rule can, in some circumstances lead to an upward bias in the budget standards because of how it is applied in practice. Consider, for example, a situation in which 30 per cent of all families own both a stereo system and a home computer, with the remaining 70 per cent choosing equally between one or the other, but not both. In practice, 65 per cent of the population will own a stereo system (30 per cent plus half of 70 per cent) and 65 per cent will own a home computer, so that application of the budget standard ownership rule would result in *both* items being included (at the modest but adequate standard), since both satisfy the 50 per cent rule. Yet the majority of the population (70 per cent) in fact *choose between* the two items rather than owning both.

This example illustrates the difficulty of dealing with *substitute goods* (which meet similar needs) in developing a budget standard by observing actual ownership patterns. In practice, irrespective of the resources available, all families make choices between goods that satisfy similar needs, yet no one has yet devised a satisfactory method for taking account of this within the budget standards framework.

Another means by which the low cost and modest but adequate standards were differentiated was by using different prices to cost the budgets. In general, the low cost budgets were priced using generic ('No Frills') brands, whereas 'leading brand' items were identified and priced in the modest but adequate budgets. Where there was a range of items that serve the same purpose (e.g. in the case of many larger items of household furniture), a price at the lower end of the range of observed shelf prices in leading retail stores was used when developing the low cost budgets, while something closer to the median price was used in the modest but adequate budgets. Rent levels for renter households at the modest but adequate standard were based on the median rent in the selected location, while the corresponding low cost rents were set at the 25th percentile of the distribution: a procedure similar to that employed in recent US budget standards research (Renwick, 1993; Renwick and Bergmann,1993).

The budgets apply to households living in Sydney and were costed using February 1997 prices. Wherever possible, items were identified and priced at leading retail outlets (so as to make it easier to apply the budgets to other areas or to re-price them in Sydney at a later date). Families were assumed to be living in the Hurstville Local Government Area (LGA) and house prices and rent levels were those applying in that area. Although the Hurstville LGA is reasonably representative of other LGAs in the Sydney metropolitan region in terms of its demographic and socio-economic profiles, the same cannot be claimed for its representativeness in relation to other parts of the country, and this needs to be kept in mind when assessing the results, particularly when they include housing costs (see below).

The above discussion has attempted to explain briefly how the BSU budget standards were developed and to highlight some of their limitations. In focusing attention on the latter, it is all too easy to convey the impression that the estimates require so many qualifications as to make them virtually useless. In the light of this danger, it is worth concluding this section by reasserting some of the *strengths* of a budget standard. The most important of these is that the method identifies what needs have to be met in order to maintain a given standard of living and then costs them. This is a complex and formidable task, but one that has to be confronted in order to put a material dimension and monetary figure on a particular standard of living. The fact that this requires judgments to be made which many will dispute reflects the inherent difficulties associated with obtaining quantitative measures of the standard of living, rather than any fundamental objection to the notion of a budget standard itself.

As Sen also pointed out in his Tanner Lectures (1988), the concept of a budget standard has been endorsed (even if the term itself was not used) by one of the founding fathers of modern welfare economics, Professor Pigou, who Sen quotes as arguing that:

> … a national minimum standard of real income … must be conceived, not as a subjective minimum of satisfaction, but as an objective minimum of conditions … [which] includes some defined quantity and quality of house accommodation, of medical care, of education, of food, of leisure, of the apparatus of sanitary convenience and safety where work is carried on, and so on. (Quoted in Sen, 1988: 14)

And Sen himself considered that identifying someone with a low standard of living in terms of their (lack of) possession of vital commodities seems ‘fair enough’, although he went on to argue that the approach needs to be taken further to consider the relationship between *functioning* - the various living conditions that can or cannot be achieved, and *capability* - the ability to achieve them (Sen, 1988: 20-38).

To summarise, budget standard estimates are controversial because, by attempting to put a monetary figure on the standard of living, they confront a series of conceptual (not to mention practical) problems that have occupied some of the finest economists and other social scientists, from Adam Smith to Alfred Marshall, Karl Marx and Pigou to Sen and his contemporaries. It is thus not only appropriate to add a note of caution to the estimates, but also to assess how sensitive they are to changes in the methods used to derive them. This was the strategy adopted by the BSU in its research, and some further illustrations of this approach are presented later.

3 Results

The BSU Budget Standards

Table 1 presents a sample of the budget standards estimates for a range of households, at both the low cost and modest but adequate standards. The standards shown in Table 1 are a sub-set of all those developed and apply to households living in (unfurnished) private rental accommodation (except for the older families, who are assumed to be outright owners). The low cost standards range from $215 a week for a single woman aged 70 ($294 a week if she is aged 35), up to $732 a week for a couple with four children. The corresponding figures at the modest but adequate standard range from $280 a week for the 70 year-old woman ($383 a week for the younger woman) to $1083 a week for the couple with four children. The estimates provide evidence of considerable economies of scale in larger households. Thus, the budget for a couple with four children is less than double that of the couple

Table 1: The BSU Budget Standards for Different Private Renter Households: February 1997 (Dollars per week)

Household Type[(a)]	Low Cost Standard (LC) ($)	Modest but Adequate Standard (MBA) ($)	Ratio of LC to MBA (%)
Single female (F35)	294.0	383.4	76.7
Couple (M40, F35)	381.6	513.8	74.3
Couple (as above) plus one child (G6)	487.2	608.0	80.1
Couple plus two children (G6, B14)	602.1	817.4	73.7
Couple plus three children (G3, G6, B14)	659.3	977.5	67.4
Couple plus four children (G3, G6, B10, B14)	731.8	1082.7	67.6
Sole parent (F35) plus one child (G6)	371.8	519.8	71.5
Sole parent plus two children (G6, B10)	485.7	690.9	70.3
Older female (F70)[(b)]	215.0	280.1	76.8
Older couple (M70, F70)[(b)]	295.6	387.6	76.3

Notes: a) F35 = female aged 35; M40 = male aged 40, G6 = girl aged 6, B14 = boy aged 14, and so on.
b) Older households are assumed to be outright owners.
Source: Saunders et al., 1998, Tables 12.2, 12.3 and 12.4.

at the low cost standard, and only slightly more than double the corresponding modest but adequate standard. There are also very considerable economies of scale for couples compared with single people.

