

13TH SERIES CONSUMER PRICE INDEX REVIEW

SUBMISSION BY THE AUSTRALIAN COUNCIL OF TRADE UNIONS (ACTU)

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1. Introduction
2. Principal Purpose of the Australian Consumer Price Index
3. Frequency of Compilation
4. Population Coverage
5. Commodity Classification and Item Coverage
6. Other Issues
7. Summary and Recommendations

Attachments

1 INTRODUCTION

Trade Unions were formed by Australian workers in the Nineteenth century to protect and improve their living standards. Over a century later, the methods of work and range of consumer choice may have changed through technology and economic development, but the basic aim is still the same - to protect and improve living standards.

One of the key determinants of living standards is the 'cost of living'. No amount of 'nominal' income can be compared without some assessment of what that income can buy in terms of goods and services. The protection and improvement of living standards refers to 'real' living standards - that is, what today's income can buy given today's cost of living, and what tomorrow's income will buy given tomorrow's cost of living.

The 'cost of living' needed to assess 'real' living standards, has in practice, been measured by the Consumer Price Index (CPI) since its inception in 1960 and before that by the various retail price indices compiled by the statistician. The CPI has been an important part of national wage cases - especially when award wages were 'indexed' to the CPI - and is often included in enterprise bargaining agreements negotiated by unions and employers. The CPI is an important consideration in the economic context of industrial negotiations.

Accordingly, the Australian Council of Trade Unions (ACTU) welcomes the opportunity to make submissions to the 13th Series Consumer Price Index Review. It is important that the CPI continues to provide an indication of changes to the cost of living which affect Australian wage and salary earners and their families.

This submission follows the format of the Information Paper titled 'Issues to Be Considered During the 13th Series Australian Consumer Price Index Review' (ABS Cat. 6451.0), provided by the Australian Bureau of Statistics (ABS). It provides comment on the four main components of the review: Principal purpose of the CPI; Frequency of compilation; Population coverage; and Commodity classification and Item coverage. It also discusses 'other issues' and provides some reference material on the CPI and the measurement of inflation.

2 PRINCIPAL PURPOSE OF THE AUSTRALIAN CONSUMER PRICE INDEX

The Information paper refers to the International Labour Organisation (ILO) definition of the purpose of a consumer price index. The ILO's 'Resolution concerning consumer price indexes' reads:

"The purpose of a consumer price index is to measure changes over time in the general level of prices of goods and services that a reference population acquire, use or pay for consumption. A consumer price index is estimated as a series of summary measures of the period-to-period proportional change in the prices of a fixed set of consumer goods and services of constant quantity and characteristics, acquired, used or paid for by the reference population. Each summary measure is constructed as a weighted average of a large number of elementary aggregate indices. Each of the elementary aggregate indices is estimated using a sample of prices for a defined set of goods and services obtained in, or by residents of, a specific region from a given set of outlets or other sources of consumption goods and services."

[ABS, Information Paper, p.40]

The ABS notes in the appendix that:

"The simplest way of thinking about how this is achieved is to imagine a fixed 'basket' of goods and services which is representative of purchases by households. As prices of items in the basket vary, the total price of this basket will also vary. Hence, the CPI is simply a measure of the change in the total price of this basket."

[ABS, Information Paper, p.40]

The ABS Information paper succinctly classifies the various uses of the CPI and the alternative conceptual approaches. The various uses of the CPI are categorised under three principal purpose headings:

- as input into income adjustment process [e.g. Economic adjustment clauses in Enterprise Agreements];
- for general indexation of public and private sector contracts;
- as a measure of inflation for macroeconomic management.

The alternative conceptual approaches to constructing the CPI include:

- the acquisitions approach, which defines the basket as consisting of all those consumer goods and services actually acquired by households during the base period;

- the cost of use approach, which defines the basket as consisting of all those consumer goods and services actually consumed (or used up) in the base period irrespective of when they were acquired or paid for; and
- the actual outlays (or payments) approach which defines the basket in terms of the actual amounts paid (or outlaid) by households during the base period to gain access to consumer goods and services (without regard to the source of such funds).

