The author would like to acknowledge the contribution of his colleagues at the Social Policy Research Centre, specifically Michael Bittman, Bruce Bradbury, Jenny Chalmers and Marilyn McHugh, who were involved in the budget standards project. Michael Bittman also provided several helpful comments on this paper and George Matheson was responsible for the statistical computations reported in Section 5. The usual caveats apply.
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The series is indebted to Diana Encel for her continuing editorial contribution.

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Tony Eardley
Editor
Abstract

The completion of the recent SPRC budget standards study represents the latest in a long line of Australian budget studies. Although the modern research on budget standards is more sophisticated than budget analyses conducted earlier this century, there is considerable similarity in the underlying concepts and methods. The first half of this paper reviews the budget standards research undertaken by the 1920 Royal Commission on the Basic Wage and as part of a study of household income and saving undertaken at the University of Melbourne in the 1940s. The concepts developed in these two studies relate to the modest but adequate and low cost standards, respectively, that have been developed and costed in the 1990s research. The concepts themselves can be traced back to ideas developed in the US Department of Labour in 1919 and revised since then in the 1940s and 1980s. When the Australian budgets for 1920 and 1942-43 are updated by movements in prices and by the growth in real incomes to 1997, there are some remarkable similarities with the new SPRC estimates, particularly at the modest but adequate standard. The second half of the paper presents an update of previous research analysing changes in the Australian income distribution between 1942-43 and the 1990s. Using data from the 1995-96 Survey of Income and Housing Costs, the analysis confirms the earlier finding that there appears to be very little change in the distribution of gross income among individuals in Australia over this period.
1 Introduction

In general terms, the material standard of living of a household is determined by three factors, the resources available for consumption, the needs which have to be met, and the cost of purchasing the goods that satisfy those needs. Most of the modern literature on inequality and economic well-being is based on measures of after-tax income adjusted for need, or equivalent disposable income. Its focus is on establishing the adequacy of resources (as measured by disposable income) in meeting relative material needs (as captured by an equivalence scale). These studies tend to ignore variations in price levels, on the grounds that these are likely to be of second order importance relative to changes in incomes and taxes.

A parallel stream of research on household budgets addresses adequacy and related issues not by comparing available resources with independently derived indicators of relative need, but by identifying and costing household needs in order to estimate the budgets required to purchase the goods and services which satisfy them. In the budget standards approach therefore, resources or income are the end result of a process that begins by identifying needs and costing them. In contrast, the conventional approach takes resources as given and evaluates these relative to the needs that have to be met by each household.

This paper presents results for Australia derived from both methods. In line with the theme of this Session, the focus is on longer term trends in both measures. This will involve comparing recent estimates of income distribution with those produced in an earlier period, and presenting a similar though more detailed comparison of recent budget standard estimates with those produced earlier this century. Because, in Australia at least, budget standards have a longer history than income distribution statistics, these particular comparisons are accorded more emphasis in the analysis, although this should not be interpreted to mean that they are more important.

One of the main aims of this paper is to describe recent Australian budget standards research and to compare its results with similar studies conducted in the first half of the century. Section 2 provides a brief overview of the historical development of budget standards research in Australia and its role in wage determination and poverty measurement.
Section 3 describes the recent budget standards project, while Section 4 compares some of its results with those produced in the earlier studies. In Section 5, the focus of the paper shifts to conventional measures of income distribution and what these reveal about the extent and nature of the longer term distributional trend in Australia. The main conclusions of the paper and the limitations that apply to them are summarised in Section 6.

2 An Overview of Earlier Australian Budget Standards Research

The budget standards approach has been used primarily in research on poverty, where the method was originally developed by Seebohm Rowntree in his pioneering study of poverty in York, England (Rowntree, 1901). Until recently, the budget standards method has been somewhat neglected - in large part because its inherently normative content sits somewhat uncomfortably with the demand for more ‘objective’ studies of poverty. However, the budget standards approach has been experiencing a revitalised presence within poverty and income adequacy debates in a number of countries. This partly reflects general acceptance of the fact that since all poverty measures embody a normative element, the budget standards approach at least has the advantage that its judgements are transparent and can be varied and results subjected to sensitivity analysis.\(^1\)

Although the budget standards approach originated in England, it had an immediate and lasting impact in Australia. The method was applied by the Commonwealth Court of Conciliation and Arbitration in 1907 to assist in the determination of a basic wage that was ‘appropriate to the normal needs of the average employee regarded as a human being living in a civilised community’. Regular updating of the measure continued until the basic wage concept itself was formally abandoned in the 1960s.

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\(^1\) Budget standards have been estimated and are now used to inform a range of policy issues in a variety of countries, including Canada, the United States, Denmark, Germany, Norway, Sweden, the United Kingdom, Hong Kong and Malaysia.
In the ‘Harvester Judgement’ of 1907, Justice Higgins, President of the Court of Conciliation and Arbitration, set a basic wage by identifying the needs of working families and costing them. Several subsequent official enquiries and independent studies produced improvements in the method and its application to the determination of minimum wages and their adjustment over time. The last of these took place in the 1940s. Thereafter, the method was largely ignored until earlier this year, when a comprehensive set of indicative budget standards for a range of Australian households was developed and published (Saunders et al. 1998).

Budget standards have also figured heavily in the development of Australian poverty research. Ronald Henderson, the founding father of Australian poverty studies, later described by Peter Kaim-Caudle as ‘well on the way to becoming the Australian Beveridge’ (Kaim-Caudle, 1975: 406), was allegedly prompted to establish his original study of poverty in Melbourne on hearing from a colleague that there was no Australian equivalent to Rowntree on poverty (McCaughey and McCaughey, 1997: 10). Henderson established a poverty line set equal to the basic wage (plus family allowance or child endowment as it was then called), a proposal that was embraced in the 1970s by the Poverty Commission (of which Henderson himself was Chairman) and still remains widely used in Australian poverty research (Saunders, 1994).²

In the six decades between the Harvester Judgement and Henderson’s original poverty study, several other attempts were made to develop and cost household budgets. The report of an Inquiry into the Cost of Living in Australia in 1910-11, undertaken by the Commonwealth Bureau of Census and Statistics (now ABS), was published in 1911 (Knibbs, 1911). In 1919, following controversy over the level of the basic wage reflecting the imperfections of its adjustment to movements in retail prices, a Royal Commission on the Basic Wage (RCBW) was established under the Chairmanship of A.B.Piddington (RCBW, 1920). The Commission estimated the cost of living of ‘a man with a wife and three children

² The links between minimum wage determination and poverty research, and the impact of both on the determination of means-tested social security benefit levels explain why writers such as Castles (1985) have described Australia as a ‘wage earner’s welfare state’.
under fourteen years of age’ to be around 50 per cent higher than Higgins’ Harvester standard - an amount which according to the Commonwealth Statistician of the time (Knibbs) would, if paid to workers, have more than absorbed the nation’s entire national income.3