The final column of Table 1 expresses the low cost standards for each family type as a proportion of the modest but adequate standards for the same family. In the majority of cases, this ratio generally lies between 70 per cent and 75 per cent, yet the definitions of the low cost and modest but adequate standards presented earlier imply that the former should be around 50 per cent of the latter, falling ‘about one-half of the median standard in the community’, compared with a standard designed to ‘fall somewhere around the median’. Table 1 thus suggests that either the low cost standards are somewhat too high, or the modest but adequate standards are somewhat too low (or some combination of the two).

One possible explanation for this which was discussed in the Budget Standards Report (Saunders et al., 1988: 442) is that the notion of the low cost standard is somewhat flawed, in that it may not be possible to specify a budget which *simultaneously* allows ‘social and economic participation consistent with community standards’ whilst falling ‘around one-half of the median standard of living in the community’. Since the budget standards were developed to allow appropriate participation and only compared later with estimates of the median (whose source is explained below), there would seem to be an element of truth in this explanation. This does not mean that the low cost standards are too high. Rather, it suggests that the expectation that one can engage in social participation at a living standard only around half of the median is overly optimistic.

Alternatively, to reduce the low cost budget standards from around 75 per cent to 50 per cent of the modest but adequate standards would require reducing them by about one-third. A cut of this magnitude would have very severe consequences for the standard of living that could be maintained on a low cost budget. It would, for example, drastically reduce the amount of social participation, possibly to the point where the household would be either experiencing social exclusion, or be at great risk of being marginalised.

To take an example from Table 1, to reduce the low cost standard for a couple with two children to one-half of the corresponding modest but adequate standard would involve reducing it from $602.10 to $408.70, or by $193.40. For this family type, a budget of $408.70 would not allow them to meet their housing, energy, food and clothing needs at the low cost standard - these four areas being costed at over $416 in the BSU research (Saunders et al., 1998, Table 12.3). There would thus be no money left over for health, transport, leisure and personal care needs - all of which facilitate social participation - nor would there be any money for household goods and services, a category which includes expenditure on many basic household goods as well as education and child care costs. The example illustrates the implications of fixing a low cost budget at around one-half of the modest but adequate budgets shown in Table 1. (In fact, evidence presented later, in Table 3, suggests that the modest but adequate budgets may themselves be somewhat on the high side, which would make the consequences of setting the low cost standards at half the modest but adequate standard even more serious).

Budget Standards and Living Standards

How do the BSU budget standards compare with the actual standards of living of Australian households? This is an obvious question to pose, and its reply provides further insight into both the level and distribution of actual household material circumstances and the relevance and applicability of the budget standards. However, before such comparisons can be undertaken, it is necessary to ensure consistency between the budget standard estimates and the data with which they are compared. This process raises several important issues that are now briefly discussed.

The data used to compare with the budget standards were taken from the *1993-94 Household Expenditure Survey* (HES) undertaken by the Australian Bureau of Statistics (ABS, 1995a). As noted earlier, the HES data were used as one way of providing a 'reality check' on the preliminary budget standard estimates, although this validation process focused primarily on the *composition* of the standards rather than their overall level and did not thus involve the kind of detailed comparisons that are reported below.

Before the comparisons could be made, it was necessary to make several adjustments to the raw HES data. The first of these involved updating the HES data to February 1997. This was achieved by applying an indexation adjustment equal to the rise in the Consumer Price Index (CPI) between the financial year 1993-94 and the March Quarter of 1997. All negative HES expenditures (which correspond to the revenue earned by selling items) were re-coded to zero so as to conform with the budget standards methodology. The next problem that arose was that the BSU household categories are very precisely defined, particularly in terms of the age, gender and labour force status of individual household members. To restrict the HES data in the same way would result in a sample that is too small to allow meaningful analysis to be undertaken.

It was thus decided to identify a series of HES household categories that, whilst similar to those used in the BSU research, were broader in scope so as to increase the useable sample size. The first step was to restrict the HES sample to only single income unit households, thus corresponding to those specified in the budget standards project. This involved adopting a broader definition of age, so that non-aged adults were defined to include all women under 60 and men under 65, aged adults were all women over 60 and men over 65, and children were defined as being under 15 (with no differentiation by gender). No allowance was made for variations in labour force status, although the BSU categories of household size and structure were replicated. These restrictions mean, for example, that the fourth BSU category shown in Table 1 (the couple consisting of a 40 year-old man, a 35 year-old woman, a 6 year-old girl and a 14 year-old boy) was approximated in the HES data by all two-child couples not living with other people, where the man was under 65, the woman under 60, with two children under 15. Similar approximations were made to all of the other detailed BSU categories shown in Table 1.

