

Parliament of the Commonwealth of Australia

The House of Representatives Standing Committee  
on Finance and Public Administration

# Cars, Prawns and Interest Rates

Review of the Auditor-General's  
Report on  
Data Collection for the Consumer Price Index

May 1991

Australian Government Publishing Service  
Canberra

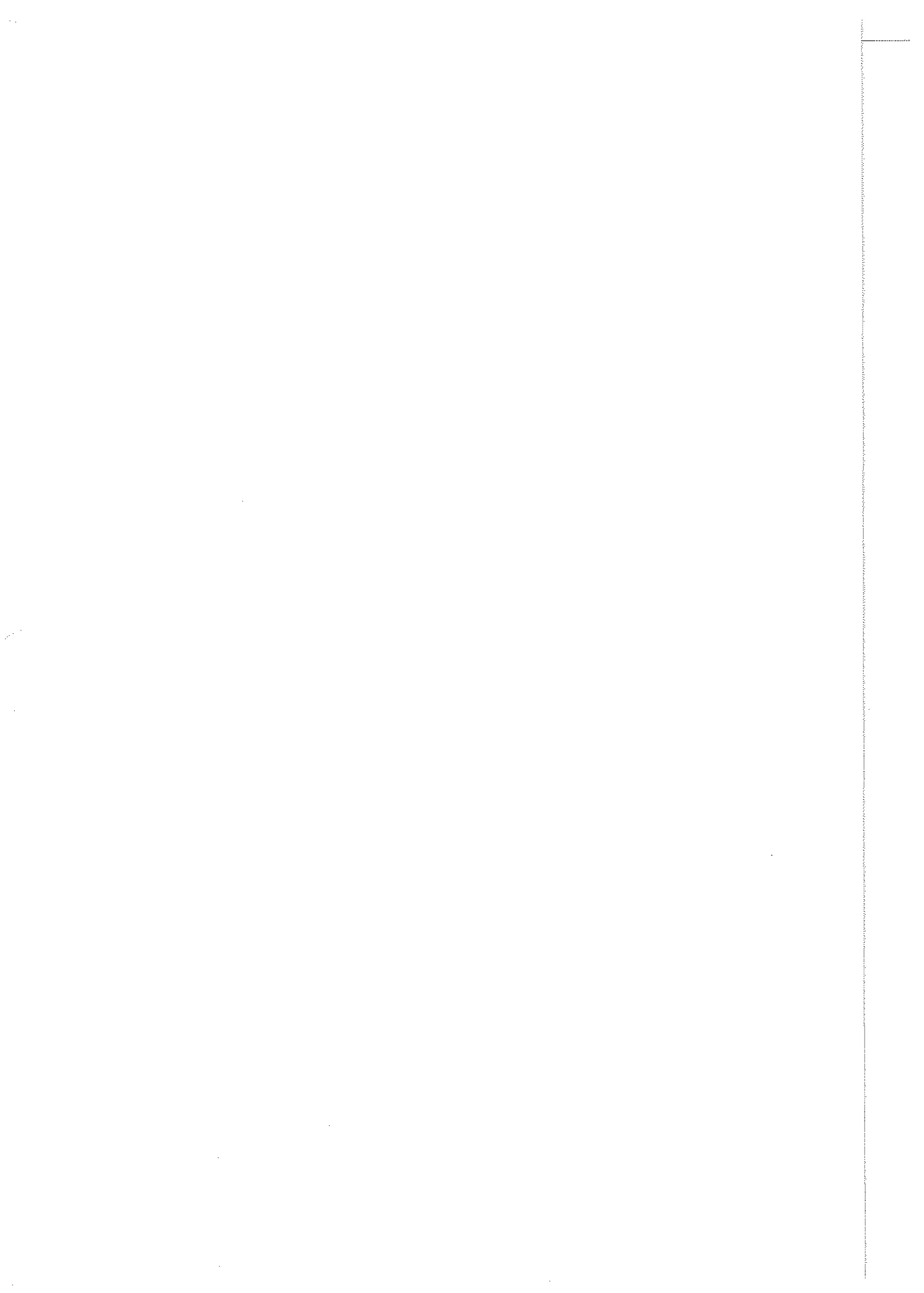
© Commonwealth of Australia 1991  
ISBN 0 644 14430 0

