# Post Implementation Review of the Unit Pricing Code of Conduct 

October 2012

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## Part I - Introduction

## Background

Unit pricing is the display of a price of goods per unit of measure (for example per 100 grams, per kilogram, per litre or per item).

In 2008, the Government indicated ${ }^{1}$ that it would consider the best way to introduce a mandatory nationally-consistent unit pricing regime. This commitment came as part of a preliminary response to the Report of the Australian Competition and Consumer Commission's (ACCC) Inquiry into the competitiveness of retail prices for standard groceries (the Grocery Inquiry) ${ }^{2}$, which recommended that a mandatory, nationally-consistent unit pricing regime be introduced for standard grocery items both on in-store price labels and in print advertising.

The Retail Grocery Industry (Unit Pricing) Code of Conduct (the Code) is a mandatory industry code of conduct that is enforceable under the Competition and Consumer Act 2010 (the Act). The Trade Practices (Industry Codes - Unit Pricing) Regulations 2009 came into effect on 1 July 2009, however the requirements of the Code applied to store-based grocery retailers and online grocery retailers after 1 December 2009.

## Purpose of the Post-implementation Review of the Code

The Treasury has been requested to undertake a Post-implementation Review of the Code (the Review). The Review follows the Regulation Impact Statement (RIS) prepared in advance of the implementation of unit pricing (the Unit Pricing RIS). ${ }^{3}$

The Review has been prepared in accordance with the Government's regulatory impact analysis requirements for consideration by the Office of Best Practice Regulation (OBPR). The Review considers feedback provided from stakeholders during the review process. Stakeholders were requested to provide evidence and analysis on the actual costs of the Code's implementation, and to provide an assessment on whether the Code has been effective and efficient in achieving its objectives. The Review also considers whether the Code continues to remain an appropriate response to achieve the objective of empowering consumers to make informed decisions about their purchases of grocery items through greater price transparency.

A key element of the Review is an analysis of the costs and benefits of the code from 1 January 2010 to 1 July 2012 (the Post-implementation Period).

[^0]
## Review of the Unit Pricing Code of Conduct (the Five-year review)

In the Unit Pricing RIS prepared upon implementation of the Code, it was suggested that a review of the Code should take place after five years of its introduction (the Five-year Review). Specifically, the Unit Pricing RIS suggested that:
"More formally, longer term review of the scheme after a five year period should be undertaken by an independent body or eminent persons. Particular areas for attention of this review would be:

Exemption criteria
Technology may have progressed and cheapened sufficiently enough to include all retailers in the scheme.

Changes in the Market

Any changes in the structure of the market may need to be addressed through the scheme details, i.e. a greater concentration of online retailers. The general size of stores or the amount of stock keeping units available may have also changed over time as retailers adapt to consumers buying behaviour.

Awareness and education campaigns
It may be necessary to run new campaigns for a new generation of consumers and immigrant populations. The review will also allow the opportunity to rate the effectiveness of previous campaigns and analyse whether they have been effective in reaching target audiences. Niche target groups of consumers may be identified to tailor any education programmes and create more effective reach and impact.

Enforcement
An enforcement review should examine whether additional or different powers are needed to address non-compliance or act as a deterrent and remain in proportion to the offences."

Issues relating to the specific requirements of the code, including its enforcement are best considered during the Five-year Review where these can be considered more thoroughly. While this Review considers specific feedback provided by submissions in relation to the operational requirements of the code, it considers this feedback within the context of assessing whether the Code has been efficient and effective in meeting its objectives. The review does not, for example, examine whether specific changes should be made to the Code.

## Requirements of the Code

Under the Code, unit pricing is mandatory for store-based grocery retailers, all online grocery retailers and all other grocery retailers that voluntarily enter the scheme (called 'participating grocery retailers').

- $\quad$ Store-based grocery retailers are those that sell the minimum range of food-based grocery items, have floor space greater than 1000 square metres dedicated to the display of grocery items with retail premises used primarily for the sale of food-based grocery items.
- Online retailers are those that sell a minimum range of food-based grocery items online.
- Participating grocery retailers are those that sell the minimum range of food-based groceries and voluntarily 'opt-in' to unit pricing by introducing in-store unit pricing for one or more grocery items that would be required to have unit-prices applied under the Code.

Grocery retailers covered by the Code must display unit prices for all non-exempt grocery items where selling prices are displayed on in-store labels, print advertising and websites. Unit prices must be displayed in dollars and whole cents. The unit price for a grocery item must also be:

- prominent - that is, it must stand out so that it is easily seen;
- in close proximity to the selling price for the grocery item;
- legible - it must not be difficult to read; and
- unambiguous - the information must be accurate and its meaning must be clear.

The Code requires grocery retailers to display unit prices in their print media and online advertisements. This requirement does not apply to advertisements on television, radio or other similar media.

Where the Code has been breached, a number of sanctions and orders are available including injunctive relief, orders for corrective advertising and notices, community service orders and declarations made by the Federal Court that a trader had engaged in conduct in contravention of the Act.

The ACCC, which has responsibilities for enforcing the Act, may also accept administrative undertakings from retailers to address conduct that has raised concern about their compliance with the Code.

## Part II - The objectives of the Code

## The objective of Government action

On 5 August 2008, as part of the Government's preliminary action plan in response to the Grocery Inquiry, the Hon Chris Bowen MP, as Assistant Treasurer and Minister for Competition Policy and Consumer Affairs, announced that the Government would consider the best way to implement a mandatory, nationally-consistent unit pricing regime for standard grocery items covering both instore and print advertising.

The Grocery Inquiry highlighted that significant benefits would flow from the mandatory introduction of unit pricing through its promotion of the ability for consumers to search for grocery items and highlighted the experience of overseas jurisdictions in implementing mandatory unit pricing schemes. In particular the Government's announcement to implement a mandatory unit pricing scheme was motivated by:

- a desire to support Australian households through the potential to save time and money; ${ }^{4}$ and
- the objective of increased price competition in the grocery market. ${ }^{5}$


## Identification of the problem

Prior to 2008 , most grocery retailers in the Australian market provided only the purchase price when selling grocery items, except where certain products are supplied by weight (for example meat, fruit and vegetables). Purchase prices are useful for consumers, however for some products, purchase prices do not convey all the information that consumers may wish to rely on when making purchasing decisions. In particular, purchase prices do not, for example, indicate whether a particular product is the cheapest of a kind when considering its weight, volume or quantity included. To make such an assessment, consumers needed to calculate their own unit prices based on the available information which may be time consuming and difficult for some consumers.

For many grocery items, unit prices decline with package size-which in part represents the economics of packaging or forms of second degree price discrimination—but this relationship does not hold universally. Unit pricing supports greater transparency where products are packaged in different sizes within the same product category.

Unit pricing provides a convenient comparison tool for consumers. Unit pricing aids the ability of consumers to search for grocery items across-brands, inter-store, and different sizes of the same brand, by providing a clear reference point on which to compare prices. When selecting between alternative products, consumers are able to use unit prices to select the product that embodies the most value to them. Differences in unit prices may reflect differences in quality- here, consumers are able to make a selection based on their own needs and preferences.

[^1]The mandated application of unit pricing across grocery retailers is a response to limitations in the usefulness of purchase prices, to the extent that they do not provide consumers with meaningful information to support them in making their purchasing decisions. Ultimately, unit pricing is intended to support consumers by allowing them to make purchases that provide them with the most value. Consumers may do so by adjusting their purchases based on unit prices which may allow them to save money, or provide them with a greater quantity for the same price.

## Box 1 - The economics of information and unit pricing

Consumers can incur a range of transaction costs when engaging in economic exchange. These can include search and information costs, negotiation costs as well as costs for monitoring and enforcing an agreement. While transaction costs may not always be easy to monetise, they are important to consumer welfare and economic efficiency. As Hadfield et al. (1998, p.132) ${ }^{6}$ note:

An economic analysis looks to the range of options provided in the marketplace, the match between an individual's preferences and transactions (are the goods and services and individual purchases in fact the ones he or she wants in terms of substance and quality?), and whether, given a consumer's preferences for quality, the goods and services a consumer purchases are obtained at the lowest price possible, taking into account the costs of the transaction itself.

In this regard, unit pricing supports consumers by reducing transaction costs associated with searching for products and obtaining the appropriate information, say through a mental calculation of the unit price. With the assistance of unit prices, consumers are able to compare different offers on equivalent terms. By providing consumers with useful information, they are better able to match their own preferences, including with regards to price and quality, with alternative products that may be available in the market.