[ABS Information Paper, p.40]

The ABS notes that "...these conceptual distinctions are unimportant for most areas of household consumption because they either do not arise or are of no practical consequence." [ABS, Information Paper, p.41].

However, the paper outlines specific cases when they can become important (pp.41-42).

The principal use of the CPI for trade unions is its input in income adjustment. This is the case of incorporating the CPI into enterprise bargaining agreements (EBAs), as part of a claim for an award wage adjustment (such as the 'Living Wage' claim), or in the case of superannuation policy.

For example, in the database of enterprise agreements, produced by the Commonwealth Department of Industrial Relations (DIR), explicit reference was made to 'Consumer Price Index' or 'CPI' in 1048 out of 12,120 agreements as at March 1997.

Further, in the 1995 Annual Report on Enterprise Bargaining in Australia, produced by DIR, reference was made to 'increase in prices/CPI' in both registered and unregistered agreements. Table 5.1 of the DIR report, together with examples of CPI clauses are provided in Attachment [1].

The ACTU recognises that the measurement of inflation is important as part of overall macroeconomic policy management. It was the efforts of the workforce, under the Prices and Incomes 'Accord' of 1983-1996, that enabled the Australian economy to experience the low inflation, high productivity environment of the 1990's compared to the 1970s and 1980s. This has occurred for Australia historically, and in terms of comparison with other industrialised economies. There is a wide range of price indices (GDP deflators, sector price indices etc.) available to policy makers. However, the CPI is the only cost of living measurement available to wage earners who are concerned about the purchasing power of their pay packets.

The conceptual issues concerning measurement of the CPI have been subject to much interest in the United States. This has occurred since the "Boskin Commission" report on possible bias in the US CPI (see "Toward a More Accurate

Measure of the Cost of Living", Chair: M. Boskin, December 1996).

The Boskin Commission Report's findings are discussed in the ABS's Information Paper, Appendix 2: 'Bias in Consumer Price Indexes'. An excellent discussion of Bias in CPIs is also provided by Brent Moulton of the US Bureau of Labor Statistics. Moulton's paper from the *Journal of Economic Perspectives* is provided. (see Attachment [2]).

In discussing the Boskin Commission Report, it is important to be aware of the political context. The issue of bias in the CPI became part of the public debate when the Governor of the Federal Reserve Board ('the Fed') Dr Alan Greenspan, indicated to Congress that the CPI may be overstating the increase in the true cost of living by ".....perhaps half a percent to one and a half per cent per year....." (see Moulton (1996), p.159).

The implication was that if the bias that overstated the CPI could be removed, then the US Federal Budget deficit could be lowered. Greenspan estimated that: "If annual inflation adjustments to indexed programs and taxes were reduced by 1 percentage point....the annual level of the deficit will be lower by about \$55 billion after 5 years..." (Greenspan, quoted in Moulton, 1996, p.159). The Fed was keen to prove overstatement, and hence lower the budget deficit.

The Boskin Commission estimated bias of 1.5% in the CPI during recent years and 1% in the future. However as Moulton points out economists around the world have widely differing views on the estimate of bias or otherwise in the CPI. The Table below (from Moulton, p.160) shows the wide range of estimates provided by professional economists.

Table 1

Recent Estimates of Bias in the US Consumer Price Index

Author(s)	Point Estimate	Interval Estimate
Advisory Commission to Study the CPI (1995)	1.0	0.7-2.0
Michael Boskin (1995)	1.5	1.0-2.0
Congressional Budget Office (1995)	-	0.2-0.8
Michael R darby (1995)	1.5	0.5-2.5
W. Erwin Diewert (1995b)	-	1.3-1.7
Robert J. Gordon (1995)	1.7	-
Alan Greenspan (1995)	-	0.5-1.5
Zvi Groiliches (1995)	1.0	0.4-1.6
Dale W.Jorgenson (1995)	1.0	0.5-1.5
Jim Klumpner (1996)	-	0.3-0.5
Lebow, Roberts and Stockton (1994)	-	0.4-1.5
Ariel pakes (1995)	0.8	-
Shapiro and Wilcox (1996)	1.0	-0.6-1.5
Wynne and Sigalla (1994)	less than 1.0	-

