



CENTRE FOR  
INTERNATIONAL  
ECONOMICS

# *The microeconomics of font size*

*Country of origin labelling on  
unpacked food in display  
cabinets*

*Prepared for:*

*Food Standards Australia New Zealand (FSANZ)*

*Centre for International Economics  
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## Summary

A new country of origin labelling (CoOL) standard mandates that where a country of origin statement is required on unpackaged food displayed in enclosed cabinets, the label font size<sup>1</sup> has to be at least 9mm.

Retailers argue that where unpackaged food is displayed in an enclosed cabinet:

- with a 9mm font size, an additional label will be required to disclose the country of origin which will require:
  - a doubling of the number of labels and therefore extra cleaning, set-up and printing;
  - create information clutter that will reduce the value of other information required by consumers in making their purchasing decisions;
- the compliance costs of the 9mm requirement could be avoided if the size of type mandated for unpackaged products was smaller than 9mm; and
- with a reduced font size consumers would be better able to see other important product information as well as still being able to read country of origin information of foods.

The main types of food likely to be affected by the standard are fish, olives, antipastos and some salads sold from enclosed cabinets. The Standard does not apply in New Zealand. About 85 of a typical supermarket's 200 products sold from enclosed cabinets may be prescribed as requiring 9mm CoOL under the new Code. Fish products will account for around half of the prescribed products at supermarkets. Independent fishmongers are the other major group captured by the code. Small independent delicatessens and supermarkets will also be captured by the Code to varying degrees.

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<sup>1</sup> 'Font size' and 'size of type' are used interchangeably.

## **With a smaller font size, compliance costs could be lowered by about 1.6 per cent of the value of products sold**

Evidence presented in this report suggests where food is displayed in an enclosed cabinet, were a 3mm font size required instead of 9mm the costs of compliance would be lower. Total costs would decline by between 0.7 and 10 per cent of the product value and average around 1.6 per cent. This equates to around \$34 million a year in compliance costs. Lower enforcement costs and possible changes in production and consumption patterns otherwise caused by high compliance costs could be avoided adding further to cost savings, were a 3mm font size used instead of 9mm. It is also possible that more products than those prescribed will be affected by the requirement. Sensitivity testing suggests cost savings could exceed \$50 million a year.

In most cases compliance costs are passed on to consumers in the form of higher retail prices. A result of the 9mm standard will be some substitution of consumption away from prescribed foods toward non-prescribed foods. In the case of fish in particular, this could result in reduced sales which will impact back negatively on the Australian fishing industry. However, with a lower font size (3mm), many of these costs could be avoided.

Moreover, the compliance costs with the 9mm standard will be highest for particularly low-volume low-value sales items such as some domestically caught fish species. As a result, with the 9mm font size prices rises for some domestic fish products are likely to be considerably greater than for imported fish. This will cause some substitution of high-volume imported fish lines for low-volume low-value domestically caught fish. This is another negative impact on the Australian fishing industry that could be avoided with a 3mm font size.

Relative to 3mm, 5mm font size results in similar savings in compliance costs in circumstances where the country of origin statement can fit on one label. However, in 20-30 per cent of cases a second label may be required. In these cases, the savings in compliance costs would be around \$24 million with potential to improve this if retailers are able to adjust fonts and layouts to enable the country of origin statement to be included on one label. However, this process itself may impose costs. Some retailers indicated that they were considering abbreviations. This may also assist.

## **Benefits to consumers of a 9mm font size do not appear to be high where unpackaged foods are displayed in enclosed cabinets**

Although consumers appear to regard CoOL information as important, they do not seem to be prepared to pay more to read the information in font sizes above 3mm. This would suggest the consumer benefits of a font size greater than 3mm are not large.

Shoppers' strongest preference appears to be for 5mm font size. However, perhaps because virtually all shoppers surveyed (94 per cent or more) can read CoOL information at 3mm, 5mm and 9mm, they do not appear to value larger font sizes highly.