## The Grocery Inquiry

In 2008, submissions to the Grocery Inquiry stated that there was a lack of transparency on pricing for many basic grocery items. In the Grocery Inquiry, the ACCC noted that major Australian supermarket chains did not include unit pricing information on packaged grocery items, however indicated that some major grocery retailers had announced that they intended on introducing unit pricing and supported its introduction on a mandatory basis.

Submissions to the Grocery Inquiry were received from both grocery retailers and consumer organisations. Submissions from both groups indicated that unit pricing was likely to be beneficial to consumers; however some grocery retailers highlighted the costs that might be associated with a mandatory scheme. The ACCC also indicated that unit pricing in catalogues and other forms of advertising would assist consumers in making inter-store price comparisons.

It was suggested that a mandatory system would ensure that it is implemented consistently in the light of state-based schemes that were under consideration at the time. In addition, it was noted

[^2]that a mandatory scheme would ensure a consistent approach to displaying unit prices between different grocery retailers.

The ACCC recommended that a mandatory, nationally-consistent unit pricing regime be introduced for standard grocery items both on in-store price labels and in print advertising.

## The Government response to the Grocery Inquiry

The Government agreed to the Grocery Inquiry's recommendation to implement a nationally consistent unit pricing scheme. The Explanatory Statement ${ }^{7}$ to the Code indicated that the purpose of the Code was '...to require large grocery retailers, those grocery retailers that operate online, and those grocery retailers that voluntarily display unit prices, to use unit pricing when selling grocery items to consumers.'

The preliminary action plan ${ }^{8}$ highlighted that the Grocery Inquiry identified that a lack of incentives for the major supermarkets to compete strongly on price was an impediment to improved competition. The Code ensures that prices are presented consistently to consumers and facilitates consumer comparisons of prices across grocery retailers and between alternative products.

In addition, it was considered that the implementation of a national unit pricing scheme would ensure that key elements in the display of unit pricing by retailers are nationally consistent. On 26 June 2008, the Queensland Premier announced ${ }^{9}$ the Queensland Government's intention to introduce a mandatory unit pricing scheme in that state. Existing trade measurement regulations had already provided national consistency in the unit pricing requirements for fresh meat, fruit and vegetables. A nationally consistent scheme allowed Australian consumers to enjoy the same standards of unit pricing around the country. The Code applies to the major supermarket chains and larger independent stores. As these are generally incorporated entities or operate across state and territory borders, they are subject to national regulation.

On 8 January 2009, the Government announced ${ }^{10}$ the details of the Government's approach to the roll-out of a nationally consistent, mandatory unit pricing scheme while highlighting that unit pricing will make a big impact on household budgets by helping consumers to save time and money. The Code supports this objective by allowing consumers to make informed decisions about their purchases of grocery items through greater price transparency.

The desire to support Australian households through the potential to save time and money, as well as achieving the objective of increased price competition together persuaded the Government to announce its support for a mandatory unit pricing scheme in its preliminary action plan in response to the Grocery Inquiry. The benefits of consistent unit pricing meant that a nationally consistent approach was favoured as a mechanism to maximise the benefits of unit pricing.

[^3]
## The Unit Pricing (Easy comparison of grocery prices) Bill 2008

On 15 May 2008, the Unit Pricing (Easy comparison of grocery prices) Bill 2008, which was a private Senator's bill introduced by Senator Steve Fielding, was introduced into the Senate. The objective of the Bill was to require grocery retailers to display unit prices. The Bill proposed amendments to the National Measurements Act 1960 including a national unit pricing scheme. On 17 June 2008, the Senate referred the Bill to the Senate Standing Committee on Economics (the Committee) for further inquiry.

The Committee reported in September 2008, after the Government had indicated that it would consider the best way to introduce a mandatory nationally-consistent unit pricing regime. The Committee supported the policy intent of Senator Fielding's Bill, but was not convinced that the Bill achieved the right balance between maximising the usefulness and effectiveness of the scheme for consumers and minimising the costs of implementation.

## The case for a mandatory and nationally consistent unit pricing scheme

A nationally consistent unit pricing scheme allows consumers to more easily compare goods between retailers. It eliminates the possibility of different systems being used from store to store and therefore lowers the potential confusion for consumers when comparing goods across retailers. A mandatory scheme provides certainty to consumers as well as grocery retailers and ensures that consumers are able to access unit prices no matter where they purchase their groceries. ${ }^{11}$ This approach is particularly beneficial where retailers would not otherwise display unit prices.

While some grocery retailers had already implemented, or were in the process of implementing unit pricing schemes, a mandatory scheme has ensured that unit pricing has been implemented consistently and that there is a mechanism for this consistency to be enforced. Furthermore, it has allowed grocery retailers to implement unit pricing in a manner that is consistent with their obligations under the Code so as to minimise compliance costs. A nationally consistent unit pricing scheme has also allowed for the promotion of unit pricing through the ACCC.

[^4]
# Part III - Assessing the Code's performance 

## The consultation process

To support the Review's assessment of the Code's performance, key stakeholders affected by the Code have been engaged. Selected stakeholders were invited to comment on the operation of the Code including their assessment of both the benefits and the costs incurred since its implementation. Stakeholders invited to comment included grocery retailers, bodies representing grocery producers and consumers, academics and the ACCC. A list of submissions can be found at Appendix Item 1.

## Consumer use of unit pricing

Some submissions outlined a number of surveys and simulations that have assessed consumer use of unit pricing in Australia. These submissions refer to unit pricing more generally whether provided for by the Code or otherwise. While these studies do not specifically examine unit pricing as it is applied with respect to the Code, they examine unit pricing in a form that is not inconsistent with the requirements of the Code - that is, the studies are useful and relevant in assessing consumer use of unit pricing where afforded for by the Code.

The Queensland Consumers Association (QCA) and CHOICE jointly undertook an online consumer survey of around 1000 consumers to assess the effectiveness of unit pricing. The survey found that 80 per cent of people who shopped at a major supermarket used unit prices with 72 per cent of users finding unit prices 'very helpful'. While unit pricing was revealed to be useful to the majority of consumers surveyed, 15 per cent had seen unit prices but were not using them while 5 per cent had not seen the unit prices. All users of unit prices had found them at least 'slightly helpful'.

The Consumers Association of South Australia (CASA) indicated in its submission that 88 per cent of respondents to their survey, conducted in March 2012, said that they compare products on a value for money basis. The submission did not indicate the sample size, or survey methodology.

A submission by academics ${ }^{12}$ from the Department of Marketing at Monash University referred to a forthcoming Australian study on how the presence of unit pricing affects consumers' grocery shopping. The study is to be based on surveys of 225 and 2035 respondents held in 2009 and 2011 (respectively). These surveys included a simulated shopping task to examine how unit pricing affected the purchasing decisions of respondents. The submission indicated that 65 per cent of grocery shoppers who are aware of unit pricing reported that they use unit prices when doing their grocery shopping.

Key findings of their current research found that:

[^5]- consumers rely on unit prices when making purchasing decisions with 60 per cent of respondents including the unit price as one of the attributes they attended to most (where unit pricing was available);
- consumers are more inclined generally to choose lower priced products where unit prices are available with 57 per cent of respondents to a simulated shopping task choosing the lowest price item where unit prices were available (compared with 49 per cent where unit prices were not available);
- the presence of unit price information reduced information load and decision difficulty;
- while unit prices are more useful to consumers where grocery items come in assorted sizes, consumers still value unit prices even where products are sold in common sizes, weights or quantities;
- under time constraints, consumers are more likely to rely on unit prices to guide their purchasing decisions;
- consumers benefit more from unit pricing where they understand the principles of unit pricing; and
- reliance on unit pricing varies with demographic characteristics including age and education.

A further submission by academics ${ }^{13}$ from the Ehrenberg-Bass Institute (University of South Australia) and CenSoC (University of Technology Sydney) outlined the results of a simulated choice experiment conducted in Australia. A total of 402 respondents over the age of 18 were presented with 16 simulated grocery item choices consisting of three alternatives. A subset of respondents received choice sets with unit prices while another received choice sets without unit prices. The manner in which these sets were shown to respondents was not inconsistent with the requirements of the Code. The experiment did not find a difference in the choices made by the respondents exposed to unit prices and those made by the respondents who did not have unit prices. However, the submission noted that the influence of unit pricing may not be fully captured as comparisons were made only between competing brands and that only two product categories were studied.