The next issue concerns the fact that many items that are recorded in the HES were excluded when the budget standards were being developed. Sometimes, this was for explicitly normative reasons. For example, the budget standards make no allowance for the consumption of tobacco products, for health reasons. Should expenditure on tobacco be excluded from the HES before making the comparisons? Although it can be argued that it should be, so as to achieve as much consistency of coverage and definition as possible, an alternative argument is that if people choose to spend part of their budget on tobacco products, to deduct this expenditure from their resources before comparing the remainder with the budget standards could distort the comparisons. Thus, a household whose *total* expenditure is above the low cost standard has adequate resources to achieve that standard, irrespective of whether or not it chooses to spend part of those resources on tobacco. A similar line of reasoning can be applied to other items of expenditure such as overseas holidays, that are also excluded from the budget standard calculations. To exclude such items from expenditure would produce an underestimate of the resources available, potentially leading to an overestimate of the numbers falling below the low cost and/or modest but adequate budget standards. In the light of these considerations, the HES data refer to total household commodity and service expenditure as reported in ABS publications based on the HES (e.g. ABS, 1995a).

One area where problems arise is in the treatment of expenditure on consumer durables. In collecting and reporting the HES data, the ABS adopts an acquisitions approach under which the full cost payable by each household in acquiring a good or service over the survey period, regardless of whether the household actually paid for or consumed the good or service within the period is reported as expenditure on each item (see ABS, 1995a: 3-4 for an explanation of the acquisitions approach). In contrast, as noted earlier, the budget standards approach to the treatment of the cost of consumer durables is to spread the purchase price over the assumed lifetime of each item. This difference will obviously affect comparisons between the two measures.

Consider, for example, a television set costing $650 that is assumed to last for 10 years. The BSU budgets will include an item corresponding to the cost of a television set equal to $65 a year or $1.25 a week. If, Australian households do in fact keep their television sets for 10 years, and if every household owns one, then everyone meets the 'television standard' implicit in the budget standard. However, the HES will only record the expenditures of those who acquired a new television set during the survey period. If this period is one year, then only 10 per cent of households will, on average, record a positive *expenditure* on television sets, even though television *ownership* will, by definition, be equal to 100 per cent. The remaining 90 per cent of the population will have zero recorded expenditure on television sets over the past year, not because they do not own one, but because the set that they do own does not yet need to be replaced. Yet if expenditure on televisions as recorded in the HES is compared with a budget standard, 90 per cent will apparently fall below this implied television standard.

Such problems will multiply in practice as each consumer durable item is considered, and although there may be some tendency for the errors to average out (because households stagger their purchase of durable replacements to suit their incomes), there is no guarantee that this will be exact. In order to overcome this problem, the durable expenditures recorded in the HES were averaged across the different household types used in the comparisons, and the recorded durable expenditures on each item were replaced by the *average* expenditures on each durable good for each household type. The ABS itself argues that the use of group average expenditures in the case of items purchased infrequently will provide accurate estimates if the groups themselves are sufficiently large (ABS, 1995b).

Before comparing the budget standards in Table 1 with the HES data adjusted as described above, it is useful to describe some of the features of the (adjusted) HES data. Table 2 shows, for each of the household types that broadly correspond to the BSU categories (as defined in Table 1), the percentage of each household type falling below one-half of the *overall* median, between one-half of the median and the median itself and above the median. The estimates shown are based on total household expenditure and household disposable income, with the median in each case being derived after applying an equivalence adjustment equal to the square root of household size (to allow for variations in household need). (For information, the calculated values for adjusted (equivalised) median income and expenditure are $317 and $327, respectively. The corresponding unadjusted estimates are equal to $509 and $522).

The estimates in Table 2 show the extent to which the economic fortunes of different household types vary in Australia. The same general pattern is revealed by both the income-based and the expenditure-based figures, except for older households who appear much worse off, both absolutely and relative to others, when their standard of living is measured by their expenditure rather than their income - a somewhat surprising finding, though one confirmed in other research using the HES by Saunders (1997b). The proportion of the population with incomes or expenditures below one-half of the median is often taken as an indicator of relative low income or poverty. On this basis, Table 2 suggests that the half-median relative

Table 2: The Estimated Distribution of Household Incomes and Expenditures by Household Type: Updated to the March Quarter 1997 (Percentages)

	Adjusted Disposable Income[b]			Adjusted Expenditure[b]		
Household Type[a]	Below one-half of median	Between one-half of median and the median	Above the median	Below one-half of median	Between one-half of median and the median	Above the median
Single non-aged female	18.4	31.0	50.6	16.2	34.9	48.9
Non-aged couple	5.4	24.0	70.6	4.9	27.6	67.6
Couple plus one child	7.0	37.8	55.2	5.7	35.3	59.1
Couple plus two children	7.3	45.3	47.4	4.4	49.4	46.2
Couple plus three children	8.5	60.7	30.9	8.9	50.2	40.8
Couple plus four children	12.7	54.7	32.6	4.7	55.2	40.1
Sole parent plus one child	23.2	56.0	20.8	16.6	60.0	23.4
Sole parent plus two children	27.8	59.3	12.9	24.2	59.6	16.2
Aged single female	7.9	85.0	7.1	37.7	48.6	13.7
Aged couple	7.4	79.4	13.2	19.9	56.0	24.1
Other households	7.5	33.3	59.2	9.3	34.3	56.5
All households	**8.2**	**41.8**	**50.0**	**11.5**	**38.6**	**50.0**

Notes: a) Detailed characteristics of each household are shown in Table 1.
b) Recorded HES expenditure data for 1993-94 have been adjusted as described in the text and updated to the March Quarter 1997 by movements in the CPI.

Source: *1993-94 Household Expenditure Survey*, confidentialised unit record file.

poverty rate in 1997 was just over eight per cent measured on an income basis, or 11.5 per cent when measured using expenditure. The former figure is quite close to the 10.2 per cent poverty rate estimated using a half-median income poverty line by ABS for 1995-96 using data from the income distribution survey for that year (ABS, 1998:125), even though the ABS used a different equivalence adjustment.