But even this wide range does not tell the whole story. As Moulton notes:

"The diversity of beliefs is probably even greater than indicated in this tabulation, because several of the experts testifying before the committee declined to give an estimate (for example, Katherine Abraham, Janet Norwood, Robert Pollak and Joel Popkin), and most of these individuals were critical of the larger estimates. In many cases, the same evidence has been interpreted in a number of different ways. Griliches (1995) said, "[T]he Committee assumes that we already know that the CPI is overstated. But the scientific basis for this judgement is much weaker than the [Committee's] questions seem to imply....The various 'guesstimates in these sources are not independent of each other." For some of the sources of bias, the evidence is based on case studies of a small number of commodities. The differences between estimates seem to be largely determined by the willingness of experts to extrapolate from these case studies to estimates for broader categories of goods. The available research results may reflect a kind of selection effect, where researchers have tended to study the goods for which there is a strong presumption of possible bias, like computers, prescription drugs, and so on."

[Moulton, 1996, p.159-160]

The ABS Information Paper and Moulton's paper provide information on the different types of bias.

The ABS provides a definition of CPI bias:

"Bias can be defined as any systematic deviation of a statistic from its true measure. In order to make any assessment of the bias in the CPI, it is necessary to have a clear understanding of what might be the true measure. In discussing bias in the CPI most commentators do so by considering how well the CPI is able to measure changes in the cost of living (i.e. by comparing the CPI to an ideal estimator for a COLI). In some respects, however, this is an unfair comparison. Most countries, Australia included, have constructed their CPIs to measure the change over time in the price of a constant basket of consumer goods and services. Further, it is generally accepted among both statisticians and economists that it is practically impossible to compile a true COLI."

[ABS, Information Paper, p.43]

To support their argument on the difficulties in measuring bias the ABS provides material on estimates in Canada, UK and USA which show a range of biases. The results support the observations by Moulton that there are a wide range of estimates.

The ABS outlines the different types of bias in Appendix 2 of the Information Paper. This includes:

- item substitution bias;
- outlet substitution bias;
- new goods bias;
- quality adjustment bias;
- elementary aggregate formula bias.

Item Substitution bias ".....arises from the inability of a fixed basket index to take account of the substitutions consumers make in response to changes in relative prices of commodities." (Information Paper, p.47).

The key is that the consumer "...can take advantage of changes in relative prices to buy more of the items that have dropped in price, and less of the items that have increased in price. Thus, the cost of a fixed market basket will be slightly more than what is required to keep the consumer at the same level of satisfaction." (Moulton, 1996, p.5).

Outlet Substitution bias "...is equivalent to item substitution bias, only in this case it relates to consumers' abilities to shift to cheaper cost outlays for identical items rather than shift to cheaper items." (Information Paper, p.48).

The Boskin Commission estimated this bias at 0.10% per year for the US. The bias is said to emanate from innovation in the retail sector with "discount warehouses encroaching on traditional supermarkets, electronics and hardware super-stores displacing the neighbourhood hardware store....." (Moulton, 1996, p.6).

New Goods bias "...refers to the inability of a rigidly fixed basket index to account for the price behaviour of completely new goods entering the market. The concern here is not with changes to existing goods, for example a new model of motor vehicle, but with goods that are substantially different from those that were in existence in the weighting base period. Examples of new goods in recent years would be microwave ovens, compact discs and players, video cassette recorders etc." (Information Paper, p.48).

Moulton (1996b, p.7) notes that "not much is known about the overall effect of inadequate measurement of new goods."

Quality Adjustment bias "....arises from the statistician's inability to perfectly account for changes in the quality of items over time. The quality of goods and services can, of course, increase or decrease over time. It is not possible to precisely quantify the extent of quality adjustment bias in the CPI as the 'true' answer is never known." (Information paper, p.49).

