

Review of the Australian Consumer Price Index

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Introduction

The Australian Bureau of Statistics (ABS) is currently conducting a major review of the Australian CPI. This review has involved extensive user consultation and an advisory group has been established to provide guidance to the ABS. This paper discusses the issues under consideration in the review and methods used to obtain user input.

Background

The Australian Consumer Price Index (CPI) is an important economic indicator. It provides a general measure of changes in prices of consumer goods and services acquired by Australian households. The Australian CPI is used for a variety of purposes, such as in the development and analysis of economic policy, the adjustment of wages and pensions, and in individual contracts. Because of this, the CPI directly or indirectly affects all Australians.

Since 1960, when the CPI was first compiled, the ABS has maintained a program of periodic reviews of the CPI to ensure that it continues to meet community needs. The present 15th series CPI, which uses a 2003–04 weighting base, was first published in the September quarter 2005 CPI release.

The ABS has commenced work on the latest review of the CPI. The resulting 16th series CPI will have a 2009–10 weighting base, will be linked to the 15th series CPI in the June quarter 2011, and will first be published from September quarter 2011.

The last comprehensive review of the CPI was undertaken in 1997 (the 13th series). The 14th series (2000) and 15th series (2005) CPI were minor reviews which were limited to updating item weights.

The timing of this 16th series review is consistent with past practices and is dependent on the availability of data from the ABS conducted Household Expenditure Survey (HES) which is run on a six yearly cycle.

While an important objective of these reviews is to update item weights, these formal reviews also provide an opportunity to reassess the scope and coverage of the index and other methodological issues. As the Australian CPI is now relatively mature in terms of commodity coverage, the latter more complex issues are now the focus of the CPI reviews.

The major issues the ABS has identified in the 16th series review are:

- i. Principal purpose of the CPI;
- ii. Compilation frequency of the CPI;
- iii. Evaluation of the deposit and loan facilities index;
- iv. Maintaining the relevance of the CPI;
- v. Commodity classification;

- vi. Analytical series; and
- vii. Other issues.

Consultation process

The CPI review process includes formal consultative mechanisms involving key users of the CPI and the general public. The ABS has sought the views of interested parties via a number of mechanisms:

- An information paper: "*Issues to be considered for the 16th series CPI*" [1] was released along with a media release announcing the review.
- Interested parties were invited to make submissions to the ABS in relation to the issues raised in this paper, or any other issues that they consider relevant to the CPI review.
- Public forums were held in each of the eight Australian state and territory capital cities to enable the ABS to hear directly from the community on the usefulness of the Australian CPI. These forums were advertised using:
 - Paid public notices in national and state newspapers
 - The ABS government public hearing webpages
 - Mail out to key clients
- The Australian Statistician appeared on YouTube advertising the review and asking for input.
- A blog will be used to continue dialogue with interested parties throughout the decision making process.
- All written submissions have been made publically available on the website to foster an informed, robust and consultative process.

To complement the public submissions, an Advisory Group (AG) comprising representatives of major users has been formed to assist the ABS in its deliberations. The AG has a strong working knowledge of prices statistics and an understanding of the practical considerations and limitations when compiling national statistics. In addition to the technical issues raised in this issues paper, relevant issues arising from the public submissions will be discussed with the AG.

In total 54 written submissions were received, including 30 from private individuals and 80 people attended the public forums.

Issues considered by the review

In addition to updating expenditure weights and linking the 16th series to the current 15th series, the review is examining the issues listed below. A summary of user feedback on each issue is also included. [2]

Principal purpose of the CPI

Since the 13th series, the CPI has been designed specifically to provide a general measure of price inflation of goods and services faced by households. It is conceptually based on the *acquisitions* approach for compiling a CPI, measuring changes in the prices of goods and services acquired by households. While a major role of the CPI is to provide a broad measure of inflation to inform macro-economic policy considerations, there is a demand for an increased number of ABS and external consumer price measures to cater for emerging community needs.