On the basis of the expenditure figures, Table 2 implies that around 11 per cent of households spend less than one-half of median expenditure and thus could be considered to be living in relative ‘expenditure poverty’ (Saunders, 1997b). This percentage varies for different household types, ranging from less than five per cent for couples without children and some couples with children, to 24 per cent for sole parents with two children and almost 38 per cent for single aged women. These differences in the percentages falling below the half-median benchmark are mirrored by the percentages lying above the median. Thus, while over two-thirds of couples without children have above-median expenditure, only around 20 per cent of sole parent and older households spend more than the overall median. Overall, the results in Table 2 present an illuminating picture of variations in the level and distribution of the living standards of different families, as measured by their incomes and expenditures relative to their needs.

We now compare actual living standards as measured by the HES data, adjusted as described earlier, with the BSU budget standard adequacy benchmarks presented in Table 1. Three sets of such comparisons are shown in Table 3. The first set of comparisons, shown on the left, restrict the coverage of the HES data to households living in (unfurnished) private rental accommodation, as this is the housing tenure to which the budget standards apply (except for older households where, for consistency, the HES data also refer to outright owners). These estimates are based on a rather small sub-sample, equivalent to just over 38 per cent of the full range of housing tenures for the identified household types shown in Table 2. Furthermore, the incomes of private renter households are generally below those living in other forms of housing tenure, which can serve to distort the impression conveyed by the results.

Because of this latter possibility, the second set of results in Table 3 includes, in addition to private renter households, owners, purchasers and those living in (unfurnished) public rental housing. The adjusted expenditures of these households are still compared with the budget standards of private renter households, partly because the scope of the BSU project means that comparisons are not always possible for other tenures, and even where they are, the BSU housing cost estimates (e.g. for purchasers) are not representative of the circumstances of all households. (It is also worth noting here that the budget standards do not vary greatly with housing tenure, particularly if housing costs themselves are excluded, so that the use of budgets for a single form of housing tenure will not greatly influence the general pattern of results).

Table 3: Percentages of Actual Household Expenditures Below BSU Budget Standard Adequacy Benchmarks for Low Cost and Modest but Adequate Standards: February 1997[(a)]

	Private renter households only		Owners, purchasers and renter households			
	(Inclusive of housing costs)		(Including housing costs)		(Excluding housing costs)	
Household Type[(b)]	Below low cost standard	Below modest but adequate standard	Below low cost standard	Below modest but adequate standard	Below low cost standard	Below modest but adequate standard
Single non-aged female	28.4	53.7	36.3	54.6	25.9	48.8
Non-aged couple	11.2	28.6	10.4	27.6	4.8	17.7
Couple plus one child	31.9	63.7	16.7	45.3	10.3	34.6
Couple plus two children	47.1	82.2	30.4	64.9	12.5	50.7
Couple plus three children	50.7	76.9	36.9	76.7	22.4	69.8
Couple plus four children	43.6	91.1	32.9	85.4	22.8	69.7
Sole parent plus one child	46.7	80.4	56.4	83.0	28.0	77.4
Sole parent plus two children	65.2	94.3	56.5	88.3	41.5	71.6
Aged single female	56.5	79.7	57.3	80.3	56.2	78.0
Aged couple	27.2	55.8	27.2	56.0	23.3	53.4
All households	**36.1**	**62.3**	**28.7**	**54.4**	**20.4**	**46.2**

Notes: a) Recorded HES expenditure data for 1993-94 have been adjusted as described in the text and updated to the March Quarter 1997 by movements in the CPI.
b) Detailed characteristics of each household type are shown in Table 1.

Source: *1993-94 Household Expenditure Survey*, confidentialised unit record file.

The final set of comparisons shown in Table 3 modify the second set by excluding housing costs from the HES expenditure data and the housing budget component of the budget standards. This variant not only addresses the unrepresentative nature of the BSU housing budgets for some tenure types, but also avoids the problems associated with the fact that the BSU housing budgets *as a whole* (which are relevant to the Hurstville LGA in Sydney) are unrepresentative of housing costs in other parts of the country (remembering that the HES data is derived from a *nationally* representative sample). In the light of the lack of correspondence between the HES and

BSU data, and given the data limitations discussed above, this third set of comparisons, while limited in scope, is likely to be the most reliable.

What do the comparisons in Table 3 reveal? On an overall basis, the initial set of estimates indicates that over 36 per cent of private renter households were living below the BSU low cost standard in February 1997, with a further 26 per cent lying between that and the modest but adequate standard. These figures both decline by around eight percentage points when other housing tenure groups are included, and by a further eight percentage points when housing costs are excluded for the broader sample. Thus, the final set of estimates implies that just over 20 per cent of Australian households were unable to maintain a low cost standard net of housing costs in 1997, while around 46 per cent were living below a modest but adequate standard. Both of these latter figures are higher than the corresponding half-median and median expenditure-based comparisons shown in Table 2, although at 20.4 per cent, the percentage below the low cost standard (after excluding housing costs) is virtually identical to the estimated (before housing costs) income poverty rate in 1993-94 of 20.3 per cent derived from the HES data using the Henderson poverty line (Saunders, 1997b, Table 1) and the corresponding ABS estimated Henderson poverty rate of 20.5 per cent in 1995-96 (ABS, 1998: 125).