Printed in Australia by P. J. GRILLS, Commonwealth Government Printer, Canberra

## Contents

---

	Page
<b>Members of the Committee</b>	v
<b>Terms of Reference</b>	vii
<b>Abbreviations</b>	ix
<b>Summary of Conclusions and Recommendations</b>	xi
<b>1. Data Collection for the Consumer Price Index</b>	
. Conduct of Inquiry	1
. The Construction of the Consumer Price Index	1
<b>2. Audit Report No 10 1990-91</b>	5
<b>3. Supplements to the Consumer Price Index</b>	
. Alcohol, Tobacco and the CPI	11
. The Effects of Taxation on the CPI	12
. Relevance of the CPI to Non-Wage Earners	14
<b>Appendices</b>	
1. List of Witnesses	17
2. List of Exhibits	19



## Members of the Committee

---

Chairman: Mr S P Martin, MP

Deputy Chairman: Hon I B C Wilson, MP

Members: Mr J N Andrew, MP  
Mr J H Beale, MP (to 10.10.90)  
Mr R A Braithwaite, MP  
Dr R I Charlesworth, MP  
Mr B W Courtice, MP  
Mr A J Downer, (from 10.10.90)  
Mr S C Dubois, MP  
Mr R F Edwards, MP  
Mr R P Elliott, MP  
Mr G Gear, MP  
Mr R S Hall, MP

Secretary: Mr D R Elder

## Members of the Subcommittee

---

The Subcommittee appointed to undertake the inquiry comprised:

Chairman: Mr S P Martin, MP

Members: Dr R I Charlesworth, MP  
Mr S C Dubois, MP  
Mr R P Elliott, MP  
Mr G Gear, MP  
Mr R S Hall, MP  
Hon I B C Wilson, MP

Subcommittee Secretary: Ms G M Skinner

Inquiry Staff: Mrs A J Garlick



## Terms of Reference of the Committee

---

The Standing Committee on Finance and Public Administration is empowered to inquire into and report on any matters referred to it by either the House or a Minister including any pre-legislation proposal, bill, motion, petition, vote or expenditure, other financial matter, report or paper.

## Terms of Reference of the Subcommittee

---

On 15 November 1990, the House of Representatives referred to the Committee for inquiry and report the Auditor-General's Report No 10 1990-91 on the Australian Bureau of Statistics - Data collection for the Consumer Price Index. The Committee appointed a subcommittee to conduct the inquiry.





## Abbreviations

---

ABS	Australian Bureau of Statistics
ANAO	Australian National Audit Office
CPI	Consumer Price Index
HES	Household Expenditure Survey
TPI	Tax and Price Index



# SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

---

## 2. Audit Report No 10 1990-91

The Committee concludes that the ABS has taken the opportunity presented by the redevelopment of the CPI data processing system to address the areas highlighted by the Audit Report as having room for improvement. The implementation of these changes should ensure greater quality control of data and an improved management trail in its processing. (2.27)

The Committee recommends that the ABS continue to closely monitor the data processing system to ensure that any adjustments made do not affect the integrity of the CPI. (2.28)

## 3. Supplements to the Consumer Price Index

The Committee recommends that the ABS provide, each CPI quarter, a supplementary index which excludes tobacco and alcohol. The existence and availability of such an index will facilitate government decisions relating to health issues surrounding alcohol and tobacco consumption. (3.8)

The Committee recognises the significant difficulties, explained by the ABS, which would be encountered in the construction of an index which removes the effects of indirect taxation. However, the Committee believes that such an index would be of value to government by providing a measure of market induced inflation or deflation and hence considers that a re-examination of its feasibility is desirable. (3.19)

The Committee also believes the construction of an index similar to the TPI could be of value to government and the community by providing further information to supplement that now provided by the CPI. (3.20)

The Committee recommends that:

- . the ABS re-examine the feasibility of producing, as an accompaniment to the CPI, an index which removes the effect of indirect taxation on price change; and
- . the ABS also investigate the feasibility of producing an aggregate index to supplement the CPI. This index could take account of broader taxation measures and thereby provide an indication of how gross income would need to change to keep real disposable income constant. (3.21)

The Committee considers that the construction of a non wage earners index would be of value, by allowing decision makers to ensure that adjustments to pensions and other benefits adequately reflect changes in costs to non wage earner households. (3.25)

**The Committee recommends that the ABS study the feasibility of constructing a price index or series of price indices, relevant to the expenditure patterns of non wage earning groups, which could form the basis for adjustment of pensions and other benefits. (3.26)**

# 1 DATA COLLECTION FOR THE CONSUMER PRICE INDEX

---

## Conduct of the Inquiry

1.1 On 15 November 1990 the House of Representatives referred to the Committee, for inquiry and report, Audit Report No 10 1990-91, Australian Bureau of Statistics - Data collection for the Consumer Price Index.