Users were invited to comment on:

- whether measuring inflation faced by households (and the *acquisitions* conceptual basis) should remain the principal purpose of the CPI in Australia, and the role of the CPI in the face of emerging community needs; and
- the usefulness of supplementary indexes such as population subgroup measures

User feedback

General consensus is that the CPI is a well established and accepted measure of consumer price inflation and that this central purpose is highly relevant to the well being of the Australian community. The CPI appears to meet most needs, but there is a demand for alternative measures to meet emerging community needs. For instance, there are concerns that the CPI does not adequately capture the full cost of living for specific population subgroups.

It appears to be well understood in the community that if the ABS were to maintain the current acquisitions approach to producing a broad inflation measure, that it would be very difficult to also tailor it to the cost of living for all of the individual population groupings.

Some individuals and organisations have raised concerns with a perceived erosion of purchasing power (e.g., for individuals on CPI indexed fixed incomes, or where they consider indexation to wages would be more appropriate). They have called for a return to something closer to a purchasing power approach.

Compilation frequency of the CPI

Australia and New Zealand are currently the only two Organisation for Economic Co-operation and Development (OECD) countries that do not publish monthly CPI statistics. There are arguments for increasing the frequency of the CPI to a monthly compilation. These need to be balanced against the complexity, quality and cost.

Users were invited to comment on:

- whether quarterly release of the CPI still meets user requirements or whether user

- needs would be better served by a monthly CPI; and
- whether user needs justify the additional costs involved in a monthly CPI.

User feedback

The issue of the frequency of CPI compilation has attracted some strong but mixed views. Some of the key users from financial and economic circles that have a close interest in monitoring, analysing and forecasting the CPI, are strongly in favour of a monthly CPI - provided that current quality levels were maintained. Groups more concerned with cost of living issues believe that the quarterly CPI has served Australia well and there is no compelling need to change it to a monthly release.

Opponents spoke to the implications of a monthly series such as transition costs. Stake holders that rely on the quarterly CPI for indexation and or contractual arrangements have expressed a strong preference for retaining a quarterly series if the ABS moves to a monthly basis. There was also concern with how the move would be funded.

Evaluation of the deposit and loan facilities index

During the global financial crisis, the deposit and loan facilities index has exhibited significant volatility that has impacted on the headline CPI figure. Movements in the index have been affected by recent volatility in interest rate margins. The recent behaviour of the index has given rise to further consideration regarding its conceptual and methodological underpinnings.

Users were invited to comment on:

- whether financial services paid for indirectly via interest margins are appropriate services for inclusion in the CPI; and
- whether the ABS methodology correctly measures the price change for this service.

User feedback

The issue of the deposit and loan facilities index generally attracted comment from those concerned with financial markets and economic policy. Users tend to agree that conceptually, financial services charges facing consumers should be included in the CPI. There were however, calls for a comprehensive reassessment of the deposit and loan index methodology, including the methodology for determining the weight of this item. The general points of concern are that the methodology leads to: volatility in uncertain times; an apparent tracking of the cash rate (particularly over the last two years), while the weight of the expenditure class ensures a material impact on the headline CPI. It has been suggested by a select few users that if improvements to the methodology (including greater transparency) are not feasible, then the item should be removed from the CPI.

In addition, the current approach and methodology does not appear to be well understood within the broader community. A reasonable proportion of the public consultations was devoted to providing users with information on the current approach and methodology.

Suggested areas of research included: reassessment of the weights for deposit and loan facilities in the CPI; the reference rate construction; sample selection, and international advances on the subject.

Maintaining the relevance of the CPI

Frequency of weight updates

The frequency at which the Australian CPI is reweighted is constrained by the main source of expenditure weighting information, the Household Expenditure Survey (HES), which is conducted every six years. The HES captures the detailed spending patterns on the full range of goods and services that households purchase. Quantities underlying the base period expenditures (the CPI weights) remain fixed over the life of the basket.

Sample review program

While the HES is conducted every six years, the ABS employs an ongoing, dedicated sample review program. Sample reviews consider the representativeness of the sample which may lead to changes being made to the items priced, the outlets they are sourced from, and the weights to be applied to the commodities within that expenditure class.