Within household types, the final set of estimates in Table 3 suggest that the worst off groups, with the greatest incidence of a less than low cost standard of living, are single older women, sole parents with one or two children and single non-aged women. These are the groups that have been identified in conventional poverty research as experiencing the greatest risk of poverty. If affluence is assessed in terms of having the largest percentage above the modest but adequate standard, then Table 3 indicates that, on average, the most affluent households are couples without children, followed by couples with one or two children and older couples. One of the most marked features of all three sets of results in Table 3 that warrants further investigation is the considerable difference between the implied standard of living of older single women and older couples. In terms of absolute numbers, the final set of estimates in Table 3 imply that around 686 000 households containing 991 000 adults and just over 404 000 children were living below the low cost standard in 1997. (These numbers appear on the low side because the analysis is restricted in its coverage to only just over half of all households included in the HES).

Overall, the third set of estimates in Table 3, in combination with the estimates shown on the right hand side of Table 2, confirm that the BSU low cost budget standards are somewhat higher than a level corresponding to one-half of the median standard in the community (as measured by household expenditure). Given that the one-half median benchmark is often used as a relative poverty standard, this implies that the low cost standard may be somewhat more generous than what is generally understood by poverty standard. Even so, the fact that around one-fifth of all households fall below the low cost standard after deducting housing costs, while the ABS (1998) estimates that the same proportion were below the Henderson poverty line (before housing costs) in 1995-96 suggests that the two measures are not that far apart once one removes the distorting effect of the BSU housing budgets.

4 The Sensitivity of the BSU Budget Standards

Several comments have already been made about the need to assess the sensitivity of a budget standard to changes in some of its key assumptions and judgments. Economists have argued the case for sensitivity analysis in areas such as poverty and income distribution in order to assess whether specific conclusions alter when particular value judgements are changed. Such analysis can help to establish how robust claims are that poverty or inequality have risen, to changes in where the poverty line is set or in how the incomes of different groups are combined when measuring inequality. The role and usefulness of sensitivity analysis in the context of the BSU budget standards are now illustrated with the half of two related examples: housing costs and spatial variations in prices.

Housing Costs

It has already been noted that the BSU housing budgets, which were derived for one LGA in Sydney are unlikely to be representative of housing costs in other parts of the country. This was confirmed in evidence provided to the BSU researchers by the focus groups, particularly those living in rural areas (Saunders et al., 1998, Chapter 13), and the variations shown in Table 3 provides further supporting evidence. The BSU housing budgets for private renter households were based on the levels of the median and first quartile rents in the Hurstville LGA for one, two and three bedroom units. The resulting low cost rents (in February 1997) were $130, $165 and $212 a week, respectively. The corresponding rent levels incorporated into the modest but adequate standards were $148, $180 and $230, respectively.

How do these rents compare with rents in other parts of Sydney and in other state capitals? One way to answer this question is to develop a statistical model which seeks to explain the variation in market rents by variables reflecting the quality and location of the dwelling and then to use the estimated model to predict the effect of differing locations on the rents of apartments with *given* characteristics. This approach allows for considerable flexibility but produces results that are only as good as the model on which they are based, although Henman (1998, forthcoming) has shown that the method is capable of providing a useful indication of how the BSU housing (and total) budgets vary with location. An alternative approach, developed below, avoids the use of an estimated model, relying instead on published data on the distribution of rents in different locations around Australia.

The source of these data is The Real Estate Institute of Australia (REIA) whose monthly review of major residential property markets in Australia, *Market Facts* which provides data on the distribution of the rents of three bedroom houses and two bedroom apartments which were *let in the previous month*. The latter REIA data (REIA, 1997) have been used to estimate the first quartile and median rents for different sized apartments in each capital city in February 1997, assuming that the ratio of rents for one and three bedroom units relative to rents for two bedroom units is the same elsewhere in Australia as in the Hurstville LGA. The resulting rent estimates are shown in Table 4.

Table 4: Estimated First Quartile and Median Rents by Capital City: February 1997 (Based on Units Let)[(a)]

Location	First Quartile Rents 1 bedroom unit	First Quartile Rents 2 bedroom unit	First Quartile Rents 3 bedroom unit	Median Rents 1 bedroom unit	Median Rents 2 bedroom unit	Median Rents 3 bedroom unit
	Dollars					
Hurstville LGA	130	165	212	148	180	230
Sydney	147	186	239	173	210	268
Melbourne	100	127	163	124	151	193
Brisbane	110	139	179	129	157	200
Adelaide	79	100	128	103	125	159
Perth	71	90	116	90	110	140
Canberra	102	129	166	119	145	185
Hobart	82	104	134	97	118	150

Note: a) All figures have been rounded to the nearest dollar.
Source: BSU Report plus author's calculations based on data in Real Estate Institute of Australia (1997).

The first thing to note about Table 4 is that it indicates that rents in the Hurstville LGA are actually somewhat *below* those prevailing in Sydney as a whole. The difference in the case of two-bedroom units is around $20 a week (or 13 per cent) at the low cost standard, and $30 a week (or 17 per cent) at the modest but adequate standard. Even greater differences can be seen in capital cities other than Sydney, particularly those outside of the eastern seaboard.