Another submission by an academic ${ }^{14}$ from the Queensland University of Technology Business School presented an overview of fieldwork undertaken as part of a broader research study on unit pricing in Australia. The fieldwork involved interviews of consumers as they chose from alternative grocery items in a supermarket. The qualitative findings from these interviews indicated that 25 per cent of 16 respondents specifically relied on the unit price to guide their purchasing decisions with the other 75 per cent relying on other factors such as brand, purchase prices, size, or quality. Although 75 per cent of respondents did not rely on the unit price to make their purchasing decisions, many of these shoppers may have benefited if they had done so, including two respondents that based their decision on the unit price, but calculated it mentally rather than relying on the price label.

[^6]
## Box 2 - International studies on unit pricing

There are a number of studies that examine the use of unit pricing in other countries. While there may be some localised factors that could lead to some differences in the manner in which consumers use unit prices, they are useful as they provide insight into consumer responses to unit pricing.

## United States

A number of studies have examined the impact of unit pricing following the introduction a compulsory unit pricing law in Massachusetts in the United States in the early 1970s. These studies examined consumer behaviour in the period after unit pricing had become compulsory.

Isakson and Maurizi $(1973)^{15}$ found that the success of unit pricing was largely dependent on the profiles of the consumers involved. Middle-income consumers used the unit pricing system more than other consumers, especially in terms of choosing more economical sizes of the same brand.

Russo et al $(1975)^{16}$ found that the posting of unit prices resulted in changes to purchasing behaviour. They observed that when unit prices were posted on separate shelf tags in a supermarket, consumer expenditures decreased by 1 per cent. The market shares of lower unit priced items also increased significantly. This was an even stronger effect for homogeneous subcategories of products. However, when the prices were displayed on an organised list (offering a more immediate comparison) consumer savings were up to near 3 per cent.

Aaker and Ford $(1983)^{17}$ find a much lower awareness and usage of unit pricing comparison amongst low income learners. They estimate that between 30-50\% of all consumers use the unit pricing system.

## United Kingdom

Further research in other jurisdictions where unit pricing is mandatory, includes research on consumer use of unit pricing in the United Kingdom. Mitchell et al $(2003)^{18}$ provide the results of a survey of over 1000 respondents finding that 51 per cent of the sample frequently used unit prices. The survey found that there may be some challenges associated with consumer use of unit prices with 31 per cent of the sample indicating they did not understand how unit pricing helped them compare between products, while 35 per cent could not be bothered to look at unit prices and 28 per cent indicated that unit pricing was too difficult to use.

Overall it would appear as though a large subset of consumers actively use unit pricing, and that there is further opportunity for consumers to increasingly use unit pricing as they become more familiar with it over time. In addition, it would appear as though consumers who use unit prices are able to make choices that better reflect their preferences.

[^7]
## Grocery retailer implementation of the Code

The ACCC commissioned a survey of unit pricing (the ACCC Survey), released in October 2010, which investigates retailer compliance with the Code. The ACCC Survey is based on the data collected by mystery shoppers who observed the application of unit pricing in a sample of 383 supermarkets and 17 online grocery retailers. The ACCC Survey examined compliance with respect to the Code's requirements for the units of measurement, the correct calculation of unit prices, as well as the display of unit prices (including prominence, legibility, proximity to retail price and unambiguity).

The ACCC survey found that 98 per cent of surveyed items displayed a unit price with 1 per cent containing an incorrect unit, and 4 per cent containing an incorrect unit price. In addition, the ACCC Survey examined compliance rates for prominence ( 91 per cent), proximity ( 94 per cent), legibility ( 95 per cent), and unambiguity ( 90 per cent) with an average compliance rate of 93 per cent. The ACCC Survey also found that 47 per cent of online retailers were failing to display unit prices.

The ACCC have indicated that following the ACCC Survey, the ACCC wrote to grocery retailers to encourage them to conduct a comprehensive audit of their store (physical or online) for any unit pricing errors and that all retailers surveyed have now addressed these areas.

Complaints data from the ACCC indicates a decrease in the number of complaints concerning unit pricing over the Post-implementation Period (See Table 1). The most common complaint related to the use of an incorrect unit of measure (See Table 2).

## Table 1 - ACCC unit pricing complaints: by year

|  | FY 2009-10 | FY 2010-11 | FY 2011-12 |
| :--- | :--- | :--- | :--- |
| Complaints | 68 | 40 | 23 |
| Enquiries | 103 | 46 | 3 |

Table 2 - ACCC unit pricing complaints (last two years): by issue

| Issue | Number of complaints |
| :--- | :--- |
| Incorrect unit of measure used | 20 |
| Unit price incorrectly calculated | 11 |
| No unit prices in store | 9 |
| No unit price on particular item | 5 |
| Unit price covered / obstructed | 5 |
| Unit price not legible | 4 |
| Other | 9 |

The ACCC Survey found that generally, larger chains were more compliant with the Code's obligations while some smaller independent supermarkets or smaller chains had greater variability in their compliance. This likely reflects differences in the manner in which individual grocery retailers achieve compliance with the Code.

The ACCC has generally resolved concerns about a potential breach of the Code through administrative action, as in most cases the alleged conduct appeared accidental or of limited detriment to consumers. Where this has occurred, grocery retailers have corrected their conduct and implemented measures to prevent recurrence.

Overall it appears the Code has been appropriately implemented by most grocery retailers. While the ACCC Survey indicated some degree of non-compliance amongst online retailers and with some specific requirements of the Code, overall it found that 98 per cent of items surveyed in physical stores displayed a unit price. Given the decreasing number of complaints and enquiries received in relation to the Code, it appears as though some improvements have been made in the manner in which unit prices have been applied. It does not appear as though consumers' use of unit pricing has been limited through non-compliance with the Code.

## Consumer benefits and costs

In their submission, the QCA identified that the use of unit pricing can vary depending on the preferences of the consumer, the extent to which unit prices are easy to read, and consumer awareness of how unit prices can be used. In addition the benefits associated with identifying cheaper groceries, the Consumer Action Law Centre (CALC) and the QCA identified that the code has benefited consumers by saving time where they no longer have to mentally calculate unit prices, as well as by improving price competition between brands. Additionally, the CALC submission further highlighted that the Code was useful where comparisons can be made across different stores.

Unit pricing is likely to be particularly relevant where the nature of a product means that consumers are more focussed on the quantity price of a grocery item rather than other attributes. This may be particularly relevant for homogeneous grocery items where consumers do not differentiate between grocery items based on brand or perceived quality. However, consumers may still benefit from unit prices even where brand or quality considerations are more important factors in a consumer's purchase decision.

The submission by Oppewal, Yao and He of the Department of Marketing at Monash University explores under what circumstances consumers were most likely to be influenced by unit prices. It is suggested that unit prices were more likely to be influential where consumers are under time pressure, where consumers are less likely rely on other information presented on the packaging and where consumers have an existing understanding of what unit prices represent.

Existing understanding of what unit prices represent is likely to support consumers' use of unit pricing as it allows them to understand how they can use them to select cheaper grocery items. The QCA commented that grocery retailers have not actively explained unit pricing and that education activities to support the implementation of the Code may not have had a significant impact on consumer understanding of unit pricing.

Some submissions, including the QCA raised the possibility that some consumers may have incurred additional costs due to the wastage associated with relying on unit prices without consideration of the quantity needed. Consumers may also incur costs where any compliance costs are passed onto consumers. There have not been any discernible price increases that can be attributed to the Code.

## Limitations on consumer benefits

Aside from the Code's benefits and costs, a number of submissions commented on what they perceived as being limitations on the benefits that have been experienced by consumers. While these submissions were generally highly supportive of unit pricing, they identified areas where the Code was not meeting their expectations. These limitations are relevant to the extent that they
mean that the Code may have not been effectively and efficiently meeting its objective with respect to the objectives of the Code.

## Prominence and legibility

Some concerns over the prominence and legibility of unit prices have been raised in the submissions.

The QCA suggested that unit pricing would be even more beneficial to consumers where grocery retailers place a higher priority in ensuring that unit prices are easy to notice, read and use. Accordingly, the QCA considers that more prescriptive requirements should be adopted to ensure that this is achieved. The QCA further considers that there is currently non-compliance with the prominence and legibility requirement of the Code. Further questions were raised as to whether the correct units of measurement were being applied consistently across products.