Moulton (1996b, p.6) has noted that "New models of cars, refrigerators, shoes, and VCRs replace old models. When these changes occur, some kind of adjustment must be made for the difference in quality. The BLS applies various procedures to adjust for quality change, but in some cases the adjustments may be inadequate.

The research here largely consists of a series of case studies involving consumer durables or apparel." He notes that the existing studies show that quality bias "....can go in either direction."

Elementary Aggregate Formula bias ".....arises from the use of an inappropriate method for aggregating price quotations at the very lowest level of aggregation." (Information Paper, p.51).

Moulton explains:

"For a fixed weight price index, like the CPI, to correctly track the ups and downs of prices, it is essential that the weight or relative importance of each item be adjusted each period, so that items with temporarily high prices receive relatively more weight, and items with temporarily low prices receive relatively less weight. In other words, if prices all change, and then move back to where they started, the index should also go back to where it started. Most of the formulas used in calculation of index numbers satisfy this property, but there are some important exceptions. Since about 1978, this issue had been discussed in the context of the unweighted estimators used by most countries other than the US to calculate the "elementary" index for each item in the market basket. It was not recognised that this problem also affected the weighted US index until Reinsdorf (1994) pointed out that the periodic replacement of samples in the US, CPI could lead to the inappropriate weighting of the new sample."

[Moulton 1996b, p.5-6]

The Boskin Commission report estimated the formula bias to be 0.25% per year for the US CPI. Formula bias is a highly technical concept. Diewert (1996) has noted that "in Canada the elementary index bias is close to zero since the ratio of average prices is used as the elementary index number formula instead of the upward biased arithmetic means of price relativities formula (which is still used in Australia.)" (Diewert, 1996, p.5).

Whilst the ACTU notes the important research prepared by economists and statisticians on Bias in CPI, it believes that the 'true' measure of a cost of living index - allowing for item and outlet substitution, new goods, quality adjustment etc. - may be an elusive concept. The ACTU also notes that the ABS believes that "....any bias in the Australian CPI is very small". (Information paper, p.53). It may be true that the fixed-weight price index may not be ideal but is the best measurement available. The ACTU relies on the professionalism of ABS to provide the best measure of the cost of living available and to make necessary improvements according to sound statistical and analytical techniques.

The periodic CPI Consultative Review process facilitates transparency in the methodology and allows broad input from community groups.

On the Boskin Commission Report the ACTU notes the comments of US

Commissioner of Labor Statistics Katherine Abraham, who said at a Congressional hearing in 1995:

"The state of the art in the area of price index construction has not advanced to the point where anyone knows how to construct true cost of living measures."

[Katherine Abraham, quoted in Robert Hershey,
New York Times, 1 December, 1996]

Further, it is important that the final judgement on CPI measurement be left to the professionalism of the ABS. As White House Chief Economist, Joseph Stiglitz has noted:

"The process for improving [the CPI] should never be politicised. Our goal should be to reach agreement based on the best scientific and technical judgement possible."

[Joseph Stiglitz, quoted in John M. Berry and Eric Panin,
Washington Post, 5 December, 1996]

In conclusion, the ACTU recommends that the Review note the international research on Biases in CPI and the assessment from the Australian Bureau of Statistics that the biases in Australian CPI is likely to be small.

3 Frequency of Compilation

The Review is considering the option of a monthly rather than quarterly compilation of the CPI.

The ACTU notes some of the advantages of a monthly issue. These include:

- Parity with other OECD countries (only Australia and New Zealand issue quarterly rather than monthly CPIs);
- More information - a monthly issue may enable analysts to detect inflation trends earlier.

However, the ACTU notes the cost of a change to the monthly series and possible reduction in the quality of the information (ABS Information Paper, p.14-18).

As enterprise agreements and awards are usually adjusted on a 12-24 (or even 36) month basis, a quarterly issue of the CPI is usually adequate. Accordingly, the ACTU sees no strong reason for a change to a monthly issue unless the ABS can show that it can be done at a low cost without a reduction in quality.