Quality adjustment in the CPI

The ABS approach to quality adjustment is based on international best practice and the purpose of measurement of general price inflation facing households. As the objective of the CPI is to measure price changes for a comparable basket of goods and services over time, some allowance must be made for changes in the quality of a product (e.g. computers) when calculating price movements. This notion of pricing to constant quality is achieved by estimating and then removing the contribution of the quality change to price movements. An argument against the use of quality adjustment to pricing is that it does not represent the price of goods and services actually available.

New good and services

When a new commodity has become widely available to households, it is considered for sampling in the CPI.

Users were invited to comment on:

- the current frequency of CPI expenditure class weight updates (six yearly);
- whether the ABS should consider the use of alternative expenditure weight sources

- ABS strategies to keep the CPI contemporary;
- should improving the measurement of services in the CPI remain a high priority for the ABS; and the quality adjustment methodology

User feedback

There was public support for the ABS to assess the value of more frequent and timely expenditure class updates. Generally cited was the apparent rapid change in expenditure patterns experienced particularly over the last 20 years and the ability for the CPI to

account for major economic shocks affecting expenditure patterns. Many users felt that the CPI weights should be updated more frequently than six years.

Support for supplementary data sources such as scanner and industry data was apparent but not a general consensus. The majority of calls were for more frequent HES updates to account for any biases due to the gap between HES. This would also bring Australia more into line with the frequency of updates internationally. Interest in the CPI as a measure of purchasing power led to a suggestion for the ABS to rethink its use of quality adjustment particularly when used to index incomes.

Commodity classification

The CPI Commodity Classification (CPICC) is used to group consumption goods and services, providing a comprehensive structure in measuring household inflation on an *acquisitions* basis by the use of that good or service. Whilst it resembles the internationally endorsed Classification of Individual Consumption by Purpose (COICOP), the CPICC relates to Australia's specific requirements. The CPICC readily concords to the Household Expenditure Classification (HEC) used in the ABS HES. The CPICC differs from the national accounts' Input–Output Product Classification (IOPC), an industry based classification.

Users were invited to comment on:

- commodity classifications used to construct the CPI; and
- whether there are any purposes for which the industry based IOPC and the purpose based CPICC should concord (indirectly via the more detailed HEC).

User feedback

There was limited interest generated by this issue in the public consultations.

Analytical series

Exclusion-based measures

The ABS produces a number of exclusion–based measures, which exclude certain items from the CPI basket. Typically, the excluded items are those whose price change are volatile and/or display pronounced seasonal patterns, and those that are subject to administrative price setting.

Measures of underlying inflation and seasonal adjustment

In order to determine the underlying trend in consumer prices, users require measures which abstract from short–term volatility. To meet these needs the ABS produces two statistical measures of underlying inflation – the trimmed mean and the weighted median, as developed by the *Reserve Bank of Australia* (RBA). These measures may be useful in identifying the more persistent component of general price–level changes.

The ABS does not seasonally adjust the CPI. The CPI measures actual contemporary movements in prices and as such reflects any real world volatility that may occur. This can make it difficult for economic analysts to distinguish the noise of short-term fluctuations from the underlying inflationary trend. Seasonally adjusted data are sometimes preferred in the formulation of economic policy and for economic research because they eliminate the effects of changes that normally occur at the same time and of about the same magnitude every year. Such effects may be large enough to mask the short-term, underlying movements of the series.

Tradable, non-tradable components

The tradable and non-tradable component series show how international and domestic price movements are impacting on movements in consumer prices. The tradable component of the CPI comprises all items whose prices are largely determined on the world market. The non-tradable component consists of those goods and services whose prices are largely determined on the domestic market.

Living cost indexes

In recognition of the widespread interest in the extent to which the impact of price change varies across different groups in the community, the ABS compiles and publishes a number of living cost indexes for selected types of Australian households. These indexes are produced as a by-product of the CPI, and are published separately to the CPI. As these measures are based on the *outlays* approach they are the conceptually preferred measures for assessing the effect of changes in prices on the out-of-pocket living expenses of subgroups of the Australian population.