Another aspect of prominence and legibility is the placement of the unit price relative to the retail price. The Code requires grocery retailers to place a unit price in close proximity to the retail price. The QCA suggested that some grocery retailers are not placing the unit price near enough to the retail price which may reduce its overall impact.

CHOICE endorsed the QCA submission in relation to their comments on prominence and legibility. CALC and CASA also referred to prominence and legibility as an ongoing concern. In the joint QCA and CHOICE survey, 60 per cent of respondents either agreed, or strongly agreed with the statement that unit prices would be more helpful if the print size was bigger. Respondents on incomes of less than $\$ 52,000$ and respondents aged over 55 years were more inclined to indicate as such. CASA indicated that 64 per cent of respondents to their survey found it difficult to read shelf tags containing the unit price.

In a submission from Vision Australia it was suggested that the Code, in its current form, had not been of benefit to its clients. In particular, Vision Australia suggests that print size and colour contrast are important when reading at a distance. Vision Australia further commented that for normal reading, a minimum of 12 point ( 3 mm ) print can be acceptable, but that 18 point $(4.5 \mathrm{~mm})$ is preferable and that adjustments should be made where text is to be read at a distance.

In the ACCC Survey, 91 per cent of labels were judged to be prominent while 95 per cent of labels were judged to be legible. To further explore these concerns, the ACCC undertook a further covert sample survey to determine whether they were compliant with the prominence and legibility requirements of the Code. In particular, this additional survey indicated that of the surveyed grocery retailers, all unit prices were either 4 mm or 5 mm in height and were therefore complying with the Code's prominence requirements. While unit pricing would appear to meet Vision Australia's guidelines for readable text, larger sizes may be useful where signage is to be read at a distance.

CALC recommended that the Code be amended to require that the text of unit prices be at least a certain height (expressed in millimetres).

As the Code does not prescribe how unit prices are to be prominent and legible, there is some opportunity for grocery retailers to satisfy the prominence and legibility requirement in a manner that satisfies their own operational needs as well as the needs of their customers. Given the
complexities that may come in prescribing requirements for prominence and legibility, ${ }^{19}$ this flexibility avoids the imposition of any additional compliance costs that may be associated with more prescriptive requirements.

In the light of the ACCC's additional survey of compliance with the prominence and legibility requirements of the Code, it appears the Code is currently meeting its objectives in this regard. While the manner in which some unit prices are displayed may be difficult to read for some consumers, it appears as though a majority of consumers are able to use unit prices where they wish to do so. Where there is concern that unit prices are not presented prominently or legibly, the ACCC is able to consider whether a grocery retailer is satisfying their obligations under the Code.

As this review is aimed at assessing whether the Code has effectively and efficiently satisfied its objectives and whether it is likely to continue to do so, the matter of prominence and legibility may be more thoroughly considered as part of the Five-year Review.

## Enforcement of the Code

The QCA suggested that consideration be given to whether the requirements of the Code be implemented through Trade Measurement legislation. In particular, the ability for trade measurement officers to monitor compliance is suggested as a possible benefit. The Consumers Federation of Australia (CFA) also suggested that this approach be taken. The QCA further commented that the ACCC should be more actively monitoring compliance with the Code, rather than relying on consumer complaints.

A review of the Code's enforcement would be appropriate at the time of the Five-year Review.

## Universality of units of measure

The CFA, the QCA and CASA suggest that standard units of measurement be changed to per kilogram and per litre rather than 100 grams and 100 millilitres as they are for some product categories. It is suggested that by doing so, unit pricing will be easier to understand. Further to this, the QCA also highlighted that depending on how the Code is interpreted, for some items, grocery retailers may provide unit prices on a per-item or per-weight basis. It was suggested, for example, packets of coffee sachets could be presented as per sachet while coffee may generally be priced per 100 grams.

The current standard units prescribed as part of the Code are intended to provide meaningful unit prices for consumers. The Unit Pricing RIS demonstrated how per kilogram unit prices may be excessively large for some grocery items while per 100 gram comparisons provide a more meaningful measure for consumers. While in some cases per kilogram unit prices may be useful, it would not appear as though the use of smaller units of measure has substantially weakened the effectiveness of the Code, and it is not immediately apparent that universally prescribed units would benefit consumers in all circumstances.

## Clarity over product categories

A submission by Woolworths indicated that they believed the existing requirements of the Code strikes the right balance for retailers and consumers. However, they indicated that broad definitions of products as well as varying interpretations of the Code have led to the inconsistent application of

[^8]unit prices on some items to the confusion of consumers. In particular, Woolworths indicated that the Code requires the same unit of measure to be applied to broad categories of goods such that some items of a type will display a unit price per 100 grams while others of a similar type will require the application of a unit price per kilogram.

The Woolworths submission provided an example of prepared meals where for some products unit prices are required to be displayed as per 100 grams while for others unit prices are required to be displayed per kilogram. Similar concerns arise where some products have undergone a substantial transformation but are still considered to be fruit and vegetables and so are required to be displayed per kilogram while other similar items can be displayed as per 100 grams.

A submission from ALDI also raised an example of where snack items such as cheese and crackers or tuna and crackers have different units of measure than the main commodity in the snack (for example, cheese and tuna respectively).

In a submission, Coles also provided further examples of where units of measure are inconsistent with other similar products including for beef jerky, air freshener, nuts, tinned meat and flour.

Woolworths suggest that greater flexibility to the grocery retailer would assist in ensuring that the most appropriate unit price is applied. Further consideration of the units of measure and their categories may be appropriate at the time of the Five-year Review.

## Quality considerations

There have also been concerns relating to the use of unit pricing based on weight or volume where a consumer's use of the product does not depend strictly on these. For example, for laundry powder, unit prices based on weight or volume might not be useful where an ultra-concentrated formula is used. Here, the ultra-concentrated formula could appear more expensive even where it is equal in price on a per wash basis. There may be other products where a consumer's use of a product may not depend on weight or volume. Where this occurs, a unit price might not be as beneficial, or could even mislead consumers.

Unit prices are not intended to cater for quality differences in products. Consumers are the best judge of how they value alternative products and will continue to rely on other information, in addition to unit prices, to support their purchasing decisions. At the time of the Five-year Review, there may be some scope to consider whether unit prices as they are currently applied to some product categories, remain appropriate for consumers.

## Scope of the Code

The CFA, the QCA and CASA commented that the requirements of the Code could be extended to other stores, for example the QCA suggested that chemists or fruit and vegetable shops be required to implement unit pricing where they sell items that are covered under the Code. It is also suggested that the floor area requirements (over 1000 square metres) also be reviewed.

While limitations on the scope of the Code may have limited the degree to which the beneficial aspects of the code have been experienced by consumers, these limitations have also assisted in reducing the compliance costs associated with the Code. It would be appropriate to consider the scope of the code at the time of the Five-year review.

## Grocery retailer benefits and costs

As with any regulatory intervention, it is likely that there have been some compliance costs incurred by grocery retailers. In particular, the major costs associated with the Code relate to changes to the information systems that record and maintain inventories as well as price labels. Other costs associated with administering grocery retailer obligations under the Code might include compliance audits as well as ensuring that advertising materials are compliant with the Code.

It is unlikely that online grocery retailers have incurred any significant costs; however some may have incurred expenses where websites had to be redesigned to cater for unit prices.

Some grocery retailers had already implemented, or were in the process of implementing unit pricing schemes. A key implication of this is that many of the costs associated with unit pricing is not attributable to the Code, but rather a commercial decision taken by these retailers. Grocery retailers that voluntarily implemented unit pricing schemes may have done so given the benefits to their customers as well as to compete with rivals that had already implemented similar schemes. The voluntary uptake of unit pricing provides some indication that the benefits have been significant even when considering the associated costs. Some grocery retailers may have been persuaded to do so in part by the Grocery Inquiry which recommended for a mandatory unit pricing scheme to be implemented.

It is acknowledged that not all grocery retailers were supportive of the requirements of the Code. Some grocery retailers had indicated that a voluntary approach would be preferred so as to minimise the compliance costs. However, a mandatory unit pricing scheme offers some benefit in that it provides certainty to grocery retailers, particularly in the light of proposals for state based schemes.

## Other benefits and costs

The Australian Food and Grocery Council (AFGC) identified that a range of costs may have been incurred by grocery manufacturers due to the Code. This included increased administration costs for suppliers in providing information to retailers as well as cost shifting, increased product loss or waste through providing larger quantities in order to provide lower unit prices, and increased consumer complaints about packaging and labels associated with unit prices. The AFGC did not provide any estimate on the magnitude of these costs.