A key issue is whether a monthly issue would be based totally on sample data, or else would include substantial imputation. It is inappropriate that historical CPI data be revised, given the commercial use made of it. Furthermore, greater recourse to imputed values for some CPI components raises the likelihood of the need for revisions when imputed values turn out to be wrong.

Further, it would be curious to institute monthly periodicity for the CPI at the same time that a reversion to quarterly issues is being implemented for the Balance of Payments series because of the high degree of imputation and excessive public fixation with month to month changes. Further, the ABS has eliminated a monthly wage series (the Award Rates of Pay Index - 6312.0) with only quarterly wage series remaining. (eg. Average Weekly Earnings - 6302.0).

4 Population Coverage

Population coverage considers changes to household type and the geographical dimensions of the CPI.

Currently the CPI covers only wage and salary earner households and the ABS is considering the expansion of the coverage to a broader cross-section of Australian households. Whilst the ACTU represents organised wage and salary earners it does recognise the different demographic trends affecting Australia - including the increase in the proportion of retirees in the Australian population. Accordingly, an expansion in household types, if it can be done at minimal cost to the ABS, could assist in CPI measurement. The ACTU does not object to a further sub-group in the series provided wage and salary earner households can be identified as a distinct group. However, the ACTU believes the ABS has overstated its case in the information paper when it says:

"4.6 The choice of reference population group for the CPI is tied most closely to the principal purpose served by the index. In the Australian case, the restriction to employee households reflects the traditional use of the CPI as an input to wage determination processes.

4.7 The restriction of the population group to employee households can be challenged on three fronts. First, the tight nexus between movements in the CPI and wage and salary adjustments no longer exists."

[ABS Information Paper, p.21]

The CPI is still an important input into wage adjustments - whether they be award or enterprise bargaining agreements (see Section 1). Further, Australia's system of wage determination has shown historically to change and evolve in various forms, whether it be centralised, decentralised, collective bargaining based, indexation based, two-tiered, based on safety net adjustments etc. The system that Australia currently has - enterprise bargaining, underpinned by industrial awards subject to safety net adjustments - may not be the system that will be in place in five or ten years time. For the ABS to alter its measurement of the CPI based in part of its assessment of the wages system currently in place, is short sighted and would require costly revisions in the future.

The ABS should avoid adjusting its techniques according to perceived policy changes. For example, the decision of the ABS to eliminate its 'Award Rates of Pay Index' series (ABS Cat. 6312.0) is now shown to be in error given the public policy importance of that series (for example in the 'Living Wage Case').

In terms of regional coverage, the ACTU has noted that some of the enterprise agreements make reference to capital city based price indexes (see 'Hobart CPI' in Attachment [1]). Furthermore, in certain awards, remote area allowances are applied and some information on regional CPI's would be considered useful (for

example some awards covering the Northern Territory and Northern Australia in general refer to regional costs of living). There is some use for these measures but the ACTU recommends that the ABS consider the costs and quality considerations of such measures carefully, according to its professional judgement. Consideration of different household types may be useful if done so at minimal cost.

As noted, the aging of the Australian population is an important issue to consider and an index for, say, older populations may be beneficial. However, if the scope is to be broadened the ABS should extend the overall household coverage from wage and salary earners to a wider selection of households (i.e. including retirees) and retain the wage and salary earner household coverage.

5 Commodity Classification and Item Coverage

This issue concerns conceptual issues with certain commodities and items including:

- financial charges;
- home computer and software;
- gambling;
- tertiary education fees;
- domestic and home care services.

The treatment of mortgage interest charges depends on whether they represent a direct cost of home ownership or cost of finance (like any other). The ABS notes:

"5.10 To better appreciate the arguments both for and against a change, it is necessary to understand that mortgage interest charges relate only to interest charges payable in respect of a loan secured by mortgage over the principal dwelling of the household (i.e. excluding mortgages over holiday and investment properties), while consumer credit charges relate to interest charges payable in respect of all other consumer finance such as credit cards, personal loans, hire purchase agreements, etc.