Table 5 takes the analysis a step further by substituting the rental figures shown in Table 4 into budget standards for two of the household types shown in Table 1. For a couple with two children, the low cost standard estimated for the Hurstville LGA falls by as much as $72 a week (12 per cent) for households living in Hobart or by $88 a week (15 per cent) for those living in Perth. For sole parents with one child, the corresponding declines are $56 a week (15 per cent) and $69 a week (19 per cent), respectively. The magnitude of these variations raises the question of whether they would be accepted as the basis for varying the rates of social

Table 5: Illustrative Effects of Location on the BSU Budget Standards for Private Renter Households: February 1997 (Dollars per week)

Location	Couple with two children (girl, 6 and boy, 14) in 3 bedroom unit		Sole parent with one child (girl, 6) in 2 bedroom unit	
	Low cost	Modest but adequate	Low cost	Modest but adequate
Hurstville LGA	602.1	817.4	371.8	519.8
Sydney	627.0	852.4	391.1	547.4
Melbourne	557.1	783.4	336.8	493.1
Brisbane	571.8	789.8	347.9	498.6
Adelaide	524.9	752.1	312.0	469.2
Perth	513.8	734.6	302.8	455.4
Canberra	559.8	776.0	338.7	487.6
Hobart	530.4	743.8	315.7	462.8

Sources: Saunders et al., 1998, Tables 12.2 and 12.3 and Real Estate Institute of Australia (1997).

security support provided to households living in different parts of the country. If the answer to this question is in the negative, the case for criticising a budget standard for failing to recognise the same variations must itself come into question.

The figures in Table 5 illustrate the importance of housing costs in the budget standards, but they should not be accepted uncritically. It is important to recognise, for example, that they provide an incomplete and hence imperfect estimate of the effect of changing location on a budget standard. Of significance here is the fact that changing the location of the household will affect parts of its budget standard other than just housing costs, because several other aspects of the BSU budgets are specific to the assumption that the household lives in the selected location. For example, changes in location will impact upon the household’s transport budget which is based on the distances travelled to shops, schools, places of work, child care centres and other services in a specific locality. More significantly, a new location may mean that the household cannot take advantage of the competitive prices available in major shopping centres, with the result that the entire budget has to be repriced. Movements across State borders are likely to affect the range of State Government services available or how they are subsidised, with obvious implications for a budget standard.

There is also the fact that a different location may change the standard of living that corresponds to a particular type of dwelling, implying that the entire budget may have to be redeveloped. The more that the significance of these kinds of conceptual and practical issues is acknowledged, the clearer it becomes that estimates like those shown in Table 5 are likely to be subject to considerable margins of error. The bottom line of this discussion is that there is no substitute for respecifying and repricing the entire budget for each new location - an exercise that, whilst time-consuming and expensive, is the only way to produce authoritative estimates of the sensitivity of a budget standard to its location.

Spatial Price Variations

The discussion to date has revealed the crucial role played by the pricing structure in determining what it costs to maintain a specific standard of living. Different prices were used in the BSU strategy to distinguish between the low cost and modest but adequate standards and, as the earlier discussion highlights, are a very important component of the housing budget. However, the prices used to do this were those prevailing in Sydney (often those in the Hurstville LGA) and the question that now arises is how one might adjust the Sydney standards so that they more accurately reflect costs in other locations. The housing costs issue just discussed is one aspect of this, but the more general issue of price variations in different locations is now addressed.

Although the discussion focuses on *spatial* variations in prices, it is worth observing at the outset that there are other important aspects of pricing that also warrant further investigation. One of these concerns the adjustment of a budget standard over time as the average price level changes. This issue was discussed in the final chapter of the budget standards report (Saunders et al., 1988), where it was noted that since the BSU budgets apply to Sydney, for consistency they should also be adjusted in line with movements in Sydney prices (at least in the short to medium term). The other aspect of price variations relates to changes in the relative prices of different items in the budgets, as will occur, for example, with the introduction of a GST. This issue is currently being explored within the BSU and will form the basis of a report due for release later in the year.

Despite the interest in the topic, both among researchers and policy analysts, there is relatively little systematic and comprehensive information on the spatial variation in consumer prices. The topic has been studied by EPAC (Ferry, 1991) and King (1995), both of whom have reviewed what evidence is available. Ferry presents estimates of relative costs of living in seven capital cities and shows that they display considerable variation, not only between cities, but also over time and according to housing tenure (Ferry, 1991, Tables 2 to 4). He shows that Sydney prices are consistently well above those in all other cities for renters and home buyers, though not for home owners.

King (1995) presents evidence collected by the Australian Consumers Association on the cost of a grocery basket of brand name products in 23 cities in 1993. The estimates range from around $62 a week to $78, with 17 of the 23 cities falling in the relatively narrow range between $65 and $70 (King, 1995: 59). Interestingly, Sydney falls within this range, but towards the *lower* end, with a basket priced at $67 (King, 1995, Figure 2). On balance, King concludes that:

> … while the evidence on regional variations in the cost of living in Australia is patchy, the available evidence does strongly suggest the possible existence of significant variations in costs other than the well known variation in housing costs. (King, 1995: 66)

On this basis, it would therefore seem that the entire BSU budget standards may need to be repriced if they are to accurately reflect the circumstances of households living outside of Sydney.

The evidence reviewed by Ferry (1991) and King (1995) does not carry the authority of the Consumer Price Index (CPI) estimated and published by ABS. The issue of whether ABS itself should develop regional cost of living estimates (as opposed to estimates of the *movements* in consumer prices in different capital cities, which it currently does provide), has been considered as part of the recent review of the CPI, but was not identified as a priority for future development (ABS, 1997a). The main reason for this appears to lie in the difficulty of estimating appropriate weights at the regional or city level which would be representative of the expenditure patterns of households in the area. Without such weights, it is not possible to derive a reliable index of consumer prices for each region which can form the basis of price and cost of living comparisons.