In 1941, a Melbourne University Economics Professor undertook a project on household budgets which was completed in 1945 but not published until some years later (Prest, 1952). That study adopted a limited form of the Rowntree methodology to cost minimum food and clothing budgets for a sample of Melbourne households. The author also provided estimates of poverty by comparing ‘available income’ (income after the payment of rent) with a budget that did not include housing costs (Prest, 1952, Chapter X) an idea that was to be taken up later in the work of Henderson.4

The 1907 Harvester Judgement set the basic wage at a level of seven shillings per working day or 42 shillings per week. Justice Higgins arrived at this figure by studying the actual budgets and living costs of nine families containing between one and seven children (Macarthy, 1969, Table 2). Since the nine families contained an average of just over three children, the rounded figure of 42 shillings per week was seen as applying to a family of ‘about five’ - a rather imprecise notion which was interpreted for practical purposes to refer to a family of exactly five (two adults and three children).5

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3 The claim was made in a Memorandum prepared by the Commonwealth Statistician to the Prime Minister, sections of which are quoted in Piddington (1921: 22); see also Hancock, 1998. The basic wage recommendations of the Piddington Royal Commission Report were not implemented (possibly wisely, in light of their cost!), although a proposal to automatically index the basic wage to quarterly price movements was. Subsequent work by Piddington (1921) led him to propose the introduction of child endowment as a necessary complement to the basic wage, a suggestion which prompted the introduction of a modest scheme of child endowment for the federal public service some 20 years before universal child endowment was introduced in 1941.

4 Estimates of the extent of after-housing poverty still feature heavily in Australian poverty research (see Bradbury, Rossiter and Vipond, 1986; King, 1997).

5 As Macarthy has shown, it is not easy to derive the daily average figure of seven shillings from the actual family budgets used by Higgins - most calculations producing a somewhat higher figure (Macarthy, 1969, Table 2).
Relatively little new research has been conducted on budget standards in Australia over the last fifty years. A report on poverty measurement undertaken in the late 1970s by the Social Welfare Policy Secretariat (SWPS) cast doubt on the value of the method because of its reliance on ‘arbitrary judgements’ which could, it was claimed, be used to construct budgets to ‘show almost anything’ (SWPS, 1981: 36). That report also failed to discover any degree of agreement among welfare agencies as to what constitutes a ‘minimum decent budget’, casting further doubt on the practicality of the method.

Despite this negative assessment, independent researchers have continued to argue that there is a role for budget standards, primarily because they make explicit the value judgements that are required in defining a constant standard of living across different households - an issue which is of fundamental importance when developing an equivalence scale (Manning, 1984). Partly as a consequence of this, and in recognition of the limitations of alternative methodologies for developing adequacy measures, in 1995 the Australian Department of Social Security (DSS) commissioned the Social Policy Research Centre (SPRC) to undertake a major study of budget standards, some of the details and findings of which are summarised later.

The 1920 Royal Commission

Because of the ambiguities over the data used by Higgins, plus the fact that the household budgets themselves are not sufficiently detailed to allow comparison with later estimates, they are not utilised in the analysis presented below. Instead, the budget standards studies undertaken by the 1920 Royal Commission and by Prest during 1941-43 will be used as the basis of comparison with the recent estimates.

In an initial attempt ‘to get as much light as possible on the current habits and standards of the people’ (RCBW, 1920: 18) the 1920 Royal Commission distributed over 9000 household budget forms requesting detailed information on spending patterns over a four week period - the forerunner to today’s Household Expenditure Survey. The response was disappointing. Only about 400 forms were returned, and examination of these showed them to be ineffective even in determining the general level
of expenditure of the household. As a result, the Commission decided to make use of the returns ‘not as guides to what the standard of living ought to be, but as affording indications of tendency in the distribution of expenditure’ (RCBW, 1920: 18).

The Commission then set out to identify what was required in order to obtain the same ‘reasonable standard of comfort’ as that used in the Harvester Judgement and to estimate what it would cost to achieve such a standard - in other words to develop a normative budget standard. The standard itself was intended to approximate ‘such standards of comfort as are attained, according to general usage, in a household which lives moderately and without either privation or extravagance’ (RCBW, 1920: 18). Three alternative specifications of this standard were considered, a pauper or poverty level, a minimum of subsistence level, and a minimum of health and comfort level.

Of these, the third was selected as providing the measure that corresponds most closely to one that ‘will provide real but moderate comfort’ in each element of the household budget. The chosen standard was based upon the concept of a level of ‘minimum health and comfort’ developed by the US Department of Labour in 1919. That standard was described as representing:

… a slightly higher level than that of subsistence, providing not only for the material needs of food, shelter, and body covering, but also for certain comforts, such as clothing sufficient for bodily comfort and to maintain the wearer’s instinct of self-respect and decency, some insurance against the more important misfortunes - death, disability and fire - good education for the children, some amusement, and some expenditures for self-development…It [is] intended to establish a bottom level of health and decency below which a family can not go without danger of physical and moral deterioration. (Quoted in RCBW, 1920: 17)
Like the Australian Harvester standard, the US ‘health and decency’ standard issued by the Bureau of Labour Statistics (BLS) in 1920 also applied to a family of five (Watts, 1980: 2).

The three main areas for which detailed budgets were developed by the Royal Commission were housing, clothing and food. The housing budget was based on the average rent for a five-roomed house ‘of a reasonable standard of comfort’ in each of the major State capital cities. The clothing budget was developed by identifying the requirements for a reasonable standard of comfort for each individual, pricing each identified item, assigning an expected ‘duration’ or lifetime to it, and then deriving an implied annual cost by amortising the purchase price over the assumed lifetime. This is identical to the procedures used in contemporary budget standards studies (Bradshaw, 1993a). An across-the-board reduction in clothing prices of three per cent was allowed to reflect the cheaper clothing items bought by many households through sale-time purchases. The food budget was developed from information on the calorific requirements of each household member, these calculations being compared with the actual budget returns ‘in order to insure that the necessary number of Calories should be obtained by a diet which was in conformity with the ordinary habits of the people’ (RCBW, 1920: 36).

A number of additional items were added to these three main items to derive the final budgets. These included fuel and lighting, groceries other than food, an allowance for the renewal of certain household items, spending on union and lodge dues, medical and dental costs, domestic assistance, recreation, amusement and library costs, fares, costs of haircuts and school requisites. In sum, these additional items accounted in total for less than 17 per cent of the overall budget; see Table 3 below.

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6 A single food budget was estimated for an adult male and then used to derive the corresponding budgets for a woman and children of different gender and age using a ‘nutritional equivalence scale’ which expressed the calorific requirements of women and children as percentages of those of the man, with the family’s total needs being expressed in ‘man-units’, or what would now be called ‘equivalent adults’ (RCBW, 1920: 35).