1.2 As is past practice, the Committee appointed a subcommittee to undertake the inquiry.

1.3 A submission was received from the Australian Bureau of Statistics (ABS) in January 1991 and evidence was taken from the ABS at a public hearing on 10 April 1991.

1.4 Details of witnesses who appeared at the public hearing are included at Appendix 1.

1.5 The transcript of the public hearing and other evidence authorised for publication have been incorporated in a volume which is available for inspection in the Committee secretariat and the Parliamentary Library. References to evidence in the text of this report relate to page numbers in that volume.

1.6 The remainder of this chapter outlines the process of data collection for the Consumer Price Index (CPI). Chapter 2 discusses the issues raised in the Audit Report. Chapter 3 examines the possibility of developing other indices to accompany the CPI.

## The Construction of the Consumer Price Index

1.7 The Consumer Price Index (CPI) is defined as a measure of changes, over time, in retail prices of a constant basket of goods and services representative of consumption expenditure by resident employee households in Australian metropolitan areas.<sup>1</sup>

1.8 'Employee households' have been defined, for CPI purposes, as those households which obtain at least three-quarters of their total income from wages and salaries - but excluding the top ten per cent, in terms of income, of such households.<sup>2</sup>

---

<sup>1</sup> Australian Bureau of Statistics, *The Australian Consumer Price Index - Concepts, Sources and Methods*, 1987, ABS Catalogue No 6461.0, p. 5

<sup>2</sup> *ibid.*

1.9 'Metropolitan' consists of the Statistical Divisions for the eight capital cities of the States and Territories - Sydney, Melbourne, Brisbane, Adelaide, Perth, Hobart, Canberra and Darwin.<sup>3</sup>

1.10 Some significant sub-groups of the Australian population are not included in the CPI population group - eg the unemployed, pensioners and other retired people, full-time students living independently, the self-employed and people of independent means, and high income earners generally - as well as those living outside the eight capital cities. The ABS has estimated that the CPI population group accounted for 57 per cent of the population of the eight capital cities or 36 per cent of the Australian population.<sup>4</sup>

1.11 The composition of the CPI basket is based on the pattern of household expenditure obtained in the Household Expenditure Survey (HES) conducted periodically by the ABS and most recently in 1988-89. The Survey provides essential information for the accurate compilation of the CPI in following years. The total basket is divided into 8 groups: food; clothing; housing; household equipment and operation; transportation; tobacco and alcohol; health and personal care; and recreation and education.

1.12 The most recent Household Expenditure Survey was surrounded by some controversy over its intrusive nature. The Committee questioned the ABS about its approach to the next HES which is planned for 1993-94.

1.13 The ABS indicated that it recognised that participation in the survey was both onerous and an invasion of privacy. In response to a recommendation of the Ombudsman, which had been accepted by the Government, the ABS is examining the possibility of compensating households for their participation.<sup>5</sup>

1.14 The methodology of the next survey will be essentially very similar to the previous one, but research is being undertaken as to the inclusion of technology such as 'smart cards' to relieve householders of some of the burden of the survey. Through 'smart cards', information on purchases could be gathered at the point of sale, thus eliminating the drudgery of recording purchases in a written form.

1.15 In compiling the CPI, price movements for the different component items are combined using weights which represent the relative importance of each of the components in the total expenditure of the CPI population group. Changes in the weighting pattern have been made at approximately five-yearly intervals to take account of changes in household spending patterns.

---

<sup>3</sup> *ibid.*

<sup>4</sup> *ibid.*, pp. 5-6

<sup>5</sup> *Evidence*, p. 18

1.16 Prices of goods and services included in the CPI are generally collected quarterly. However some important items are priced monthly or more frequently (e.g. bread, fresh meat and fish, fresh fruit and vegetables, petrol, alcohol and tobacco) and a smaller number annually (e.g. seasonal clothing, local government rates and charges).

1.17 The collection of prices for some goods is a complex process. Since a fundamental principle of the CPI is that it reflect transaction prices - i.e. the price the consumer pays for the good, it is necessary for data collectors to ensure that the price recorded is the price being paid in the marketplace. Account must therefore be taken of factors such as trade-ins and discounts.