Of the 4.0 per cent of surveyed shoppers who indicated they would pay more for a higher font size, they indicated they were prepared to pay only between about 1 and 3 per cent of the value of the product extra. When averaged across all consumers, the willingness to pay extra is only about 0.06 of one per cent of the value of the product (1.5 per cent times 4 per cent).

### ***Consumer benefits need to be 25 to 50 times higher than indicated to match costs***

Willingness to pay would need to be more than 25 times higher than indicated to match the compliance costs of 1.6 per cent of the 9mm standard. Even then the 9mm standard would only be regarded as marginally economical. Willingness to pay would need to be about 50 times greater than indicated to suggest that mandating a 9mm font size where unpackaged foods are displayed in enclosed cabinets is a good investment for the economy. This suggests there is a large gap between benefits and costs with the 9mm standard.

### ***5mm standard offers advantages***

Although consumers did not indicate a strong willingness to pay for 5mm font size over a 3mm font size, they nonetheless indicated a preference for 5mm over 3mm were it to be costless. They indicated these preferences even where abbreviations were used to make 5mm font size fit on one ticket.

Where the country of origin statement can fit on one label, a 5mm standard would be of a similar compliance cost relative to a 3mm standard and might provide a marginal economic benefit to consumers based on the evidence assembled here. However, it is estimated that in 20-30 per cent of

cases a second label may be required which will increase costs relative to the 3mm standard.

In order to address this, one possibility is that a thinner font or redesign of the ticket lay-out may allow for unabbreviated information to be fitted on the ticket. However, this may either compromise brand font recognition or other information contained on the ticket due to a cluttered appearance. This would come at an economic cost but is difficult to quantify. Other retailers have indicated that they could use abbreviations in order to include the country or origin statement on one label.

***The 3mm option is an economic winner when compared with 9mm where unpackaged foods are displayed in enclosed cabinets***

From shopper survey data it would appear that the benefit of higher font sizes to consumers would be small and insufficient to clearly off-set the higher compliance cost of the 9mm standard. So, economically, the most efficient font size option would be a minimal 3mm standard. This is especially so given:

- survey data showing that at 3mm CoOL information is legible to 94 per cent of shoppers;
- that even with a 17 per cent lower font size of 2.5mm and some other factors compromising legibility, still 75 per cent of surveyed shoppers could read the CoOL information, and
- of the 25 per cent who could not read 2.5mm only 6 per cent are highly concerned about CoOL.

Survey data suggests that most shoppers who are strongly concerned about CoOL information and most shoppers generally (even those not strongly concerned about CoOL) can read a font size less than 3mm even when other factors affecting legibility are not optimal. If we add to this the legal requirement that irrespective of font size a CoOL label must be legible, then the 3mm requirement begins to look like a safe minimum requirement if the policy objectives are:

- to ensure that virtually all shoppers can read it;
- other information of more value to consumers is not compromised.

# 1

## *Introduction*

Australian retailers of unpackaged products sold from enclosed display cabinets are particularly concerned at the costs of complying with a new country of origin labelling (CoOL) standard. The standard is Standard 1.2.11 - Country of Origin Requirements of the Australia New Zealand Food Standards Code (the Standard).

The Standard mandates that where a country of origin statement is required on unpackaged food the label size of type has to be at least 9mm. The main types of food likely to be affected by the standard are fish, olives, antipastos and some salads sold from delicatessen cabinets. The Standard does not apply in New Zealand.

### **Concerns about the mandated 9mm font size**

Retailers argue that:

- with a 9mm font size, an additional label will be required to disclose the country of origin which will require:
  - extra costs to manage;
  - create information clutter that will reduce the value of other information required by consumers in making their purchasing decisions;
- a large proportion of the compliance costs could be avoided if the size of type mandated for unpackaged products was smaller than 9mm;
- with a reduced font size consumers would be better able to see other important product information as well as still being able to read country of origin information of foods.