7 Many other items were also considered for inclusion in the calculated budgets, but eventually rejected; see RCBW, 1920: 45-8.
The 1940s Melbourne Study

Although the general approach adopted by Prest in his study was similar to that used by the Royal Commission some twenty years earlier, there were also several important differences. One of these reflects Prest’s decision to exclude housing costs because of the difficulties of estimation, particularly in the case of owner-occupiers. In the light of these difficulties, Prest decided:

… to abandon any attempt at assessing the cost of minimum housing needs, and to secure comparability between the incomes of the various classes of occupiers by deducting actual expenditure upon housing from the incomes of purchasing owners and tenants. (Prest, 1952: 65)

The budgets developed by Prest thus cover two main areas - food and clothing - plus a ‘miscellaneous’ category that includes a number of unspecified household items. The underlying standard adopted was less generous than that used by Piddington, as Prest himself was keen to emphasise:

Thus our standard does not purport, like the Piddington standard, to be an optimum or even a desirable objective of social policy, and in particular it is not suggested that all those whose incomes are sufficient to provide these minimum needs have reached a desirable standard of living. All that is asserted is that those whose net incomes are normally insufficient to provide such needs are living in ‘poverty’, in the sense that they must be either inadequately fed or inadequately clothed, unless they are assisted by public or private charity. (Prest, 1952: 66)

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8 The ‘miscellaneous’ category accounted for between 26 per cent and 31 per cent of the food and clothing budgets estimated by Prest (the difference depending upon the year of estimation).
The Prest standards thus correspond more closely to the ‘pauper or poverty’ levels, or to the ‘minimum subsistence’ levels discussed (but rejected) by Piddington (see above). This is borne out by the estimates themselves, where Prest notes that his food and clothing standards fall short of those developed by Piddington. Finally, it needs to be emphasised that Prest’s estimates only apply to households living in Melbourne.

3 An Australian Budget Standard for the 1990s

The origins of the recent Australian budget standards project can be found in a broader program of work on the development of a framework for assessing the adequacy of social security payments undertaken by the Australian Department of Social Security (DSS, 1995). After reviewing alternative methodologies for assessing the adequacy of social security payments, two complementary approaches were identified. The first of these is a descriptive approach which involves comparing the living standards of different groups of DSS clients and other low-income households in order to estimate the relative adequacy of different classes of payment and other incomes.

The second, prescriptive approach is designed to provide a more specific and independent measure against which the adequacy of payments can be assessed. Of the alternatives considered in the DSS report, preference was given to budget standards, although it was acknowledged that it would be subject to several limitations related to its focus on the material aspects of well-being, the large number of subjective decisions required to develop a budget standard, and the time needed to develop and maintain the standards themselves (DSS, 1995: 23-4).

The DSS was cautious regarding the role of a budget standard in the broader adequacy debate, arguing that:

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9 In fact, as Prest (1952: 66) acknowledges, his clothing standards were below the 1942 clothing ration that applied in war-time Australia.

10 This strand of research has been developed in a pilot project undertaken by Travers and Robertson (1996).
... Budget Standards are essentially illustrative. They should not be seen as an attempt to define an adequate standard of living (or poverty line) ... but rather as an attempt to outline the financial consequences of a specified and defined standard. Confusion over this distinction may result in Budget Standards being seen as an attempt to prescribe a particular pattern of consumption for low income families. (DSS, 1995: 46)

This latter distinction is important. The main purpose of a budget standard is to estimate the household budget needed to purchase the goods and services required to satisfy the normatively determined needs corresponding to a given standard of living, not to determine how incomes should actually be spent. A budget standard thus estimates the income required to provide people with the opportunity to meet their needs but does not attempt to prescribe the actual consumption patterns of households.\(^{11}\)

The research was undertaken within a Budget Standards Unit (BSU) established as an autonomous unit within the SPRC specifically for this purpose. The project took as its template the budget standards that have recently been developed by the UK Family Budget Unit (Bradshaw, 1993b). The general approach adopted was to modify the existing UK budgets to suit Australian circumstances and data availability. This incremental developmental approach mirrors what other countries have done: the UK budget standards themselves drew heavily on studies completed recently in Sweden, Canada and Norway (Bradshaw, 1993b: 4).\(^{12}\)

\(^{11}\) It is, however, an implication of the budget standards methodology that if a household chooses to exceed the derived standard in one area of the budget, this must involve consuming less than the derived standard in another area. As a result, the household may be better off in a welfare sense, but will not satisfy all of the norms that are reflected in the budget standard.

\(^{12}\) Professor Jonathan Bradshaw, Director of the Family Budget Unit at the University of York was appointed external consultant to the BSU project and provided advice and assistance throughout its duration. He bears no responsibility for the outcomes of the research, including that described here.
The two main strengths of the budget standards method which underlie its recent revival are its transparency and its flexibility. Because the standards are developed from the ‘bottom up’ by specifying each and every item required to attain and maintain a particular standard of living, it is possible to make the many assumptions and judgments that underlie a budget standard transparent. Budgets can thus, in principle at least, be developed corresponding to any standard of living, not just a poverty standard. Furthermore, modern computer technology makes it a relatively easy task to explore what difference changes in these assumptions and judgments make to the results. At the very least, it is possible to assess the sensitivity of a developed standard to variations in the crucial assumptions and values on which it is based.

It is inevitable that a budget standard covering all dimensions of material well-being will be based on a complex series of judgements, about which there will always be disagreement. Writers such as Callan and Nolan (1991) and the recent US expert panel on poverty measurement (Citro and Michael, 1995) have expressed concern that a budget standard can lead to confusion and misinterpretation because the complexity of its statistical sophistication conveys an impression of precision and objectivity that is unwarranted. The method also sits uneasily with the neoclassical theory of consumer choice which emphasises the role of individual preferences in the determination of utility-maximising consumption patterns.

Against this, one of the strengths of the method lies in the fact that many of the judgements on which a budget standard is based will already have been articulated in various areas of public life. These judgements are best described as being informed, rather than arbitrary in the normal meaning of the term. Other judgments may have less legitimacy, but can at least be subject to sensitivity testing if they are made transparent within a flexible framework.

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13 As Patricia Ruggles has observed: ‘... 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, one of the most difficult problems confronted when developing a budget standard concerns how to ensure that the standard of living to which the standard refers is constant across the different areas of the budget and across different households. How can one guarantee, for example, that the standard to which the food budget refers is the same as that which underlies the clothing, transport or housing budgets? How can one ensure that the budgets for single people, couples (with or without children), or sole parent households refer to the same standard of living? Unless these can be assumed to be held constant across different household types, not only will the budget standards themselves be problematic, their use to derive an equivalence scale and estimates of the cost of children will be flawed. Yet achieving such cross-budget and cross-household consistency presents a major challenge for budget standards research.

Two separate budget standards were derived in the BSU research. The *modest but adequate standard* was defined as one which affords full opportunity to participate in contemporary Australian society and the basic options it offers. It is seen as lying between the standards of survival and decency and those of luxury as these are commonly understood. It attempts to describe the situation of a household whose living standard falls somewhere around the median standard of living experienced within the Australian community as a whole.

The *low cost standard* represents a level of living which may require frugal and careful management of resources but would 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 it should not be seen as a minimum standard, the low cost standard is intended to describe a level below which it becomes increasingly difficult to maintain an acceptable

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14 The term ‘household’ is used henceforth, even though the BSU budget standards relate to single family households so that the term ‘family’ is equally applicable.