1.18 The Committee explored with the ABS other complexities involved in calculating the CPI. Of particular interest were mechanisms for dealing with changes in quality of items between quarters and over time.

1.19 To explain how changes in specifications are dealt with, the ABS used the example of a Mars bar. If the weight of a Mars bar is increased from 50 to 55 grams the increase in price due to the change in specification is not reflected as a price change. An arithmetical adjustment is made to take account of the increased quantity. Similarly where specifications are altered for more complex commodities such as car models it is only the pure price change which is included in the index.<sup>6</sup>

1.20 A further example of the complexities involved in CPI data collection and calculation is provided by the treatment of home ownership costs. Changes in the treatment of home ownership costs in the CPI were made in the March quarter of 1987 and again in the March quarter of 1989.

1.21 Prior to 1987 the CPI was criticised for excluding mortgage interest charges, land prices and prices of established houses from the House Purchase category.

1.22 In 1987, the 'simple revaluation' method was adopted. This method effectively took all outstanding mortgage debt together and revalued it in line with current changes in house and land prices, before applying the change in the current average mortgage interest rate to determine movements in mortgage interest charges.

1.23 When large fluctuations occurred in house and land prices in 1988 this method proved to not accurately reflect movements in average mortgage interest payments, as it did not take account of the fact that changes in house and land prices did not directly affect payments on mortgages taken out before the changes took place.

---

<sup>6</sup> Evidence, p. 15

1.24 In 1989 the more complex 'debt profile' method was introduced to overcome this problem. Under this approach the changes in house and land prices in the latest quarter are applied only to the stock of mortgage debt acquired in the last year. Under the debt profile method any changes up or down in the mortgage interest charges index are smaller than those produced by the revaluation method.

1.25 The debt profile method is considered to provide a more accurate picture of movements in average mortgage interest charges than the preceding method. By providing for a much smoother increase and decrease in prices, with the effect spread over a much longer period, the ABS believes it better reflects the actual effect on the consumer.<sup>7</sup>

---

7

Evidence, p. 33



## 2 AUDIT REPORT NO 10 1990-91

---

2.1 On 15 November 1990 Audit Report No 10 1990-91, Australian Bureau of Statistics - data collection for the Consumer Price Index was referred to the Committee for inquiry and report.

2.2 The key findings of the report conducted by the Australian National Audit Office (ANAO) were:

- . there is no reason to question the accuracy of the CPI. The processing of data and the compilation of the index were based on sound principles and professionally performed;
- . there is scope for additional effort by ABS in editing and quality control of item price data collected for CPI processing, and in improving the management trail in the processing of price data;
- . in compiling the index, more structured and effective use could be made of ABS records of previous prices and trends in establishing the accuracy of current item prices;
- . weightings assigned to individual items within expenditure classes should be reviewed more actively, using the varied sources of information available to ABS, to ensure that they are accurate reflections of the market; and
- . ABS advised that it is taking the opportunity presented by the current extension of computer processing methods in the CPI area to make a number of improvements to data editing and quality control.<sup>1</sup>

2.3 Chapter 8 of the Audit Report contained a summary of the fifteen recommendations to address these weaknesses. Each recommendation was followed by an ABS response. In those comments the ABS indicated that many of the recommended changes were practicable and were being incorporated into the new data processing applications being developed at the time.

2.4 The ABS submission to the inquiry was brief and noted that there was little to add to the ABS comments published in Chapter 8 of the report. A summary, accompanying the submission, of recommendations that had been actioned or that

---

<sup>1</sup> *Audit Report No 10 1990-91 Australian Bureau of Statistics - data collection for the Consumer Price Index*, AGPS Canberra, 1990, p.ix

were in the process of being actioned, confirmed indications in the initial responses that many of the recommended changes would become redundant in view of the new computerised data processing system.

2.5 Recommendations 1 and 2 concerned the production of a comprehensive procedures manual for CPI price collection. In January 1991 the ABS advised that the manual was being drafted and that Audit suggestions concerning content were being addressed. In April it was reported that 'the first run of manuals' would be ready for use by approximately June 1991<sup>2</sup>.

2.6 Recommendations 3 and 4 dealt with field collection procedures. The ABS advised that 'where appropriate the detailed suggestions ... are already implemented.' An exception was the suggestion involving recording of data checks on summary sheets. Such documents will no longer exist when the new data processing system is fully operational<sup>3</sup>.