In spite of this, ABS has been collecting and publishing lists of the average retail prices of selected grocery items in each of the eight capital cities (ABS, 1997b). The list includes the prices of a variety of foodstuffs (including diary products, meat, fresh fruit and vegetables and processed foods), household supplies, petrol, alcoholic drinks and personal care items. Figure 1 shows, for the March Quarter 1997 (when the BSU budgets were costed) the variations in selected items compared to Sydney and the variation in the total cost of all 57 items covered in the ABS publication. Although it is clear that some of the variations cancel out others, the fact that most of the variations in Figure 1 are negative confirms the fact that prices in Sydney are above those in most other cities. Of course, these comparisons suffer from the absence of a method for weighting the different items: simply adding up the price of all 57 items as is done in the final panel of Figure 1 assigns an equal weight to each item, which is clearly not an appropriate representation of actual spending patterns.

Further evidence on grocery expenditure variations is provided in a recent study conducted by A.C. Nielsen for the Australian Supermarket Institute (ASI, 1998). Participants surveyed as part of the study were asked: *‘On average, approximately how much would you say you spend on all the household’s food and grocery per week?’*. The highest mean response

Figure 1: Price Differences for Selected Commodities: March Quarter 1997
(Percentage difference from Sydney prices)

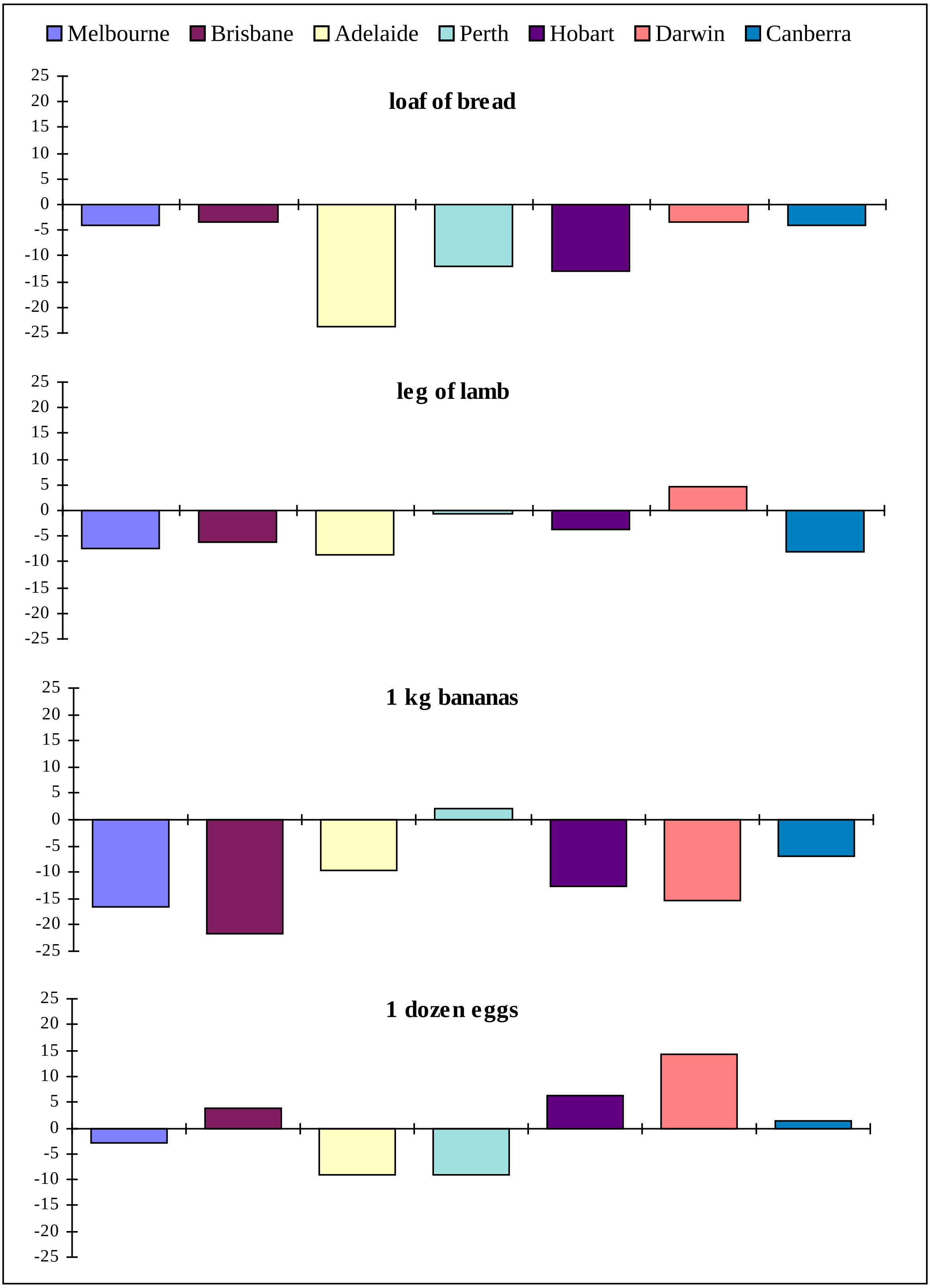
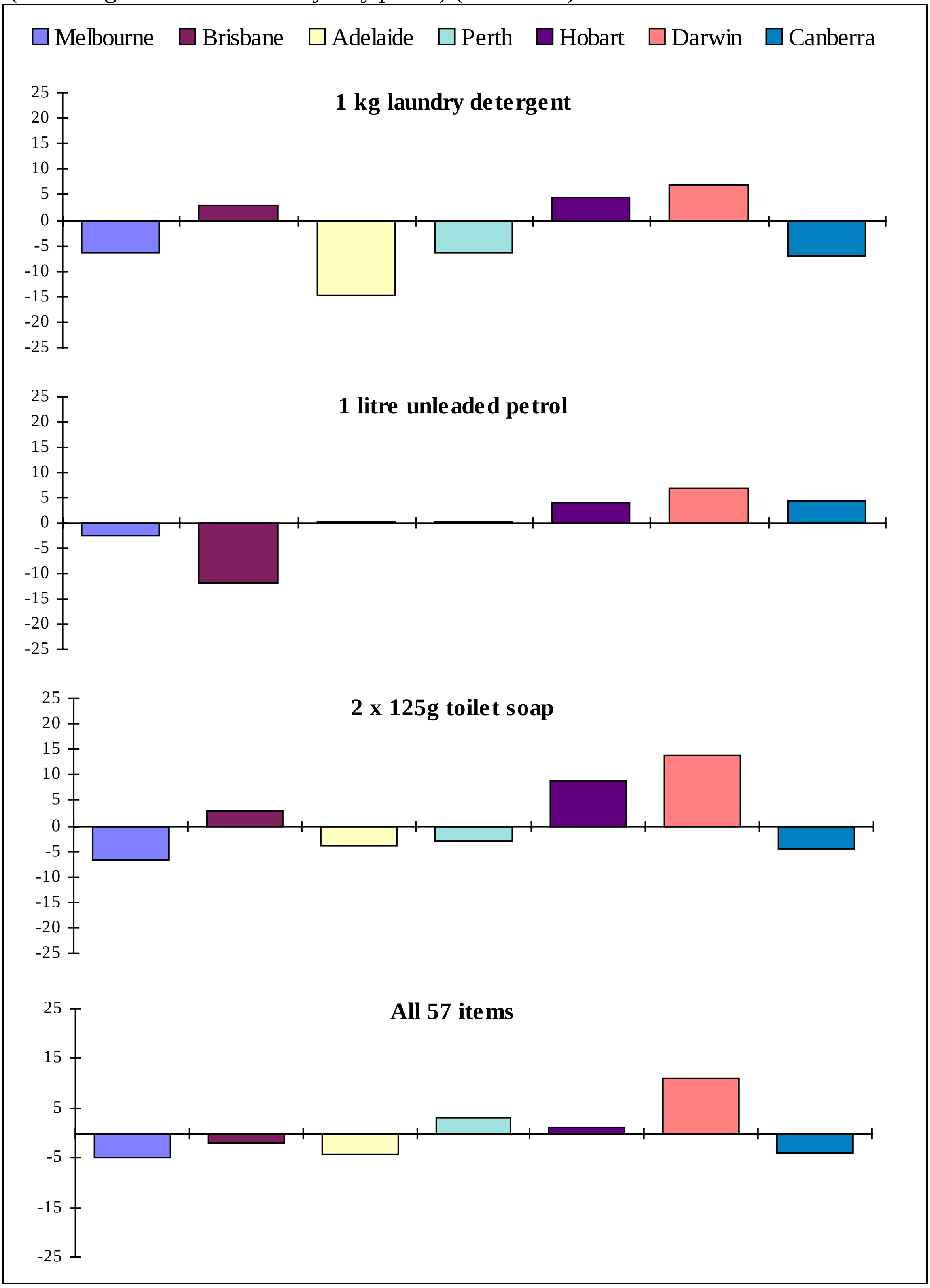