15 The modest but adequate standard was first used by the US Bureau of Labor Statistics as far back as 1948, where it was described as sufficient ‘to satisfy prevailing standards of what is necessary for health, efficiency, the nurture of children and for participation in community activities’ (quoted in Bradshaw, 1993a: 4). It corresponds to the *prevailing family standard* developed later by the Watts Committee in the US (Watts, 1980).
living standard because of the increased risk of deprivation and disadvantage. In round terms, the low cost budget can be thought of as corresponding to a standard of living which is achievable at about one-half of the median standard for the community as a whole.\textsuperscript{16}

A budget standard was derived at one or both of these two levels 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. Some of these decisions were not independent. Thus, the low cost standards generally assumed that the adults are unemployed or not in the labour force, whereas the modest but adequate standards assumed that at least one adult is in full-time employment (unless they had passed retirement age).\textsuperscript{17} In general, the low cost standards apply to households who are renting (either private or public), whereas many of the modest but adequate budgets assumed that the household is a purchaser.\textsuperscript{18}

In total, 46 separate budgets were developed and costed: 26 at the modest but adequate standard and 20 at the low cost standard. In specifying and costing the budget standards, and in differentiating between low cost and modest but adequate, 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 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. In between these two extremes lie the household goods and services and

\textsuperscript{16} The low cost standard embodies elements of both the social minimum standard and the lower living standard developed for the US by the Watts Committee (Watts, 1980: 59).

\textsuperscript{17} In two cases, the low cost standard assumed that one adult is in employment, in an attempt to derive an estimate of the cost of working.

\textsuperscript{18} The budget standards at both levels for older households (aged 70) assume outright home ownership, reflecting the high rate of home ownership among older Australians.
leisure budgets, both of which include a combination of individual and household items.19

Development of the budgets relied upon a combination of normative and behavioural inputs. Reliance on the former was restricted by the lack of articulated standards in many areas. Despite this, the food budget was based on the recommended dietary in-take requirements developed and endorsed by the National Health and Medical Research Council, while the housing budget began by estimating housing needs from a normative occupancy standard which specifies the number of bedrooms required to house households of differing size and composition. Other aspects of the research ensured that the items included conformed with existing safety and officially endorsed quality assurance standards. All household members were assumed to be ‘in good health’ in the sense that they had no special on-going health needs and this assumption was also reflected in the diets underlying the food budget and in the amount of exercise included in the leisure budget.

In determining which items (goods, services and activities) to include in the budgets, a simple ‘ownership rule’ was applied. Under this rule, only those items owned, used or 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 to identify which items are necessities. In practice, application of both versions of the ownership rule was severely restricted by available data.

Another means by which the low cost and modest but adequate standards were differentiated was that many of the items included in the low cost budgets were assumed to be of lower quality and/or price than those in the modest but adequate budgets. In general, the low cost budgets included generic (‘No frills’) brands, in contrast to the ‘leading brands’ costed in the modest but adequate budgets, and larger items of household furniture and effects were priced at the lower end of the range of

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19 The transport budget was developed to meet the needs of the household, although transport needs depended crucially on the characteristics of each household member (particularly their employment and education status), which in turn determined their transport needs.
observed shelf prices in leading retail stores.\textsuperscript{20} The rent levels included in the modest but adequate housing budgets for renter households were set at 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 by Renwick (1993) in her work on budget-based poverty measures for the US (see also Renwick and Bergmann, 1993).\textsuperscript{21}

As the budgets were developed, they were validated against data on actual household expenditures (as recorded in the Household Expenditure Survey; see ABS, 1995a) and were modified in the light of feedback provided by a range of focus groups comprised of people from the household types to which each budget applied. There were, however, a number of instances where normative criteria were used to justify a decision not to vary the estimates in the light of focus group feedback. For example, the budgets make no allowance for smoking and include food profiles that differed from what most Australians actually eat (more meat and less fruit and vegetables were the most common differences highlighted by the focus groups).

This is as it should be. The aim of a budget standard is to develop a standard based on normative criteria relating to the needs of households. Although these are informed by actual spending patterns and behaviour, to assign too great a role to the latter would undermine the normative content that is the \textit{raison d’etre} of a budget standard. It would also mean that the standards would become overly influenced, not only by the actual choices of households, but also by the impact of the constraints they face. This would again undermine the role of a budget standard in providing a prescriptive income adequacy benchmark.

\textsuperscript{20} This involved a considerable amount of time and effort looking in shops and recording actual shelf prices. There is a good deal of truth in Jonathan Bradshaw’s observation that a keen interest in shopping is a positive advantage when developing a budget standard!

\textsuperscript{21} A downward adjustment was made to the published data on the distribution of rent levels to reflect the fact that these data refer to access rents rather than sitting rents. The adjustment factor (eight per cent) was determined on the basis of unpublished information provided by DSS.
Where items have an assumed lifetime of more than one year, the budget standards approach involves specifying an assumed lifetime for each item and then amortising the purchase price over that lifetime. For example, the modest but adequate budgets include a refrigerator which costs $1429 and has an assumed lifetime of 15 years, which implies that this item enters the budgets at an annual cost of $95.3 or $1.83 a week. Many of these consumer durables were assigned longer lifetimes at the low cost standard than at the modest but adequate standard, even when the item itself was of lower quality.22

Both the clothing and footwear budget and children’s toys component of the leisure budget includes an across-the-board reduction to allow for purchases made ‘on special’ or in sales. No allowance was made for hand-me-downs within (or between households) or for the purchase of second-hand items. Similarly, no allowance was made for gifts, on the assumption that these would be offset by the need to buy gifts to reciprocate. The transport budgets include an allowance for the annual depreciation of the family car which was assumed to be one of the popular Australian models that was either eight (modest but adequate) or 12 (low cost) years old.

An important aspect of the definition of the low cost standard was that it had to be sufficient to allow a degree of economic and social participation ‘consistent with community standards’. Precisely what this means in practice is difficult to determine, although it involved ensuring that allowance was made for expenses associated with many of the most common ways in which Australian households participate in the society in which they live. Thus, not only do the budgets assign a car to each household and include an allowance for a holiday away from home (annually at the modest but adequate standard, and once every three years at the low cost standard), as well as occasional day trips away, visits to friends and relatives and attendance at sporting events, and so on.23

22 The assumed lifetimes of many items of household furniture were also shortened where there were children in the household, by an amount which varied with the number of children.

23 Many of these decisions were guided by the feedback and comments received from the focus group discussions.
The budgets were priced using the actual shelf prices applying in leading retail stores located in Sydney in February 1997. The housing budgets refer to a particular local government area in the Sydney metropolitan region (Hurstville). It should be noted that housing costs in Sydney are well above those in other parts of Australia, and even though the chosen location is reasonably representative of Sydney as a whole, the same cannot be claimed for other parts of the country.  

The housing budgets are even more problematic in the case of purchaser households, where housing costs depend not only upon house prices (which are also considerably higher in Sydney) but also upon details of mortgage arrangements. As a consequence, it is virtually impossible to develop a housing budget for purchasers that is in any sense representative. In the light of these difficulties, the following discussion will consider the budgets for renter households only, which allows for direct comparison with the earlier budget standard estimates (which also apply to renters).