2.7 Recommendation 5 involved decisions made by compilers. Compilers are located in Central Office and have responsibility for the compilation of the CPI from the raw data collected in the field. In the compilation process it is sometimes necessary to exclude certain price data from average price calculations. The ANAO recommendation sought to ensure that compiler decisions regarding exclusions were recorded and their validity monitored, through peer or supervisory review. The ABS accepted the recommendation. It also noted that the number of such decisions would be small in the new data processing system due to a change in the underlying methodology.

2.8 Recommendation 6 (i), concerning the method of calculation of average prices has become redundant due to the new methodology, which uses price relatives (i.e. the ratio of the current period price to a base period price). Averages will continue to be calculated as in the former system for only a small subset of items.

2.9 Recommendation 6 (ii) suggested that the ABS should review the 'special' procedures applying to collation of prices for some items. An example of such a 'special' procedure was in the treatment of prices of fruit items. For apples the method used was to collect prices for each of three apple types and to calculate a weighted average apple price. In contrast, for oranges, prices for two types were collected and the cheaper included in further calculations.

2.10 The ABS agreed that standard procedures were desirable and advised that some standardisation of procedures had been achieved with the implementation of the new data processing system. However, it advised that some differences in

---

<sup>2</sup> ABS Submission, Appendix A, Evidence, p. 39

<sup>3</sup> ABS Submission, Appendix A; *Audit Report No 10, 1990-91*, op cit., pp. 80-81

measurement practices will continue to be necessary. In relation to fruit prices, for example, the ABS advised that experience had shown strong consumer preferences in the market for apples of different types, while purchases of oranges showed no such distinction. Where use of varied procedures continued the ABS undertook to implement Recommendation 6 (iii), which suggested that these varying arrangements should be fully described in written procedures for the guidance of compilers.<sup>4</sup>

2.11 Recommendation 7 drew attention to the use which could be made of ABS records of previous prices and trends, to improve quality control of price data. The ABS agreed with this recommendation and again indicated that the new processing system would greatly facilitate this development.

2.12 Some degree of informed subjective judgment would continue to be required, however, to establish reasons for some apparently aberrant behaviour in prices, when time period comparisons are made. An example of such informed judgment was recounted in the Audit Report. In the course of the audit, concern was expressed by ANAO at the apparent lack of response by the ABS to a major variation in the cyclical price trend for prawns in 1989. The ABS advised that:

the result was anticipated because it coincided with the death of the Japanese Emperor which in turn caused a dramatic fall in demand as Japan went into mourning. The result would have attracted attention if a price fall had not taken place.<sup>5</sup>

2.13 The importance of background information and acquired knowledge was also referred by the ABS in relation to the training required for staff to use the technology basic to the new data processing system:

it is also fair to say there is a lot of knowledge of price collection and experience within that body which we would certainly want to retain. Having changed the method of capture and specification there are still some judgments we want them to make in the collection process. We would not want to lose that capacity.<sup>6</sup>

2.14 Recommendation 8 covered input editing. The ABS practice had been to rely heavily on 'output editing' as a control mechanism to monitor data quality. 'Output editing' focuses on analytical review of the output of the CPI process. The ANAO argued that this approach could result in the uneven application of quality control measures to some elements of the price data. Consequently it recommended the adoption of input editing methods particularly in some of the larger data groups.

---

<sup>4</sup> *Audit Report No. 10, 1990-91*, op cit., pp. 37, 82

<sup>5</sup> *ibid* p. 83

<sup>6</sup> *Evidence*, pp. 40-41

2.15 The ABS responded that field staff undertook subjective editing of data at the point of collection, but also outlined enhancements to be built into the hand held computers being introduced for field collection work. When a price observation is recorded the previous price observation and the percentage price increase will be shown thereby providing a context for subjective judgment about accuracy of the recorded price.

2.16 The ABS also agreed with the second part of the recommendation which proposed a review of all steps in data handling to identify areas where input editing could operate effectively. Simple editing packages are being built into the hand held micro computers to be used for the bulk of the price collection work.

2.17 Part (iii) of Recommendation 8 suggested a sampling approach to editing of input data to eliminate unnecessary effort in reaching an appropriate level of assurance on data accuracy. The ABS expressed reservations about the cost-effectiveness of such an approach. It preferred to stay with its method of independent field checking of recorded price data, by analysis of comparable price observation from the set of price observations. This approach 'effectively uses the observations of every collector to provide assurance of the quality of every other collector.'<sup>7</sup> Independent, non-simultaneous checking of prices was not considered appropriate because prices are dynamic and change constantly, while simultaneous checking of the recording of a sample of prices would not be truly independent.