5.11 The argument in favour of the current treatment is that mortgage interest charges represent a direct cost of home ownership and therefore are more correctly allocated to the Housing group. If they were to be excluded from the Housing group, the Housing group index number may be less useful for some applications as it could be seen as not fully representing all housing costs. Consumer credit charges, on the other hand, relate to the charged incurred in financing a much broader range of household consumption items and are more correctly classified to general household operating costs.

5.12 The argument in favour of a change include the following. While mortgage interest charges can only be incurred by households owning their principal residence, it is less clear that the funds borrowed against a mortgage are entirely used to finance home ownership. Financial deregulation and increases in real household income over recent decades have combined to provide households with greater and more flexible access to sources of finance. It is now more appropriate to view a mortgage as simply a security against which households can borrow funds to finance general household consumption expenditure such as consumer durables, holidays, children's education expenses, etc. The increase in the range of flexible mortgage or home equity products are cited in support of this view."

[ABS Information paper, p.28-29]

The ACTU represents wage and salary earner households whose main financial cost

of their working life is the purchase of the family home. Accordingly, the ACTU supports the inclusion of mortgage interest charges in the index as representing a direct cost of home ownership. Similarly, with tertiary education fees, the ACTU believes they should be treated as a cost of education.

If it is the ABS view that there should be a separation between cost of housing and cost of finance for housing, or cost of education and cost of finance for education, then they should be clearly identified as both these items are an important part of the major long term expenditure patterns of wage and salary households. The ABS should note the possible changes to private health insurance and its effect on the CPI (potentially the opposite of the 'Medicare effect' which produced a once-off reduction in the CPI in 1984).

6 Other Issues

The ACTU notes the comments in the 'Other Issues' section of the Information Paper. The ACTU notes the view of the ABS on selected state and local government charges Index (Information Paper, p.35). Whilst the ACTU notes the ABS judgement on the unreliability of this index, because of privatisation and corporatisation, the ACTU emphasises that there must be close monitoring of the charges of such utilities whether government owned or privatised. One of the key arguments for privatisation of public utilities and increased competition is that it will lower prices to consumers. This proposition should be properly tested by ensuring that there is clear and adequate information about price charges in a post privatisation environment. This would assist the public policy process.

7 Summary and Recommendations

The ACTU welcomes input into the 13th Series CPI Review. This submission outlines the ACTU's views on the Review, based on the ABS Information paper. The ACTU will be further assisted by its representation on the Review and may add supplementary submissions if necessary before the Review's completion. On the basis of its examination of the Information Paper the ACTU makes the following recommendations as outlined in the table below.

Issue	ACTU Recommendation (page)
1. Principal Purpose	Input into income adjustment (p.3). Note: Also recognises importance of inflation and macroeconomic management (p.3).
2. Biases in CPI	Agrees with ABS that: "...any bias in the CPI is very small" (p.7). The Review should rely on professionalism and judgement of ABS in providing best practical measure of cost of living (p.8).
3. Frequency of Compilation (Quarterly to Monthly)	Sees no strong reason to change to monthly issue unless done at a low cost. Decision should be left to ABS's judgement. Notes quarterly basis of wages, Balance of Payments data (p.9).
4. Population Coverage (Wage and salary earner households to all households)	Only expanded if at minimal cost. ABS has overestimated its case on CPI - wages nexus. Must maintain distinct series for wage and salary earner households (p.10).
5. Population Coverage (geographical)	Some use of geographic CPIs is made in EBAs, Award (Remote allowances etc.). Should only be done at minimal cost (p.10).
6. Population Coverage (household type)	Some case for retirees, older demographic groups. Cost and quality - key considerations (p.10-11).
7. Commodity Classifications and Item Coverage	Mortgage interest charges should be retained as cost of housing. HECs charges should be retained as cost of education (p.13).
8. Other Issues	If selected State and Local Government Charges Index is removed there should be adequate identification of the prices charged by privatised or corporatised utilities (p.14).

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