4 Comparisons Between the 1920, 1940s and 1997 Estimates

The above description of the three budget standard studies, though brief, reveals the inherent stability in the methodology first developed in the 1890s by Rowntree. The steps in the process involved in estimating a budget standard are the same today as they were when Rowntree first developed them: identification of the goods required to attain a specific standard of living, pricing them, deriving a weekly cost figure for each item, summing these to arrive at the budget and equating this with the income needed to purchase the derived budget. The fact that increased data availability and more advanced analytical techniques now allow a more sophisticated application should not conceal the fact that the basics of the method itself remain the same as they were a century ago.

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24 It is possible to apply the methodology used to estimate rents at the modest but adequate and low cost standards in Sydney to published data on the distribution of market rents in other locations.

25 For this reason, many of the European budget standards exclude housing entirely.
Several of these similarities have been highlighted in the above summaries of the three studies. All three developed a food budget from a normatively determined set of nutritional requirements by translating these into a set of menus and then costing them. The approach used to estimate housing costs for renters (and the reasons for treating the housing costs of purchasers with caution) by the 1920 Royal Commission are very similar to those used in the recent BSU study - even to the point that although the Royal Commission used the actual rent paid by renters, it emphasised that this is: ‘not the rent which a house would bring if re-let to a new tenant, the latter rent being almost universally higher’ - a consideration which, as was noted earlier, was explicitly allowed for in the BSU estimates.

In relation to the clothing budgets, all three studies again share many similarities in method, each attempting to identify and cost a wardrobe that was appropriate to the general standards of comfort and decency applying at the time, taking into account normal patterns of social custom and interaction. Both the Royal Commission and the BSU study applied a small discount to the original clothing budget to allow for discounts resulting from sale purchases.

There appears to be less similarity once one moves outside of the three main budget areas of housing, food and clothing. This is not surprising, given that many of the items in these other areas are likely to be more specifically tied to the customs of a particular epoch. There is also less detail provided about the treatment of these items in the earlier studies, which compounds the problems of making comparisons. However, many of the additional items listed in the report of the Royal Commission and referred to in Section 2 have also been incorporated in the recent BSU study.26 Although these items enter into the BSU budget standards, some of them (e.g. renewal of household supplies, recreation costs and school expenses) are larger components of a household now than they were eighty years ago, reflecting changes in goods available and the increasing complexity of modern consumer societies.

26 One item included in the Royal Commission budgets but not in the BSU estimates is the cost of smoking (which amounted to the equivalent of 40 cents a week). The 1920 budgets also include a small allowance for ‘domestic assistance’ which does not appear in the BSU standards.
In addition to the actual items in the budgets being similar, it also has to be established that the underlying standards to which the budgets apply are similar. As mentioned earlier, the standards developed by the Royal Commission were intended to correspond to a standard of health and comfort that could afford the overall level of decency articulated by the US Department of Labour. This concept does not seem far removed from the modest but adequate standard as defined earlier, although it might be argued that the notion of a modest standard is somewhat more generous than one that affords only comfort and decency. This interpretation is consistent with the modest but adequate standard being described as ‘lying between the standards of survival and decency and those of luxury as these are commonly understood’. Overall, though, it seems reasonable to assume that the two standards, when assessed in the context of the general standard of living of the time, are sufficiently similar to treat them as being the same, at least as a first approximation.

What of the standards developed by Prest in the 1940s? As indicated earlier, it is clear that these budgets refer to a somewhat lower standard than those estimated by the Royal Commission. Prest himself saw them as being closer to what might be regarded as a poverty threshold. This suggests that the appropriate point of comparison is with the BSU low cost budgets, although these were not intended to correspond to a poverty standard. In fact, as the analysis reported in the final report from the BSU project indicates (Saunders et al., 1998), the low cost budget standards are generally above the current poverty line - in some cases by as much as 40 per cent (Saunders et al., 1998, Table 12.21).27 In summary, although the most appropriate point of comparison is between the Prest budgets and the BSU low cost standards, the differences alluded to in this discussion should not be lost sight of.

The final issue that needs to be considered before turning to the comparisons themselves relates to the composition of the household. As noted previously, the early Australian work on budget standards relate to the situation of a man, wife and three children, this being the most common type of household at the time. Furthermore, the man was

27 As Saunders (1998) has subsequently argued, there is good reason for this, in the sense that the existing poverty line appears to represent a standard of living that is somewhat more austere than that to which the low cost budget standard refers.
assumed to be a wage earner, as was appropriate for a standard used to set the level of the basic wage. The ages of the two adults were not specified by the Royal Commission, although the three children were a boy of 10 and a half, a girl aged seven and an ‘infant’ assumed to be a boy of three and a half years. Prest estimated his minimum food and clothing budgets for a man and woman (again of unspecified age), as well as for infants under one year, a child aged 1-5 years, and girls and boys aged 5-9 years and 10-16 years.

The BSU budget standards for a couple household with three children who are renting privately assume the man is aged 40, his wife is aged 35 and that they have girls aged three and six and a 14-year-old boy. The modest but adequate budgets assume that both adults are employed full time, while the low cost budgets assume that the husband is unemployed and the wife is not in the labour force. There are therefore some differences in the assumed characteristics of the individuals in each household, and in the standards to which the budgets are intended to correspond. The most important of these are summarised in Table 1.

In order to compare the budget standard estimates themselves, it is first necessary to place them on an equal footing. This has been done by updating the earlier estimates to 1997, the year in which the BSU budgets were costed. What index should be used for this purpose? Because a budget standard estimates the cost of acquiring a specified basket of goods and services, it might appear initially that adjustment in line with movements in consumer prices is appropriate. Ideally, separate price indices should be applied to each budget area to allow for variations in relative prices, although in practice the ability to do this is restricted by the lack of commodity-specific price indices for Australia which extend back to 1920.

In any case, the problem with only adjusting a budget standard in line with movements in prices is that this ignores changes in ‘the customs of the day’ which influence the goods and services required to attain a particular standard of living in a particular social context, irrespective of whether that standard is one of poverty, minimal decency or modest adequacy. Without wishing to become embroiled in the debate between absolute and relative concepts of poverty, the point is that a budget
Table 1: Comparisons of Three Australian Budget Standards

<table>
<thead>
<tr>
<th>Defining the standard</th>
<th>Royal Commission on the Basic Wage (1920)</th>
<th>Prest (1941-43)</th>
<th>Budget Standards Unit (1998)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum standard of health and decency: ‘a bottom level of health and decency below which a family cannot go without danger of physical and moral deterioration … an amount which will provide real but moderate comfort’.</td>
<td>Minimum needs budget: ‘the least common factor of various competing concepts of adequacy… those whose net incomes are normally insufficient to provide such needs are living in “poverty”, in the sense that they must be either inadequately fed or inadequately clothed, unless indeed they are assisted by public or private charity’.</td>
<td>Modest but adequate: ‘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 as these are commonly understood’.</td>
<td>Low Cost: ‘A level of living which may require frugal and careful management of resources but would 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’.</td>
</tr>
<tr>
<td>Household characteristics</td>
<td>Adult man, adult woman, boys (aged 10 and 31/2) and girl (aged 7).</td>
<td>Adult man, adult woman, child (aged 1-5), girl (aged 5-9) and boy (aged 10-16).</td>
<td>Male (aged 40), female (aged 35), girls (aged 3 and 6) and boy (aged 14).</td>
</tr>
<tr>
<td>Labour force status</td>
<td>Man (typical of all employees) in full-time employment, woman not in the labour force.</td>
<td>Man in work, (details not specified) woman not in the labour force.</td>
<td>Modest but adequate: male and female both employed full time.</td>
</tr>
<tr>
<td>Location and housing tenure</td>
<td>Sydney; rent levels averaged across 35 different suburbs.</td>
<td>Melbourne; excludes housing.</td>
<td>Hurstville local government area in Sydney; private renter.</td>
</tr>
</tbody>
</table>
standard must, at least over the longer term, be adjusted to reflect not only price movements (which determine the income needed to purchase a given basket of goods and services), but also movements in average living standards in the society to which they refer (which will influence accepted notions of which items should appear in the basket itself).