2.18 Recommendations 9 and 10 proposed features which should be included in the data processing system. The ABS responses indicated that all suggestions had been incorporated except for a facility to enable spatial comparisons. ABS representatives later expanded on reasons behind this decision:

The problem with undertaking that work is that it will not focus on the observations which are likely to be in error. If I can illustrate by referring to a chain of supermarkets: typically, the chain may have different levels of prices in particular outlets, but their movement in prices will, apart from some exceptional cases, tend to be consistent between outlets. In other words, the chain is likely to maintain constant margins across particular outlets.

If we made comparisons of the level of the prices, we would constantly be finding differences which would be throwing up no information of any use to us. Weetbix, in one outlet, might be \$1.63 and in another \$1.48. But what has it told us? All it may have told us is that we have a high margin outlet and a low margin outlet. What we are really interested in is whether the changes in prices are occurring consistently and if not, why not.<sup>8</sup>

---

<sup>7</sup> *Audit Report, No. 10, 1990-91*, op cit., p. 85

<sup>8</sup> *Evidence*, p. 43

2.19 Recommendations 11 - 13 concerned review and maintenance of item samples. This process ensures that item specifications and weights reflect current consumer purchase arrangements.

2.20 ANAO considered that changes in samples and weights arising from expenditure class sample reviews should be implemented in a timely manner. The ABS agreed but explained that it is not possible to act on results in each city independently. It is necessary to wait until the results are drawn together into a national report.

2.21 Specific suggestions for documentation to be included in sample reviews were accepted by the ABS.

2.22 ANAO also suggested that more resources be made available in order to increase the sample review program. The ABS advised that, although not in direct response to the Audit review, it had allocated additional resources for the sample review and maintenance functions from 1991-92 and to research and development activity.<sup>9</sup>

2.23 The final recommendations, 14 and 15, suggested an increased role for Field Office staff in monitoring market changes which could affect weights, and in providing input into the Sample Review program. To facilitate this role, it was recommended that weight information be readily available to those working in the field. The ABS advised that under the new data processing system weighting information will be readily available to all users.

2.24 The foregoing discussion is indicative of the extent to which improved quality control of data collection and compilation is dependent on computerisation of the process. Benefits gained will depend on the quality of that system. Any design fault in the system would impact heavily on the validity and reliability of the outcome. The Committee questioned the ABS on this aspect.

2.25 The ABS advised that substantial resources had been dedicated to ensuring that the computer system was able to replicate the outcomes previously achieved with the clerical system. The ABS had been satisfied that that requirement had been met. The consistency of the system would continue to be reviewed to ensure that any changes made do not alter outcomes.<sup>10</sup>

2.26 The ABS also outlined other significant advantages which have accompanied the computer implementation. These include the elimination of the scope for clerical computational error, and the provision for imputation of missing observations, which has largely eliminated the need for clerical intervention.<sup>11</sup>

---

<sup>9</sup> Evidence, pp. 4-5

<sup>10</sup> Evidence, pp. 8-9

<sup>11</sup> Evidence, pp. 5-6

*Conclusion*

2.27 The Committee concludes that the ABS has taken the opportunity presented by the redevelopment of the CPI data processing system to address the areas highlighted by the Audit Report as having room for improvement. The implementation of these changes should ensure greater quality control of data and an improved management trail in its processing.

*Recommendation*

2.28 The Committee recommends that the ABS continue to closely monitor the data processing system to ensure that any adjustments made do not affect the integrity of the CPI.

### 3. SUPPLEMENTS TO THE CONSUMER PRICE INDEX

---

#### Alcohol, Tobacco and the CPI

3.1 An underlying principle of CPI compilation is that the basket of goods on which it is based should reflect household expenditure patterns. The CPI currently consists of eight broad groups of goods and services:

- . Food
- . Clothing
- . Housing
- . Household Equipment and Operation
- . Transportation
- . Tobacco and Alcohol
- . Health and Personal Care
- . Recreation and Education

3.2 The Committee spent some time considering the implications of the inclusion of tobacco and alcohol. For the March quarter 1991 this group contributed 5.57 percentage points to the total CPI.