The submission noted that overall grocery manufacturers have not reported any significant increase in consumer complaints.

While the Code has meant that some grocery retailers have incurred some compliance costs, it is not clear whether or how these costs, or other compliance burdens, have been passed onto grocery producers and manufacturers. As the Code requires grocery retailers to provide unit prices, it is not expected that grocery manufacturers or producers will have incurred any additional compliance burdens associated with changes to packaging or labelling.

## Part IV - The costs and benefits of the Code

## Measuring the costs and benefits of the Code

It is acknowledged that while compliance costs may be easily identified where there are specific costs incurred by a relatively small number of stakeholders, the benefits of unit pricing may be harder to identify where they are shared amongst a much larger number of stakeholders. In their submissions, the QCA and CALC argued that consumer benefits-when they are difficult to assessmay be less persuasive in a Post-implementation Review process. They note that a reliance on quantitative data may further disadvantage any valuation of the consumer benefit.

The Review examines the cost and benefits in accordance with OBPR's guidelines on assessing the cost and benefits of a regulatory measure. In this regard, all benefits to consumers are to be considered whether they are easily quantifiable or not. Accordingly, while some attempt has been made to quantify the costs of the Code, the Review relies on a qualitative assessment of the consumer benefits to assess the Code more fully.

In addition, there is some need to differentiate between costs that are incurred to achieve initial compliance with the Code and costs that are incurred on an ongoing basis. CALC noted that the major compliance costs associated with the Code involved front-end spending associated with software and system upgrades and that these costs were not relevant to an assessment of future costs going forward. Sunk costs should be considered in an assessment of whether the Code has been an effective and efficient regulatory measure over the Post-implementation Period, however these are not relevant to any consideration as to whether the Code is likely to continue to be an efficient and effective response to the identified problem into the future.

The QCA further remarked that some consideration should be given to the start date, as many grocery retailers were engaged in unit pricing on a voluntary basis before it became mandatory. In this regard it is important to consider how the benefits and the costs of unit pricing should be attributed. While some grocery retailers have identified that their compliance costs have been low as they already had a unit pricing scheme in place, it can also be said that the benefits of unit pricing for these retailers are not directly attributable to the Code. The Review considers the costs and benefits of unit pricing more generally while outlining the compliance costs reported by Australia's major grocery retailers.

## Quantifying the costs to grocery retailers

Four major grocery retailers provided feedback on the implementation and ongoing compliance costs associated with the Code. This included submissions from Coles, Woolworths, Metcash and ALDI. Other grocery retailers with smaller market shares of the total grocery market were invited to comment on the costs of implementation, but did not make a submission. This included Foodworks ( 2.3 per cent), Franklins (less than 1 per cent) and Supabarn (market share unknown).

Together, grocery retailers that made a submission to the Review comprise the majority of grocery retailers that are required to comply with the Code. They represent 82 per cent of the total Australian grocery market which also includes, for example, fruit and vegetable stores and delicatessens which may not be subject to the requirements of the Code (see Table 3). While other grocery retailers may have incurred compliance costs due to the Code, the majority of total compliance costs are reflected in the submissions to the Review.

## Table 3 - Grocery retailers by market share

| Major company | Estimated market share |
| :--- | :--- |
| Westfarmers Limited (Coles) | 31 per cent |
| Woolworths Ltd | 40 per cent |
| Independent Grocers of Australia (Metcash | 7 per cent |
| Trading Limited) | 4 per cent |
| ALDI | 82 per cent |
| Total |  |

Source: IBISWorld Industry Report G5111, June 2012.

## Woolworths

The Woolworths submission indicated that unit pricing had been implemented on a voluntary basis and that costs associated with ticket design and technology had already been incurred. They indicated that on an ongoing basis between fifty and one hundred product lines required specific changes, amounting to around $\$ 50,000$ in annual compliance costs. Before the implementation of unit pricing, Woolworths had estimated that compliance costs would be approximately \$4-5 million (see Appendix Item 2).

## Coles

Coles estimated that their implementation costs had amounted to around $\$ 3.5$ million. A specific breakdown of costs was not provided and they further submitted that ongoing costs had been absorbed by the business and had not been estimated. Before the implementation of unit pricing, Coles had estimated that compliance costs would be approximately $\$ 10$ million (see Appendix Item 2).

## ALDI

A submission from ALDI indicated that there were no real costs to ALDI stores associated with the Code as unit pricing had already been implemented across their network of stores.

## Independent Grocers of Australia (IGA)

Metcash Food and Grocery supplies independent grocery stores primarily under the IGA brand.

The Metcash submission indicated that Metcash Food and Grocery manage the unit prices of in excess of 30,000 products but that some IGA Retailers stock items to cater to local demographics and that the maintenance of these items, are managed separately. The submission suggested that the Code was creating greater compliance costs to retailers. Specifically, Metcash provided cost figures indicating that $\$ 1,030,000$ had been spent by Metcash to implement the requirements of the Code, and estimated that a further $\$ 22,100,000$ in compliance costs had, and would be incurred by individual retailers. This estimate included $\$ 6,800,000$ in re-ticketing costs and $\$ 13,600,000$ in upfront and ongoing costs relating to data management for direct lines not hosted by Metcash.

The figures provided by Metcash were based on estimates of the average cost incurred by each store. These estimates were multiplied by 850 stores, of which 400 are not compelled to comply with the Code. These costs are presented in Table 4.

## Table 4 - Cost estimates: Metcash (retailer)

| Cost | Number of stores | Average cost per store | Subtotal |
| :--- | :--- | :--- | :--- |
| Payment of software <br> maintenance contract <br> with scanning vendor | 850 | $\$ 1,000$ | $\$ 850,000$ |
| Re-ticketing costs | 850 | $\$ 8,000$ | $\$ 6,800,000$ |
| Staff and consumer <br> education costs | 850 | $\$ 1,000$ | $\$ 850,000$ |
| Data management for <br> direct lines not hosted <br> by Metcash* | 850 | $\$ 16,000$ | $\$ 13,600,000$ |
| Total |  | $\$ 22,100,000$ |  |

*includes some ongoing costs
The estimated retailer costs provided by Metcash would appear to be substantial relative to the estimates of its competitors. Metcash has previously identified that the independent retailing sector has unique characteristics, including different IT and shelf tag systems, that may mean that independent retailers face disproportionately higher compliance costs.

However, other costs that cannot be attributed to differences in operating environments appear to be high. For example, re-ticketing costs of $\$ 8,000$ per store imply that significant man-hours were required to replace labels specifically due to the Code. The Code allowed for an implementation period such that grocery retailers could gradually achieve compliance with the code. In this regard it is likely that most grocery retailers would have been able to update labels as part of their ordinary occasional label changes rather than specifically changing labels to achieve compliance with the Code. In addition, it is not clear that data management costs for direct lines not hosted by Metcash are incurred specifically due to the requirements of the Code, or as part of a broader operational requirement. The underlying assumptions of these estimates and the proportion of which costs are ongoing have not been provided.

If the use of the Metcash estimates were to create any doubt as to the efficiency of the Code, further investigation of these estimates would be warranted. Metcash had previously estimated that compliance costs would be approximately $\$ 10$ million if no change to shelf stripping was required (see Appendix Item 2).

## Summary of costs

From the submissions provided by grocery retailers, it appears as though there have been some costs associated with achieving initial compliance with the Code however ongoing costs have been smaller in comparison. Woolworths and ALDI did not provide their initial compliance costs as they had previously introduced unit pricing while Coles indicated that their initial compliance costs were lower than they had anticipated. Metcash provided an estimate of both the compliance costs incurred by Metcash Food and Grocery as well as their estimate of the costs incurred by independent supermarkets for which they supply. They did not indicate what proportion of these costs were ongoing, but indicated that these costs represented the total spend over the Postimplementation Period. These costs are summarised in Table 5.

Table 5: Summary of costs

| Retailer | Total compliance <br> costs over the Post- <br> implementation <br> Period | Annualised total <br> compliance costs over the <br> Post-implementation <br> period* | Expected annual <br> ongoing costs into <br> the future |
| :--- | :--- | :--- | :--- |
| Noolworths | Nil | Nil | $\$ 50,000$ |
| Coles | Nil,400,000 | Nil | Absorbed by the |
| business |  |  |  |

*based on a 30 month Post-implementation Period, calculated as: $\frac{\text { Costs }}{30} \times 12$
While some other grocery retailers that may be affected by the Code did not make a submission, Table 5 reflects the compliance costs incurred by the majority of grocery retailers that must comply with the Code. From the submissions it is not possible to estimate the total expected annual ongoing costs as Metcash and Coles did not indicate their ongoing compliance costs. Based on the submission provided by Woolworths, it would appear as though most costs have already been incurred and that ongoing compliance costs are relatively low.