Figure 1: Price Differences for Selected Commodities: March Quarter 1997
(Percentage difference from Sydney prices) (Continued)



($137) was provided by those living in Sydney. This was 8.7 per cent above the national average, with the averages for other cities falling below the Sydney figure by 5.1 per cent (Melbourne), 10.2 per cent (Brisbane), 28.5 per cent (Adelaide), 16.1 per cent (Perth) and 18.2 per cent (Tasmania). These figures refer to variations in *expenditure* and thus incorporate differences in both the prices paid and the quantities consumed and (because Sydney households tend to have the highest average incomes and thus consume more) will overstate the differences in prices alone. They are also based on a smaller sample than the ABS data summaries in Figure 1 and are thus somewhat less reliable. Even so, the available comparisons provide further support to King’s (1995) conclusion that there is evidence that prices vary systematically by location. It is also worth observing that Sydney appears to have *both* the highest housing costs and the highest grocery costs. There is no general tendency for relatively low housing costs to be cancelled out by relatively high grocery prices, although Table 4 and the ASI figures quoted above suggest that this does occur to some extent in places like Adelaide, Perth and Tasmania.

In summary, the available evidence on spatial price variations suggests that it would be necessary to reprice the Sydney-based BSU budget standards in each capital city (and possibly in regional centres also) before they can be used to provide a basis for assessing the adequacy of the incomes of households living in different parts of Australia. This is a big ask and not one that is currently capable of being addressed by any other living standards indicator. Once again, it is important not to be too critical of what a budget standard *cannot* do in achieving what no other measure has yet succeeded in doing. Having said this, however, it is clear that there is considerable scope for further research on the spatial aspects of budget standards in order to improve their accuracy and relevance.

5 Conclusion

This paper has described how the BSU budget standards were developed, discussed some of their strengths and weaknesses, and illustrated what role budget standards can play in assessing household living standards and the adequacy of household incomes. The single most important contribution that budget standards research can make to these issues is in providing a coherent and transparent framework for thinking about the items needed to maintain a particular material standard of living and translating them through prices into the budgets required to purchase them.

The discussion in this paper has been motivated by the view that budget standards have a very important role to play in the living standards debate in Australia. Having said that, there is considerable room for improving the existing budget standards, possibly by changing some of the judgements that underlie them, but also by repricing them in cities and regions other than Sydney. The results presented in Sections 3 and 4 of the paper suggest that this has the potential to greatly influence what conclusions can be drawn about the adequacy of household incomes in relation to the low cost and modest but adequate standards. The budget standards research already undertaken is an important step forward, but there is much more work to be done and many more challenges to be faced along the way.

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