3.3 The argument that exclusion of these commodities from the CPI would enable governments to more easily make health related decisions was raised with the ABS. The crux of this argument is that if tobacco and alcohol were not included in the CPI, governments could decide to increase tax on these items in order to discourage their consumption, without needing to consider the consequent effects on the CPI and other economic measures related to it.

3.4 The ABS explained that it is important to guard the objectivity of the CPI. To remove goods from the CPI, for any reason other than a change in expenditure patterns, would risk undermining public confidence in the integrity of the measure. It is unlikely that the Australian Statistician, in whom authority for such decisions rests, would accept such an alteration to the index.<sup>1</sup>

3.5 The Committee subsequently noted that the Fourteenth International Conference of Labour Statisticians also recommended that a CPI should relate to all consumption without any omission of tobacco or other items which may be regarded as non-essential or undesirable.<sup>2</sup>

---

<sup>1</sup> Evidence, pp. 23-24, 45

<sup>2</sup> Resolution concerning consumer price indices, Fourteenth International Conference of Labour Statisticians, adopted 5 November 1987, reprinted in *Consumer Price Indices: An ILO Manual*, Ralph Turvey et al., ILO Publications, Geneva, 1989.

3.6 An alternative approach was suggested by the ABS. At present the ABS publishes, along with the CPI each quarter, a series of supplementary indices which exclude some commodities. Examples include an index excluding food and another excluding housing.

3.7 The ABS advised that it would be relatively simple to construct a similar supplementary index which excludes alcohol and tobacco. Governments could then legislate, if they wished, to use the index excluding tobacco and alcohol for particular purposes.

### *Recommendation*

3.8 The Committee recommends that the ABS provide, each CPI quarter, a supplementary index which excludes tobacco and alcohol. The existence and availability of such an index will facilitate government decisions relating to health issues surrounding alcohol and tobacco consumption.

## **The Effects of Taxation on the CPI**

3.9 The above discussion on the implications for the CPI of increases in indirect taxation on alcohol and tobacco is a specific case of a wider problem faced by governments considering changes in indirect taxes or subsidies.

3.10 Any changes in indirect taxation, by affecting the transaction price of goods, will cause changes in the CPI and thereby to other economic variables indexed to it. Adjustments in direct taxation, however, do not affect the CPI and thus do not have the same flow-on effects.

3.11 Wage and pension increases are often linked to the CPI, with the implicit assumption being that adjustments to match CPI increases will maintain their purchasing power.

3.12 The exclusion of direct taxation from the CPI, however, means that depending on overall government policy this may not necessarily occur. For example a decision to effect a reduction in the price of a particular good by granting a subsidy to a producer will appear as a downward influence on the CPI, but it may be matched by an income tax increase which yields the same amount of revenue. If wages rise only by the same amount as the CPI real disposable income and hence purchasing power will fall.

3.13 The Committee explored with the ABS the feasibility of constructing a CPI which reflects market induced inflation or deflation of prices and excludes effects of taxation.



3.14 The ABS outlined the difficulties involved. Since taxes are built into retail cost structures, they affect retail prices, but the precise effect of a tax change on any particular item within any given period would be very difficult to calculate. Retailers may decide to partially absorb tax costs either permanently or temporarily. In other cases taxes levied at early stages in the chain may be subjected to mark-up at later stages.<sup>3</sup>

3.15 In the Australian context the problems are further increased by the variation in rates of indirect taxation. In order for the ABS to be able to make the necessary adjustments each CPI reporting period, detailed information systems would have to be maintained about the actual level of taxation applying to specific commodities.

3.16 The ABS stated that the difficulties would be greatly reduced with a Value Added Tax applied at the point of sale. Calculations would then simply require the removal of the tax from the transaction price.

3.17 An alternative is to include all the effects of government on individuals in a separate index. The Central Statistical Office in the UK, for example, produces a Tax and Price Index (TPI) as well as CPIs for a range of household types. The TPI indicates how gross income would need to change to maintain after-tax real income constant.

3.18 Such an approach would overcome problems presented by matters such as health costs. At present the Medicare levy is not included in the CPI because it is seen as being a tax, although private health insurance costs are included. If the levy component of health costs were moved into private insurance, the increase in private health insurance costs would be reflected in the CPI, but no account would be taken of the change to income tax. The aggregate measure provided by the TPI would include both effects.