To allow for this latter consideration, it is necessary to adjust the budget standards for movements in prices and to account for improvements in real average living standards. The index used for this latter purpose is again restricted by data availability, the only series that is readily available for the period 1920-97 being real GDP per capita. This is an imperfect measure of the changes in community norms that should ideally be reflected in the development of a budget standard, as these are unlikely to move in line across the different budget areas. It is, however, a better method than price adjustment alone, which makes no allowance for improvements in either normative or behavioural budget quantities. Movements in consumer prices and real GDP per capita between 1920 and 1997 are shown in Table 2 (which also covers the period 1941-43 when Prest’s budgets were developed).

The Royal Commission budget for a three-child couple household living in Sydney in 1920 was estimated to be $11.70 (after converting from pounds to decimal currency). If this is updated to February 1997 by the movements in consumer prices shown in Table 2, the corresponding figure for 1997 becomes $11.70 \times 20.913 = $244.70. The BSU modest but adequate budget standard for 1997 for a three-child couple renting privately is equal to $977.50 - almost exactly four times as large. If, however, the 1920 budget is adjusted first by movements in consumer prices and then by movements in real GDP per capita, the corresponding estimate for 1997 becomes equal to $11.70 \times 20.913 \times 3.935 = $962.80 - or within 1.5 per cent of the BSU estimate of $977.51, a truly remarkable result.

Although the aggregate budgets are very similar, it is of interest to consider whether or how their composition has changed over the intervening seventy-seven years. Such a comparison can, of course, be of only limited relevance because (as noted above) it is not possible to allow for variations in relative prices. Nevertheless, the compositional
## Table 2: Consumer Prices, Real GDP, Population and Unemployment: 1920-1997

<table>
<thead>
<tr>
<th>Year</th>
<th>Consumer Price Index (CPI)(a) (1920 = 100)</th>
<th>GDP ($ million, 1966-67 prices)(b)</th>
<th>Population ('000)(c)</th>
<th>GDP per capita (1920 = 100)</th>
<th>Unemployment rate (%)(d)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1920</td>
<td>100.0</td>
<td>4624</td>
<td>5304</td>
<td>100.0</td>
<td>3.3</td>
</tr>
<tr>
<td>1941</td>
<td>86.4</td>
<td>8218</td>
<td>7069</td>
<td>133.3</td>
<td>4.9</td>
</tr>
<tr>
<td>1942</td>
<td>94.2</td>
<td>9423</td>
<td>7144</td>
<td>151.3</td>
<td>1.9</td>
</tr>
<tr>
<td>1943</td>
<td>98.1</td>
<td>10244</td>
<td>7197</td>
<td>163.3</td>
<td>1.0</td>
</tr>
<tr>
<td>Average: 1941-43</td>
<td>92.9</td>
<td>9295</td>
<td>7137</td>
<td>149.4</td>
<td>2.6</td>
</tr>
<tr>
<td>1997</td>
<td>2091.3</td>
<td>63624</td>
<td>18548</td>
<td>393.5</td>
<td>8.8</td>
</tr>
</tbody>
</table>

Notes:  
(a) Source for data for 1920-43: *Year Book Australia, 1998* (ABS Catalogue No. 1301.0), Table 28.7, updated to March Quarter 1997 from published CPI data taken from ABS Catalogue No. 6401.0.  
(b) Source for data for 1920-43: Maddock and McLean (1987), Statistical Appendix, Table 4, updated to 1996-97 from *Year Book Australia, 1998*, Table 29.1.  
(c) Source for data for 1920-43: Maddock and McLean (1987), Statistical Appendix, Table 1, updated to 1997 from ABS *Population Projections 1995-2051*, Catalogue No. 3222.0.  

Comparisons provide some insight into how living standards and costs have changed over the period, bearing in mind that the budget standards themselves are supposed to refer to a common standard across each of the different budget areas.\(^\text{28}\)

Not surprisingly, one of the biggest compositional differences revealed in Table 3 is in the proportion of the budget spent on food. This declined from 41.6 per cent to 22.6 per cent between 1920 and 1997 - a reflection of the increase in living standards experienced over the period. Interestingly, the other main budget area whose spending importance has

\(^{28}\) It should be noted that there are differences in the coverage of some of the budget categories between the two studies, and although an attempt has been made to account for these, it is possible that some differences remain.
Table 3: Comparing the 1920 and 1997 Budget Standards

<table>
<thead>
<tr>
<th>Budget Area</th>
<th>1920</th>
<th></th>
<th>1997</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>($)</td>
<td>(%)</td>
<td>($)</td>
<td>(%)</td>
</tr>
<tr>
<td>Housing(a)</td>
<td>2,200</td>
<td>18.8</td>
<td>213.21</td>
<td>21.8</td>
</tr>
<tr>
<td>Clothing and footwear</td>
<td>2,700</td>
<td>23.1</td>
<td>83.12</td>
<td>8.5</td>
</tr>
<tr>
<td>Food(b)</td>
<td>4,873</td>
<td>41.6</td>
<td>220.90</td>
<td>22.6</td>
</tr>
<tr>
<td>Fuel and light</td>
<td>0.463</td>
<td>3.9</td>
<td>17.28</td>
<td>1.8</td>
</tr>
<tr>
<td>Household goods and services(c)</td>
<td>0.738</td>
<td>6.3</td>
<td>217.43</td>
<td>22.2</td>
</tr>
<tr>
<td>Medical and dental</td>
<td>0.075</td>
<td>0.6</td>
<td>18.96</td>
<td>1.9</td>
</tr>
<tr>
<td>Leisure(d)</td>
<td>0.300</td>
<td>2.6</td>
<td>65.61</td>
<td>6.7</td>
</tr>
<tr>
<td>Transport(e)</td>
<td>0.333</td>
<td>2.8</td>
<td>100.75</td>
<td>10.3</td>
</tr>
<tr>
<td>Personal care(f)</td>
<td>0.025</td>
<td>0.2</td>
<td>40.25</td>
<td>4.1</td>
</tr>
<tr>
<td>Total</td>
<td>11,707</td>
<td>100.0</td>
<td>977.51</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Notes:  

a) The estimate for 1920 includes only rent. The 1997 estimate also includes the cost of building and contents insurance.

b) The food budget for 1920 includes an allowance for smoking.

c) The estimate for 1920 includes groceries, renewal of household supplies, school requisites, domestic assistance and union and lodge dues.

d) The estimate for 1920 includes recreation expenses, plus the cost of newspapers and magazines and stationery and stamps. The latter two items are included in the household goods and services budget in 1997.

e) Estimate includes fares only in 1920.

f) Estimate includes the cost of barber only in 1920.

declined is clothing and footwear, which fell from 23.1 per cent in 1920 to 8.5 per cent of the total budget by 1997. Together, the proportion of the budget allocated to the three most basic of needs - food, shelter and clothing - declined from 83.5 per cent in 1920 to 52.9 per cent in 1997.