## Other costs

To establish the Code, the ACCC were provided with $\$ 2.2$ million in Government funding over two years from 2009-10. ${ }^{20}$ This funding should be considered as a cost of the Code.

There may be other costs associated with the Code; however these are not quantified given the difficulties in assessing the magnitude and scope of other costs such as compliance burdens that have been passed onto grocery manufacturers or consumer losses owing to wastage.

[^9]
## Quantifying the benefits to consumers

The benefits of unit pricing for consumers are difficult to quantify. It should be noted that the benefit of unit pricing to an individual consumer is not necessarily equivalent to the savings made by purchasing cheaper groceries. Consumers may benefit from lower expenditure on grocery items, however they may also benefit by receiving a greater amount of a grocery item for the same price. In addition, consumers may decide to purchase items with a higher unit price because they may perceive an alternative grocery item to be of a higher quality. Ultimately the benefit of unit pricing is embodied in the additional information provided to consumers to assist them in purchasing items that maximise their overall value. Accordingly it is difficult to quantify the benefit to consumers based on savings alone.

Survey research and other studies would appear to suggest that between 25 and 80 per cent of grocery shoppers use unit prices (see Table 6). While there is no precise measure of the number of consumers who actively rely on unit prices to guide their purchasing decisions, it would appear as though at least a significant subset of consumers use unit prices. The extent to which consumers rely on unit prices may depend on whether they are aware of and understand unit prices, what product characteristics they value, and the type of products which they most commonly purchase. In addition, the degree to which an individual consumer will benefit from unit prices may depend on whether they are the primary purchaser of groceries for their household, whether they value lower unit prices and whether the consumer benefits from the convenience of unit prices.

Table 6: Consumer use of unit pricing

| Source | Usage |
| :--- | :--- |
| QCA / CHOICE survey | 80 per cent of people who shop at major <br> supermarkets |
| Oppewal, Yao and He academic submission | 65 per cent of grocery shoppers who are aware <br> of unit prices |
| Mortimer academic submission | 25 per cent of shoppers observed relying on unit <br> prices as a major decision making factor |

Given the difficulties in quantifying the consumer benefits, it may be useful to examine the costs relative to each household or shopping trip. There are a total of 9,117,033 households in Australia with an average of 2.6 persons per household. ${ }^{21}$ Based on estimates of annual grocery industry revenue of $\$ 83.7 \mathrm{bn}^{22}$, each household spends approximately $\$ 9180$ per year, or $\$ 176$ per week on groceries. By way of comparison, for a unit pricing scheme with an annual ongoing cost of \$15 million dollars, the average household would need to benefit by the equivalent of approximately 3.2 cents per week for the annual cost to equal the total annual consumer benefit (see Table 7). For an ongoing annual compliance cost of \$1 million dollars, the average household would only need to benefit from the equivalent of 11 cents per year.

[^10]Table 7: Consumer and household benefits

| Total annual consumer benefit | Household benefit required per week |
| :--- | :--- |
| $\$ 1$ million | $\$ 0.0021$ |
| $\$ 5$ million | $\$ 0.0105$ |
| $\$ 10$ million | $\$ 0.0210$ |
| $\$ 15$ million | $\$ 0.0316$ |
| $\$ 25$ million | $\$ 0.0526$ |

To provide some estimate of the possible dollar savings for a consumer relying on unit pricing information, the QCA compared the cost of a basket of over 20 packaged grocery items where the item with the cheapest unit price was selected, compared with an equivalent basket where a medium sized package of a well-known brand was selected. They found that the basket where products were selected by relying on unit prices was nearly 50 per cent cheaper. While this measure is likely to overestimate the benefits to the consumer, it does indicate that there is the potential for considerable savings where a consumer relies on unit pricing. More generally, there are a number of practical ways in which the consumer benefit can be characterised. To achieve an annual total benefit of $\$ 15$ million dollars, the average household could do one of any of the following on a typical weekly shopping trip:

- save just under 6 seconds per shopping trip as a result of the Code; ${ }^{23}$
- save just over 1 per cent on a 1 kg bag of long grain rice as a result of using unit pricing provided for by the Code; ${ }^{24}$ or
- receive an additional 11.13 grams of rice as a result of using unit pricing provided for by the Code, when the consumer would have otherwise purchased a 1 kg bag of long grain rice. ${ }^{25}$

Where consumers actively use unit pricing it is likely that they would achieve such savings given that the average weekly household grocery shopping bill amounts to $\$ 176$. While it is acknowledged that not all households actively use unit pricing, it is likely that the households that use unit pricing are able to accrue significant total annual consumer benefits on behalf of all consumers. These benefits will increase as consumers become more aware and familiar with unit pricing.

## Attributing the costs and benefits of unit pricing

While unit pricing may have a range of costs and benefits to the community, not all of these costs and benefits can be attributed to the Code. Grocery retailers that voluntarily implemented unit pricing before the Government's announcement to introduce a mandatory unit pricing scheme chose to do so in the absence of the Code. Therefore, the benefits afforded and the costs incurred from the implementation of unit pricing at these grocery retailers cannot be attributed to the Code. It is noted that even where unit pricing was voluntarily implemented, some ongoing compliance

[^11]costs may still be incurred when ensuring compliance with obligations under the Code. The submissions appear to indicate that generally, these ongoing compliance costs are low.

It can be argued that grocery retailers that implemented unit pricing before it become mandatory, but after the Government's announcement, did not do so voluntarily. Accordingly, it can be argued that the costs and benefits afforded by unit pricing at these grocery retailers should be attributed to the Code.

Specifically, the costs and benefits of unit pricing schemes implemented before the Government's announcement are not attributed to the Code. However, the efficiency of the Code will depend more on the relative size of the costs and benefits of unit pricing than the number of businesses that implemented unit pricing as a direct result of grocery retailers' obligations under the Code.

## Cost-benefit analysis

The costs of the code will be considered on a cost per household basis because it is difficult to measure the consumer benefits. This approach allows for a subjective assessment of whether the typical household has likely benefited by the required amount to make an assessment of whether the Code has been efficient in achieving its objectives. In doing so, two approaches have been taken including:

- assessing the costs and benefits since the implementation of the Code to determine whether it has been efficient in satisfying its objectives over the Post-implementation Period; and
- assessing the costs and benefits over the life of the Code to determine whether it is likely to be efficient over the life of the Code including into the future.


## Assessing the costs and benefits over the Post-implementation Period

To assess whether the Code has been efficient in satisfying its objectives over the Postimplementation Period, the total costs of implementation are annualised to consider the benefits that would be required to make this assessment. The annualised total cost over the Postimplementation Period would appear to be less than $\$ 15$ million. This estimate accounts for the total costs reported by the submissions and includes further room for additional costs incurred by other grocery retailers that did not make a submission.

A regulatory proposal with an annual cost of $\$ 15$ million would ordinarily require a weekly household benefit of more than $\$ 0.0316 .{ }^{26}$ Such a benefit would therefore be required to determine that the Code has been efficient in satisfying its objectives over the Post-implementation Period.

Comparing the costs and benefits accrued in the Post-implementation period on its own does not fully capture the benefits of the Code. Many of the benefits will continue to be earned into the future while the costs are mostly upfront and directly associated with the implementation of the Code. Accordingly, there is further scope to examine the total compliance costs compared with the total benefits that consumers receive over the life of the Code by performing a Net Present Value (NPV) analysis.

[^12]
## Assessing the costs and benefits over the life of the Code

NPV analysis better captures the benefits of the Code which are fairly constant in nature and ongoing. It provides a more meaningful basis for comparing the benefits with the implementation costs which have been incurred upfront so that grocery retailers achieve initial compliance with the Code. A regulatory proposal with a zero NPV implies that the benefits are equal to the costs over the life of the proposal. A comprehensive NPV analysis would be difficult to perform as it remains difficult to quantify the benefits of the Code. However, an example of the benefits required for a zero NPV at different cost estimates can be found in Table 8.