Average retail prices

Average prices for selected CPI items are presented for the purposes of making price comparisons between the capital cities for individual items. Due to the confusion which arises from the inappropriate use of the data, the ABS is reviewing the costs and benefits of publishing these series.

Users were invited to comment on:

- the usefulness of the current suite of ABS analytical series;
- the usefulness of the Average Retail Prices data; and
- any need for a seasonally adjusted CPI in addition to an unadjusted headline CPI

User feedback

There was a general consensus on the value and importance of the current suite of ABS analytical series. Few were concerned with the number of indexes. The majority of comments requested additional data, which ranged from an expansion of the exclusion and underlying inflation measures to new indexes based on alternative conceptual and methodological underpinnings.

There have been calls for the ABS to compile an analytical measure that abstracts from quality adjustments in the CPI, or alternatively, to do an assessment and release information on the impact of quality adjustments in the CPI.

Several submissions called for the publication of a seasonally adjusted CPI in the analytical series section of the CPI release. At the same time, there is a strong and universal preference for a headline measure that is not seasonally adjusted or revised, as the definitive CPI measure.

There has been some interest in retaining, or indeed enhancing, the Average Retail Prices (ARP) data. Currently there is not a comprehensive and reliable data source that provides comparable data on price levels / or item prices across regions.

It seems the appetite for information has not diminished with time and users are sophisticated enough to distinguish between the CPI and the measures used to interpret and add value.

Other issues

Spatial measures

Spatial Price Indexes (SPIs) are a snapshot of differences in price levels across regions. In 2001–02 and 2003–04 the ABS compiled experimental SPIs which revealed numerous conceptual, practical and resource based issues in developing such measures.

Geographical coverage

For the CPI to be representative of all Australian households, extending coverage beyond the capital cities would be required. The 2009–10 HES will be collecting and compiling point of purchase information for the first time. This will provide the ABS with an opportunity to assess whether the purchase behaviour for non-metropolitan areas is different to price index behaviour for capital cities.

Users were invited to comment on:

- the importance of spatial measures and their potential use; and
- the need for regional indexes – expanding the geographical coverage of the CPI beyond capital cities, and their potential use.

User feedback

Spatial indexes generated significant interest, particularly during the state forums. The underlying interest in a spatial price index is to highlight differences in the purchasing power of incomes among the state and territory capitals and between capital centres and regional zones. There were different views on the most appropriate set of expenditure classes and the most beneficial areas of comparison (e.g., capital vs. regions). Separately, there was also some interest in expanded geographic or population coverage outside capital cities.

Other User feedback

Implications from major events such as the possible introduction of an emissions trading scheme were also discussed in several submissions.

A few users put forward that the ABS should provide greater access to the detailed data underpinning the CPI to facilitate research and analysis amongst users - and that this would address some of the concerns and pressures from emerging community needs.

There were also some calls for greater transparency of ABS methodologies in areas such as: the deposit and loan facilities index; quality adjustment; new products and services, and the purpose of each index.

Conclusions

Overall, the ABS is pleased with the level of public engagement in the review. The issues which attracted most interest were: the principal purpose of the CPI; concerns around the deposit and loan facilities index; the desire for spatial / regional consumer price information, and interest in a monthly CPI. The ABS is currently considering the views put forward during the consultation process. The outcomes of the review will be published on the ABS website in December 2010. [3]

References

1. "*Issues to be considered for the 16th series CPI*"
[http://www.ausstats.abs.gov.au/Ausstats/subscriber.nsf/0/2ADF31DC1549C3BECA25768C001942B6/\\$File/64680_dec%202009.pdf](http://www.ausstats.abs.gov.au/Ausstats/subscriber.nsf/0/2ADF31DC1549C3BECA25768C001942B6/$File/64680_dec%202009.pdf)
2. Submissions to the review can be found at:
<http://www.abs.gov.au/websitedbs/D3310114.nsf/Home/Sixteenth+series+review+of+the+CPI+-+Submissions>
3. The ABS website <http://www.abs.gov.au>