Offsetting these declines in budget shares, the main areas where expenditure increased in proportionate terms are household goods and services, recreation and related activity (which includes areas such as child care and education expenses in the BSU budgets, as well as conventional leisure activities), transport (reflecting the ownership of a car which is factored into the BSU budgets) and personal care. All of the areas where spending has risen proportionately reflect changes in the range of goods and services now available to people and the degree to which a modern budget standard incorporates them.
The Prest budgets were derived over the 1941-43 period and have been adjusted in line with price and GDP movements between the average of these three years and February 1997. As noted earlier, Prest derived budgets for a number of children of different ages and those which correspond most closely to the children included in the BSU study have been used. On these assumptions, the minimum food and clothing budgets estimated by Prest for the December Quarter 1941 and the March Quarter 1943 are equal to $5.93 and $6.96, respectively (Prest, 1952, Table XXXI), which produces an average ‘basic needs’ budget in 1942 of $6.44.

It has already been noted that Prest himself regarded his minimum need budgets as more austere than those developed by the 1920 Royal Commission. The figures bear this out, although the difference is not great. If the sum of the Royal Commission’s food and clothing budgets is updated by movements in consumer prices to 1942, the resulting figure is $6.98, almost identical to Prest’s estimate for 1943 but 8.4 per cent above the average figure for 1942. Thus, the Prest estimates themselves were somewhat on the low side, though not markedly so.

If the Prest minimum need budget is updated in line with movements in consumer prices to February 1997, the resulting figure is $145.10. If they are further adjusted upwards to reflect movements in real GDP per capita, this figure increases to $382.10. The corresponding BSU low cost food and clothing and footwear budget standard for a three-child couple renting privately in February 1997 is $237.30 - well in excess of the

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29 For comparative purposes, the updated Prest budgets have been constructed on the assumption that the household consists of husband, wife, girls aged 1-5 and 5-9 and a boy aged 10-16.

30 The Prest minimum needs budget also include an allowance for ‘miscellaneous items’ which add approximately 30 per cent to the food and clothing budget (Prest, 1952, Table XXXII). However, because no detail is provided on what is included in the miscellaneous category, it was decided to exclude it from the analysis.

31 It is worth observing that the ‘updating’ of the 1920 budgets to 1942 in fact involves a decline, because as Table 2 indicates, consumer prices actually fell between 1920 and 1942. Table 1 also indicates that there are some slight differences in the assumed characteristics of the children in the Royal Commission and Prest studies.
price-adjusted figure, but well below that adjusted for price and real income movements.

If the food and clothing components of Prest’s budget are considered separately, the (price) updated estimates for 1997 are $97.20 (food) and $47.80 (clothing). The corresponding BSU estimates are $172.15 and $65.25, respectively. Thus, the austerity of the Prest budgets mainly reflect food costs relative to the cost of purchasing a nutritionally adequate budget today. This in turn is likely to reflect policies (including direct price controls and rationing) which were designed to keep food prices to a minimum as part of the war effort. If it were possible to allow for the effects of these policies, the updated Prest and BSU food budgets would move closer together - possibly considerably closer.

Overall, the most significant finding reported in this section concerns the remarkable similarity between the budget standard estimated for a three-child couple household by the Royal Commission of 1920 and that estimated for a similar household by the BSU in 1997. There are, of course, many differences in the details of each of these two studies, even though both used the same underlying methodology.

The main limitation of the comparisons reflects the inability to allow for changes in relative price movements, as these would probably have a significant bearing on the comparisons. Despite this, the fact that two studies undertaken almost eighty years apart could produce such similar estimates of the household budgets required to attain a similar standard of living is illustrative of the underlying strength of the budget standards method and to the resilience of the results produced by it.

5 The Longer Term Trend in the Australian Income Distribution

Comparisons of longer term changes in income distribution in Australia have been severely limited by data availability and by the quality of what has been available. Only a very limited number of comparisons have been possible for periods prior to the regular collection and reporting of distributional data on household incomes by the ABS in the early 1970s. Most of these comparisons refer only to two discrete points in time and
are thus more accurately described as mapping distributional change rather than any overall trend - the latter requiring more than just two observations.

In a recent paper, the current author reviewed some of the evidence on distributional change in Australia over the period from 1914-15 through to 1989-90, the latest year for which ABS data were then available (Saunders, 1993). That review indicated that there was a significant overall decline in gross male income inequality between 1914-15 and 1980-81, most of it occurring between the Depression years 1932-33 and the early 1970s, and remaining in force even after the estimated effects of the Depression itself were removed from the data (McLean and Richardson, 1986). For females, the story is different, with no clear distributional trend discernible, although the data themselves are somewhat less reliable leading to a more qualified conclusion.

In his own contribution to the literature, Saunders explored changes in the distribution of individual gross incomes between 1942-43 and 1989-90 by comparing ABS survey data for the latter year with the results of an important study of income distribution undertaken in the 1950s by H.P. (Horrie) Brown, the results of which were originally presented to the Fourth Conference of IARIW in 1955 and published subsequently in a volume of Conference Proceedings (Brown, 1957).

The basic source of the data used in Brown’s study was the income tax returns for 1942-43, although these were linked by an identity card number attached to the partial Census conducted in June 1943 (Saunders, 1993: 357). There are, however, several limitations of the data, at least when assessed against today’s standards. The most important of these are:

• they refer to the gross incomes of individuals (the unit of analysis in the Australian tax system) and exclude those with incomes below the tax threshold (equal to $204 in 1942-43);

• there are a number of particular problems relating to the treatment of those with rental income (explained in more detail in Saunders, 1993: 357); and
1942-43 was in the middle of the war and was characterised by low unemployment (see Table 2 above). However, many of the high number of jobs available were taken temporarily by women, who were at the time receiving wages that were generally well below those earned by men.

Although Brown did not have access to tax data for those with incomes below the threshold, he was able to impute an average value for those on low incomes (defined as incomes below $100) and used this in his distributional estimates. For consistency, low-income individuals have also been excluded from the latest data, the cut-off for exclusion being set at the same proportion of mean income in the latest survey year as $100 was of mean income in 1942-43.

One final point before turning to the results. Because Brown’s distributional estimates were derived from group data, the earlier analysis by Saunders (1993) explored what difference this makes to measures of inequality derived from unit record data. This involved collapsing the unit record data into groups (defined by updating the original group boundaries used by Brown) and comparing the resulting distributional measures with those derived from the raw data. The results showed very little difference when applied to data for 1989-90 and the same is true for data from the latest (1995-96) income distribution survey. For this reason, only the exact results for the later year are presented below.