## **This report assesses benefits and costs of the font size**

The purpose of this report is to assess the benefits and costs of smaller font sizes than the 9mm prescribed. To do this, the benefits and costs of three font size options are considered:

- Option 1: the existing prescribed 9mm font size to provide a basis for comparison;
- Option 2: a 3mm font size which is at the lower end of font sizes currently used in cabinets to convey consumer information;
- Option 3: a 5mm font size which is a mid-range font size currently found in cabinets.

The 3mm font size option would enable retailers to use one sign to display all consumer information in enclosed display cabinets, rather than two tickets. For font sizes greater than 5mm, it is likely that a separate sign will be required to contain the CoOL requirements. It is likely that with the 5mm option, the need for a second ticket could generally be avoided.

## **The nature of benefits and costs**

The benefits of each font size relate to the legibility of CoOL information under each option multiplied by the value that consumers place on such information. The costs relate to:

- the costs of producing, cleaning, setting-up and managing additional tickets in cabinets;
- the reduction in other information, price, quality, health and food safety, conveyed to consumers due to increased information clutter in cabinet displays;
- any extra costs to retailers of ensuring compliance to a mandated font size;
- surveillance and enforcement of the mandated font size by government authorities.

### ***Benefits to consumers***

To assess the benefits and costs to consumers of possible changes to information provided in cabinets, consumer research was conducted at two supermarkets, one in Melbourne and one in Sydney. Around 300 consumers were interviewed to test the legibility of the information, their preferences and how much they valued the information provided at the

three font size options. For further details of the survey results and questionnaire see TNS (2006).

### *Costs of managing extra tickets*

To assess the extra costs to retailers of the various options an economic model has been devised. For each font size, this takes account of:

- the number of additional tickets that need to be managed;
- time and motion changes in the operation of retail cabinets;
- labour activity changes required;
- increased use of inputs (consumables);
- costs of inputs and labour;
- the number of products affected;
- the number of stores affected;
- the size of stores affected;
- additional compliance requirements.

The data for the model was collected from interviews with major retailers.

### *Surveillance and enforcement costs*

To assess extra surveillance and enforcement costs, information from state food authorities was used to estimate the extra resources and extra frequency of inspections that might be required at various font sizes were high levels of effective enforcement to be achieved.

# 2

## *Benefits to consumers*

Country of origin labelling has some value to consumers when making their purchasing decisions. It may allow some consumers to choose a particular product from a preferred country or it may allow them to avoid a product from a country they do not favour.

### **General evidence is that CoOL information is not highly valued**

Considerable international research suggests that some consumers value CoOL information highly, however, on average it tends to be considerably less important than information about price and quality. Moreover, consumers' country of origin preferences are unlikely to be sufficient to sway consumers where a product offers a favourable price or quality advantage (see for instance Balabians and Diamantopoulos 2004, Usunier 2003, FSANZ 2003, IGD Consumer Trends Report 2003).

### **Specific evidence of CoOL information at varying font sizes**

TNS (2006) conducted consumer surveys on shoppers' preferences for CoOL information in enclosed cabinets at two supermarkets: one in Melbourne and one in Sydney. The main findings are:

- shoppers generally regard CoOL information as important;
- it is less important than product appearance and price;
- more than 94 per cent of shoppers can read CoOL information for font sizes of 3mm or larger (5mm and 9mm);
- most shopper prefer a 5mm font size;
- about 50 per cent of shoppers find that 9mm font size obscures their view of the product;
- less than 5 per cent of consumers would be willing to pay to have a larger font size over a smaller one, and what they are prepared to pay is very small.

### *CoOL information in enclosed cabinets has some value*

Consistent with more general findings on CoOL information, surveyed Australian supermarket shoppers rank CoOL information in enclosed cabinets as third after product appearance and price information (TNS 2006).

### *Virtually all shoppers can read CoOL information whether 3mm, 5mm or 9mm*

CoOL information in 3mm font size is legible to 94 per cent of shoppers surveyed. At font sizes of 5mm and 9mm survey results show that the percent of shoppers able to read CoOL information is slightly higher around 97 per cent (TNS 2006). Statistically there is no significant difference in legibility between the three font sizes.