Table 8: NPV example

| NPV at 7 per cent discount rate |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Ongoing costs (annual in perpetuity) |  |  | Initial costs (at year zero) |  |
|  |  |  | \$30,000,000 | \$50,000,000 |
|  | \$1,000,000 | NPV costs (year zero)* | \$44,285,714 | \$64,285,714 |
|  |  | Annual benefit required for zero <br> NPV <br> (in perpetuity)** | \$3,100,000 | \$4,500,000 |
|  | \$5,000,000 | NPV costs <br> (year zero)* | \$101,428,571.43 | \$121,428,571.43 |
|  |  | Annual benefit required for zero NPV (in perpetuity)** | \$7,100,000.00 | \$8,500,000.00 |

*NPV costs is calculated as: $x+\frac{1}{0.07} \times y$, where $x$ is equal to the upfront cost and $y$ is equal to the annual ongoing cost.
**Annual benefit required for zero NPV is calculated as: NPV costs $\times 0.07$
Table 8 demonstrates that even where high cost estimates are used-for example $\$ 5$ million for ongoing costs and $\$ 50$ million for initial costs-the benefits required for a zero NPV are below $\$ 10,000,000$ on an annual basis. Where costs are closer to what is actually estimated-for example $\$ 1$ million for ongoing costs and $\$ 30$ million for initial costs-the benefits required are less than $\$ 5$ million on an annual basis.

A regulatory proposal with an annual cost of $\$ 10$ million would ordinarily require a weekly household benefit of more than $\$ 0.021 .{ }^{27}$ A regulatory proposal with an annual cost of $\$ 5$ million would ordinarily require a weekly household benefit of more than $\$ 0.0105 .{ }^{28}$ Such benefits would therefore be required to determine that the Code has been efficient in satisfying its objectives over the life of the Code when high and low cost estimates are used.

## The efficiency and effectiveness of the Code

The initial compliance costs of Woolworths and ALDI have not been included in the above analysis as they had already introduced unit pricing and were compliant with the Code. Therefore it would be

[^13]inappropriate to assess the performance of the Code by considering the benefits of them doing so. Woolworths and ALDI comprise 44 per cent of the total grocery market. Other retailers whose costs have been included in the above analysis comprise 38 per cent of the total grocery market. Accordingly, for the purposes of comparison, the benefits of the Code should be taken to include the benefits of unit pricing in those grocery retailers that did not have unit pricing schemes and all other benefits associated with unit pricing (for example consistency, enforcement and improved consumer awareness about the application of unit pricing).

It may also be true that not all households actively use unit pricing. From the submissions it would appear that at least 25 per cent of households use unit pricing with some estimates as high as 80 per cent.

To better reflect that only a subset of households may actively use unit pricing and that only a subset of grocery retailers implemented unit pricing as a result of the Code, it may be appropriate to consider the benefits required from households that:

- actively use unit pricing (at least 25 per cent ${ }^{29}$ ); and
- shop at grocery retailers that implemented unit pricing as a result of the Code (around 38 per cent ${ }^{30}$ ).

The subset of households that meet both conditions amounts to approximately 10 per cent of all households. The household benefits required to conclude that the benefits of the Code have outweighed its costs is summarised in Table 9.

## Table 9: Required household benefits (per week)

|  |  | Post- <br> implementation <br> Period | NPV |  |
| :--- | :--- | :--- | :--- | :---: |
|  |  | Total annualised <br> costs $(<\$ 15 \mathrm{~m})$ | High cost <br> estimates <br> $(<\$ 10 \mathrm{~m})$ | Low cost <br> estimates <br> $1<\$ 5 \mathrm{~m})$ |
| Required <br> household <br> benefits | All households | 25 per cent of households | $\$ 0.1264$ | $\$ 0.0210$ |

If it were assumed that only 10 per cent of households benefited from the Code and that annual compliance costs were $\$ 15$ million, the households that benefit from the Code would need to benefit by $\$ 0.32$ per week, or $\$ 16.48$ per year.

It would be overly conservative to suggest that only 10 per cent of households have benefited from unit pricing as other households may benefit in other ways as well as because the percentage of households that actively use unit pricing may be as high as 80 per cent. In addition, it would be overly conservative to assume that the annual cost of the Code amounts to $\$ 15$ million as the actual ongoing cost of the Code appear to be less than $\$ 1$ million and because there is some uncertainty

[^14]over the compliance costs estimated for some independent retailers. However, this conservative estimate provides a worst case scenario that is useful in supporting a conclusion about the costs and benefits of the Code.

It is not implausible that where households actively use unit pricing, they benefit by at least 32 cents per week. To achieve a saving of 32 cents per week, these households would need to do one of any of the following on a typical weekly shopping trip:

- save just under 58 seconds per shopping trip as a result of the Code; ${ }^{31}$
- save just over 11 per cent on a 1 kg bag of long grain rice as a result of using unit pricing provided for by the Code; ${ }^{32}$ or
- receive an additional 113 grams of rice as a result of using unit pricing afforded for by the Code when the consumer would have otherwise purchased a 1 kg bag of long grain rice. ${ }^{33}$

Because this is a worst case scenario based on conservative estimates of both the number of households benefiting from unit pricing as well as the annual costs of the Code, it is therefore difficult to conclude that the costs of the Code have outweighed its benefits over the Postimplementation Period, or are likely to do so over the life of the Code.

Without an objective measure of the benefits received by consumers it is only possible to conclude that there is a reasonable probability that the benefits of the Code have outweighed the costs. As many of the costs associated with the implementation of the Code are sunk costs, it is more probable that the benefits of the Code are likely to outweigh the costs into the future.

[^15]
## Part IV - Conclusion

The total costs of implementation ${ }^{34}$ reported by Coles, Woolworths, ALDI and Metcash amounted to no more than $\$ 27$ million. From this, there is a reasonable probability that the benefits of the Code have outweighed its costs over the Post-implementation Period. The Code is likely to be even more efficient into the future as the benefits are likely to remain (or even increase) while ongoing costs appear to be low.

This review has considered a number of factors that contribute towards or limit the Code's effectiveness. While it may be possible to enhance the Code's ability to achieve the objective of supporting Australian households and increasing price competition in the grocery market, it would not necessarily be possible to do so efficiently. In assessing the efficiency of the Code, it has been useful to compare the benefits required from each household to offset its costs. In this regard it is plausible that the total benefits accrued to each household have exceeded the Code's costs.

This review has found that, even when examining for a worst case scenario based on conservative estimates of both the number of households benefiting from unit pricing as well as the annual costs of the Code, households that are actively using unit prices would only need to benefit by 32 cents per week, on an average weekly grocery bill of $\$ 176$, for the benefits of the Code to outweigh its costs. The benefits to households are difficult to quantify and different households are likely to benefit in different ways with benefits that cannot be easily monetised. This Review has been unable to uncover reliable evidence upon which to base an estimate on the household benefits of the Code. However, the submissions have demonstrated that households can receive significant benefits when making use of unit pricing that is afforded for by the Code. Accordingly, based on the experiences and benefits outlined in the submissions, it could be argued that it is probable that the Code has been efficient at meeting its objectives.

The Government's announcement to implement a mandatory unit pricing scheme was motivated by a desire to support Australian households through the potential to save time and money, the objective of increased price competition in the grocery market and the benefits of national consistency. From the consumer submissions it would appear that unit pricing has supported some consumers in saving time and money. While it may be difficult to directly observe increased price competition, the implementation of unit pricing across grocery retailers has created an environment where consumers are able to compare prices across brands, sizes and between grocery retailers. As a mandatory code under Part IVB of the Competition and Consumer Act 2010, the Code ensures that unit pricing is applied consistently across Australia. Accordingly, it could be argued that the Code has been effective at meeting its objectives.

During the course of this Review, a number of submissions raised issues that are better addressed within any future terms of referenced issued as part of the Five-year Review. Greater consideration of whether there are amendments to the Code that can improve its efficiency and effectiveness would be appropriate at that time.

[^16]This Review concludes that the Code has been effective and efficient at meeting its objectives over the Post-implementation Period and that it is likely to continue to do so into the future. The Code continues to remain an appropriate response to achieve the objective of supporting Australian households and increasing price competition in the grocery market.