### *Conclusions*

3.19 The Committee recognises the significant difficulties, explained by the ABS, which would be encountered in the construction of an index which removes the effects of indirect taxation. However, the Committee believes that such an index would be of value to government by providing a measure of market induced inflation or deflation and hence considers that a re-examination of its feasibility is desirable.

3.20 The Committee also believes the construction of an index similar to the TPI could be of value to government and the community by providing further information to supplement that now provided by the CPI.

---

<sup>3</sup> Evidence, p. 27; *The Australian Consumer Price Index, Concepts, Sources and Methods*, op cit., p. 34

## *Recommendations*

- 3.21        **The Committee recommends that:**
- **the ABS re-examine the feasibility of producing, as an accompaniment to the CPI, an index which removes the effect of indirect taxation on price change; and**
  - **the ABS also investigate the feasibility of producing an aggregate index to supplement the CPI. This index could take account of broader taxation measures and thereby provide an indication of how gross income would need to change to keep real disposable income constant.**

## **Relevance of the CPI to Non-Wage Earners**

3.22        While the calculation of the CPI is based on the expenditure patterns of employee households, it is also used to index pensions and other benefits paid to non wage earners. Adjustments made on the basis of CPI movements may not be appropriate to the spending patterns of non wage earners households.

3.23        The ABS advised that, in general, the differences in spending patterns between the two groups is quite small. However, exceptions do occur. For non wage earner households, for example, mortgage charges would have a relatively low weight.<sup>4</sup>

3.24        The ABS estimated that the development of a 'Non Wage Earner Index' may not require substantial extra resources to develop. Household Expenditure Surveys, which provide the ABS with the information on which to construct the basket of goods for which prices are recorded, target households generally not employee households alone. The non wage earner component of the Survey may provide sufficient information on which to construct an additional index. It would also be expected that much of the necessary data collection would overlap, as consumption patterns for several goods and services groups would be similar.

## *Conclusion*

3.25        The Committee considers that the construction of a non wage earners index would be of value, by allowing decision makers to ensure that adjustments to pensions and other benefits adequately reflect changes in costs to non wage earner households.

---

<sup>4</sup>        Evidence, p. 37

*Recommendation*

3.26 The Committee recommends that the ABS study the feasibility of constructing a price index or series of price indices, relevant to the expenditure patterns of non wage earning groups, which could form the basis for adjustment of pensions and other benefits.

**STEPHEN MARTIN, MP**  
Chairman

May 1991

# REPORT ON THE PROGRESS OF THE WORK

1911

The work of the year has been devoted to the study of the history of the country, and the progress of the work has been as follows:

## 1. History

The history of the country has been studied in detail, and the progress of the work has been as follows: The history of the country has been studied in detail, and the progress of the work has been as follows: The history of the country has been studied in detail, and the progress of the work has been as follows:

## 2. Geography

The geography of the country has been studied in detail, and the progress of the work has been as follows: The geography of the country has been studied in detail, and the progress of the work has been as follows: The geography of the country has been studied in detail, and the progress of the work has been as follows:

## 3. Agriculture

The agriculture of the country has been studied in detail, and the progress of the work has been as follows: The agriculture of the country has been studied in detail, and the progress of the work has been as follows: The agriculture of the country has been studied in detail, and the progress of the work has been as follows:

## 4. Industry

The industry of the country has been studied in detail, and the progress of the work has been as follows: The industry of the country has been studied in detail, and the progress of the work has been as follows: The industry of the country has been studied in detail, and the progress of the work has been as follows:

# APPENDIX 1

## LIST OF WITNESSES APPEARING AT PUBLIC HEARING

---

### Witnesses/organisation

---

#### Australian Bureau of Statistics

Mr Keith Robert Blackburn  
Assistant Statistician  
Prices and Household Finance Branch

Mr Timothy Joseph Skinner  
First Assistant Statistician  
Social & Labour Division

Mr Keith Victor Woolford  
Director  
Consumer Price Indexes Section



## APPENDIX 2

### LIST OF EXHIBITS

---

No.	Description
1.	<i>A Guide to The Consumer Price Index</i> , ABS Catalogue No. 64400, Eleventh Series, 1987
2.	<i>The Australian Consumer Price Index: Concepts Sources and Methods</i> . ABS Catalogue No 6461.0, Eleventh Series, 1987
3.	Correspondence from Ms R G Galbally, Chief Executive Officer, VicHealth, to Mr S P Martin, MP, Chairman, concerning advertising of tobacco and including an AMA submission regarding the removal of tobacco from the CPI basket of goods.