The distributional comparisons themselves are shown in Table 4. The latest estimates were taken from data collected in the 1995-96 Survey of Income and Housing Costs which was conducted as a continuous survey in each month over the course of the financial year beginning in July...
Table 4: The Distribution of Gross Individual Incomes in Australia: 1942-43 and 1994-95

<table>
<thead>
<tr>
<th>Decile</th>
<th>1942-43</th>
<th>1994-95</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Income share</td>
<td>Cumulative income share</td>
</tr>
<tr>
<td>First</td>
<td>2.34</td>
<td>2.34</td>
</tr>
<tr>
<td>Second</td>
<td>2.71</td>
<td>5.05</td>
</tr>
<tr>
<td>Third</td>
<td>4.31</td>
<td>9.36</td>
</tr>
<tr>
<td>Fourth</td>
<td>5.66</td>
<td>15.02</td>
</tr>
<tr>
<td>Fifth</td>
<td>7.56</td>
<td>22.58</td>
</tr>
<tr>
<td>Sixth</td>
<td>8.57</td>
<td>31.15</td>
</tr>
<tr>
<td>Seventh</td>
<td>11.13</td>
<td>42.28</td>
</tr>
<tr>
<td>Eighth</td>
<td>12.24</td>
<td>54.52</td>
</tr>
<tr>
<td>Ninth</td>
<td>14.25</td>
<td>68.77</td>
</tr>
<tr>
<td>Tenth</td>
<td>31.23</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Gini Coefficient

<table>
<thead>
<tr>
<th></th>
<th>1942-43</th>
<th>1994-95</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.409</td>
<td>0.405</td>
</tr>
</tbody>
</table>

Notes and Sources: See text.

1995. In order to maintain consistency with the definitions used by Brown, the income variable refers to annual income in the previous year, i.e. in 1994-95.35

The general picture to emerge from the results presented in Table 4 (like that to emerge from the earlier analysis reported in Saunders, 1993) is one of remarkable longer term stability in the Australian income distribution. The bottom 80 per cent of the two distributions are virtually identical and it is only in the top two deciles that the difference in decile income share exceeds one percentage point. Overall, the only change of any magnitude that occurred is in the share of the top decile, which declined from 31.2 per cent in 1942-43 to 28.6 per cent in 1994-95. The Lorenz curves for the two distributions intersect in the fourth and eighth

35 The Survey of Income and Housing Costs began to be conducted on a continuous basis in July 1994, replacing the previous practice of conducting special one-off surveys every five years or so. Users of the Australian distributional data collected from both the old and new methods should be aware of this important change in sampling methodology, although there is as yet no evidence regarding its impact (if any) on the reliability of the data themselves.
deciles, so it is not possible to derive an unambiguous welfare ranking of the two distributions. There is a very slight decline in the Gini coefficient, although almost certainly not by an amount that is statistically significant (although no formal test of significance have been conducted).36

On the face of it, the distributional stability implied by the estimates in Table 4 is all the more remarkable given what has happened to the scope and nature of distributional policies in the more than fifty years that separate the two sets of estimates. How can the enormous expansion of social security programs and changes in the labour market and the structure of earnings have had such an apparently insignificant distributional impact? Although it is not possible to provide a definitive answer to this question, it is possible that the impact of redistributive transfer programs may have been concealed by the form in which the data are available for analysis.

Of particular significance in this context is that fact that the data used by Brown (and hence also its recent counterpart) exclude all incomes below an arbitrary low figure and do not allow individuals to be grouped together into families or households or other cohabiting units that are likely to engage in extensive pooling of resources. The increased incidence of part-time employment at relatively low incomes, for example, is likely to produce the impression of increasing inequality in the more recent data (given that very low incomes have been excluded).

An alternative, and much less palatable explanation for the proponents of redistributive policies is that the impact of such policies have been almost entirely offset by changes in market income - possibly reflecting behavioural responses to the policies themselves. This interpretation appears to be a very radical reading of the evidence that needs a good deal of elaboration before it can be taken seriously. There is now a substantial body of evidence which demonstrates that cash transfer programs in Australia are highly redistributive (ABS, 1995b; Johnson, 1996).

36 As a matter of interest, the estimates for 1994-95 shown in Table 4 are very close to those reported by Saunders (1993) for 1989-90. Over this period, the Gini coefficient increased from 0.396 to 0.405 although the Lorenz curves for the two distributions again intersect.
Manning and Hellwig, 1995) which casts further doubt on such an interpretation.

It also needs to be remembered that the data in Table 4 cover both males and females, although some of the research referred to earlier has demonstrated that there are gender differences in the observed distributional changes. Finally, any changes in the actual distributions will reflect broader demographic, as well as social and economic changes, to an extent that is not easily amenable to quantification.

6 Summary and Conclusions

The focus of this paper has been on longer term changes in the distribution of Australian living standards yet like the ‘barking of the dog in the night’ which provided the crucial clue to Sherlock Holmes, the most noticeable feature of the results reported here is the absence of change. The most striking of the results suggest that the budget standard developed in the 1920s to guide the setting of a basic wage is, when updated by movements in prices and real incomes, virtually identical to that developed in 1997 as part of an inquiry into the development and role of budget standards in the broader context of income adequacy.

Although the two studies are separated by almost eighty years, they both adopted a methodology that has remained broadly unchanged since it was initially developed at the end of the 19th century. However, a central feature of the budget standards methodology that has led many analysts to regard it with deep suspicion is its reliance on a series of normative judgements and other assumptions that add to the complexity of the method and contribute to the intractability of its results. The fact that two studies separated by eight decades of substantial economic development and fundamental social and attitudinal change, can nonetheless produce such similar results can be interpreted to suggest that, in practice, the use of normative judgements does not make a budget standard as arbitrary as many have assumed.

In effect, what appears to have happened is that those who have had to make the judgements on which a budget standard rests have done so in ways which reflect the real economic circumstances of the time (as
reflected in price levels and real incomes), with the result that the budgets required to achieve a given standard of living differ to the extent that prices and real incomes have, on average, changed. This does not mean, of course, that average living standards have not changed, but rather that the real cost of purchasing the items required to achieve a standard of living determined by social custom and existing behaviour has remained unchanged over time. In other words, the cost of achieving a given relative standard of comfort and modesty has not changed despite the very considerable increase in absolute material standards of living.

The results presented in Section 5 of the paper are also characterised by the extent to which they fail to display evidence of change, on this occasion in the distribution of gross individual incomes. Although the time period to which this comparison applies is different, and the data on which it is based have several deficiencies, the finding of little or no distributional change raises questions about the impact of redistributive cash transfer programs.

In a world now characterised by constant and rapid change, there is something reassuring - calming even - about discovering that little has apparently changed in some dimensions of economic life over an extended period. Those who see value in the budget standards method will take heart from the results presented here. In contrast, the income distribution comparisons raise a number of awkward questions for proponents of a redistributive state - questions that need to be answered.
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