## Appendix item 1 - List of submissions

During the Review, the following entities were invited to make a submission to the Review:

## ALDI

Australian Council of Social Service Australian Food and Grocery Council

Australian Pensioners and Superannuants
League
CHOICE
Coles
Consumer Action Law Centre
Consumers Association of South Australia
Consumers Association of Western Australia COTA Australia
Dr Gary Mortimer, Queensland University of Technology
Dr Svetlana Bogomolova, the University of South Australia

## FoodWorks

Franklins
Independent Retirees Association
Metcash
National Seniors
Professor Harmen Oppewal, Monash
University
Queensland Consumers Association
Queensland Council of Social Service
South Australian Council of Social Service
Supabarn
Vision Australia
Western Australian Council of Social Service
Woolworths

Submissions were received from the following entities:

ALDI
Australian Food and Grocery Council
CHOICE
Coles
Consumer Action Law Centre
Consumers Association of South Australia
Dr Gary Mortimer, Queensland University of Technology
Dr Svetlana Bogomolova and Professor Jordan Louviere, the University of South Australia
Metcash
Professor Harmen Oppewal, Jun Yao and Dr Yongfu He, Monash University
Queensland Consumers Association
South Australian Council of Social Service
Vision Australia
Woolworths

The Treasury also consulted with the ACCC during the course of the review.

## Appendix item 2 - Cost estimates from the Unit Pricing RIS

| Retailer | Implementation costs | Description |
| :---: | :---: | :---: |
| Coles | \$10 million (6-12 month period) | Coles indicated that the implementation cost estimate would be subject to the scope of the scheme and time frame for implementation - a shorter implementation period would increase the cost estimate. |
|  |  | If the scheme requires changes to the entire shelf edged pricing strips in all stores, the total implementation cost would increase to $\$ 17$ million. The most likely trigger for these additional costs would be highly prescriptive unit price display requirements. |
|  |  | This estimate does not included ongoing compliance costs. |
|  |  | ACCC inquiry ${ }^{1}$ |
|  |  | Coles estimated the costs of introduction would be around \$20 million if immediate implementation was required. This estimate would decrease to between $\$ 5$ million and $\$ 10$ million if a 12-18 month timeframe was allowed. |
| Metcash | \$10 million (12 month period) | Metcash based their estimate on implementation of a mandatory scheme with no change to shelf stripping required. If shelf stripping is to be changed, the implementation cost could rise to $\$ 23.8 \mathrm{~m}$. |

## ACCC inquiry ${ }^{1}$

Metcash estimated that the costs of a unit pricing regime would be at least $\$ 9.9$ million. This was comprised of:

- changes to the IT systems used in price calculation and label printing activities ( $\$ 1.2$ million);
- one-off change to all price labels involving labour costs of \$8.8 million; and
ongoing costs associated with additional data entry for unit pricing requirements are estimated at $\$ 0.4$ million annually.


## Woolworths ${ }^{2}$ \$4-5 million Woolworths indicated an estimate of wages alone, if a unit pricing (immediate) was required to be rolled out immediately.

ACCC inquiry ${ }^{1}$

> At the ACCC inquiry Woolworths anticipated the cost of implementation would be around $\$ 4$ million. The cost was largely dependant on the timeframe permitted for the introduction and the scope of the regime. If Woolworths was required to change its 'shelf-stripping' to accommodate mandated font size, the capital costs would be around $\$ 6$ to $\$ 7$ million.
${ }^{1}$ Coles, Metcash and Woolworths also provided initial cost estimates to the ACCC Grocery Inquiry.
${ }^{2}$ This information was provided by Woolworths on 6 August 2008 to the Senate Standing Committee on Economics' inquiry into Senator Fielding's Unit Pricing (Easy comparison of grocery prices) Bill 2008.


[^0]:    ${ }^{1}$ The Hon Chris Bowen MP (2008), 'Rudd Government releases its preliminary action plan in response to the ACCC's Grocery inquiry', Media Release No.065, 5 August 2008.
    ${ }^{2}$ Australian Competition and Consumer Commission (2008), 'Report of the ACCC Inquiry into the Competitiveness of Retail Prices for Standard Groceries.'
    ${ }^{3}$ OBPR reference number 9806.

[^1]:    ${ }^{4}$ The Hon Chris Bowen MP (2009), 'Australian consumer to save with unit pricing', Media Release No.001, 8 January 2009.
    ${ }^{5}$ The Hon Chris Bowen MP (2008), 'Rudd Government releases its preliminary action plan in response to the ACCC's Grocery inquiry', Media Release No.065, 5 August 2008.

[^2]:    ${ }^{6}$ Gillian K. Hadfield, Robert Howse and Michael J. Trebilcock (1998), 'Information-Based Principles for Rethinking', Journal of Consumer Policy, Vol 21:2, pp.131-169.

[^3]:    ${ }^{7}$ Explanatory Statement, Select Legislative Instrument 2009 No. 152, Trade Practices (Industry Codes - Unit Pricing) Regulations 2009.
    ${ }^{8}$ The Hon Chris Bowen MP (2008), 'Rudd Government releases its preliminary action plan in response to the ACCC's Grocery inquiry', Media Release No.065, 5 August 2008.
    ${ }^{9}$ The Hon Anna Bligh MP (2008), 'Bligh moves to ease the squeeze at QLD check-outs', 26 June 2008.
    ${ }^{10}$ The Hon Chris Bowen MP (2009), 'Australian consumer to save with unit pricing', Media Release No.001, 8 January 2009.

[^4]:    ${ }^{11}$ This is supported where consumers shop at a grocery retailer of a kind that is required to comply with the Code.

[^5]:    ${ }^{12}$ Professor Harmen Oppewal, Jun Yao and Dr Yongfu He

[^6]:    ${ }^{13}$ Dr Svetlana Bogomolova and Professor Jordan Louviere
    ${ }^{14}$ Dr Gary Mortimer

[^7]:    ${ }^{15}$ Isakon, HR, and Maurizi, AZ (1973), 'The Consumer Economics of Unit Pricing', Journal of Marketing Research, Vol. 10:3, pp.277-285.
    ${ }^{16}$ Russo, J, Krieser, G, and Miyashita, S (1975), 'An effective display of unit price information', Journal of Marketing, Vol. 39:2, pp.11-19.
    ${ }^{17}$ Aaker, D, Ford, G (1983), 'Unit pricing ten years later: A replication', Journal of Marketing, Vol. 47:1, p.118122.
    ${ }^{18}$ Mitchell, V, Lennard, D, McGoldrick, P (2003), ‘Consumer Awarness, Understanding and Useage of Unit Pricing', British Journal of Management, Vol.14:2, pp.173-187.

[^8]:    ${ }^{19}$ For example prescribing an appropriate minimum size may present difficulties where the distance of a sign from the eye of a consumer may vary.

[^9]:    ${ }^{20}$ Australian Government, Budget measures: no. 2: 2009-10, p.387.

[^10]:    ${ }^{21}$ Australian Census (2012).
    ${ }^{22}$ Sivasailam, N (2012), 'Supermarkets and Other Grocery Stores in Australia', IBISWorld Industry Report G5111', June 2012.

[^11]:    ${ }^{23}$ Calculated as $5.688 / 3600 \times \$ 20=\$ 0.0316$, where a consumer's time is valued at $\$ 20$ per hour.
    ${ }^{24}$ Calculated as $\$ 0.0316 / \$ 2.84=0.011$, where the brand the consumer would otherwise purchase normally costs $\$ 2.84$.
    ${ }^{25}$ Calculated as $11.13 / 1000 \times \$ 2.84=\$ 0.0316$, where the brand the consumer would otherwise purchase normally costs $\$ 2.84$ and the alternative brand is the same price for a higher quantity.

[^12]:    ${ }^{26}$ From Table 7.

[^13]:    ${ }^{27}$ From Table 7.
    ${ }^{28}$ From Table 7.

[^14]:    ${ }^{29}$ From Table 6.
    ${ }^{30}$ From Table 3.

[^15]:    ${ }^{31}$ Calculated as $57.6 / 3600 \times \$ 20=\$ 0.32$, where a consumer's time is valued at $\$ 20$ per hour.
    ${ }^{32}$ Calculated as $\$ 0.32 / \$ 2.84=0.1127$, where the brand the consumer would otherwise purchase normally costs $\$ 2.84$.
    ${ }^{33}$ Calculated as $112.68 / 1000 \times \$ 2.84=\$ 0.32$, where the brand the consumer would otherwise purchase normally costs $\$ 2.84$ and the alternative brand is the same price for a higher quantity.

[^16]:    ${ }^{34}$ It is noted that of these costs, $\$ 22$ million were based on extrapolated estimates for individual grocery stores and cannot be verified.