Below 3mm font, the number of shoppers able to read CoOL information declines. One set of results shows that at 2.5mm, 25 per cent of shoppers are unable to read the Cool information (TNS 2006).

### *Overall, most shoppers prefer a 5mm font size*

Although most shoppers could read the 3mm font size CoOL information, overall it was the least preferred font size tested. Although favoured by some, the 9mm font size option was regarded as obscuring the view of the product by around 50 per cent of shoppers which was regarded as undesirable. The 5mm font size option was found to have the highest average desirability rating (TNS 2006).

### *However, consumers are not prepared to pay much to have higher font sizes*

To assess how much shoppers value their CoOL font size preferences, they were asked questions about their willingness to pay for the extra costs that different font sizes may impose on them (TNS 2006).

Survey results show that only 4 per cent of consumers indicated they were prepared to pay between 1 and 2 per cent extra to achieve a higher font sized option. However, as 96 per cent of shoppers indicated they were not prepared to pay more, on average it would appear that shoppers would be prepared to pay only around 0.03 of one percent extra to have font sizes larger than 3mm.

Revealed survey preferences are not actual market tested preferences. Some uncertainty surrounds the survey findings. Nonetheless, consumer surveys

about consumer preferences are an important tool used frequently by marketing firms to gain indications and insights about consumers' preferences. Such information is used heavily in making multi-million dollar decisions about designing, pricing and positioning products in the market place. Marketing firms would not continue to rely on such survey data were it not valuable to them. The data cannot be ignored. Despite uncertainties, revealed survey preferences:

- are consistent with the general evidence about the value of CoOL to consumers, that is that consumers (in the main) are unlikely to be willing to trade off a price or quality advantage to achieve their country of origin preferences;
- provide a useful starting point to quantifying the benefits from CoOL information;
- provide a broad measure of expected consumer benefits around which sensitivity testing can be conducted;
- provide a baseline against which to assess the relative costliness of the various font size options so that it is possible to judge whether
  - benefits may far exceed cost;
  - benefits and cost may be similar; or
  - costs far exceed benefits.

---

# 3

## *Costs to retailers*

A typical large Australian supermarket may have up to 200 items on display in enclosed delicatessen cabinets. About 85 such products may be prescribed as requiring 9mm CoOL under the new Code.

### **Retailers affected by the Code**

In large supermarkets fish products will account for around half of the prescribed products. The other products affected will be olives, antipastos and some salads.

### *Independent fishmongers impacted*

Independent fishmongers are the other major group captured by the code. There are over 1 200 independent fishmongers who collectively sell more fish products than the supermarkets. Woolworths and Coles sell an estimated \$600 to \$700 million in fish products each year. The independent fishmongers sell over \$1.0 billion a year.

The number of product lines per fishmonger varies, but typically the larger shops have from 90-130 product lines with the medium to smaller shops varying from 60-90 product lines. Moreover, the number of product lines is increasing due to more prawn and oyster lines as well as the introduction of sushi and various marinated and pre-prepared products. The Australian seafood industry is typified by high product diversity with low volumes which means that operators require a larger number of tickets to cover the available products. In total there are over a thousand different fish species sold in Australia. About a quarter are imported from 50 different countries. Although fewer products are imported than produced domestically, they typically are high volume items. Imported fish sales make up nearly 50 per cent of all domestic fish sales by value, and more than 50 per cent by volume (DAFF 2005).

### *Small supermarkets and delicatessens affected by the Code to varying degrees*

Small independent delicatessens and supermarkets are captured by the Code to varying degrees, but none are affected as much as the fishmongers.

### *Big supermarkets anticipate all cabinet items will be affected*

Although only about 40 per cent of all products in enclosed cabinets are prescribed under the Code (85 out of 200), for purposes of consistency both Woolworths and Coles (at least) expect that they will need to label all products with CoOL information. This would capture such products as cold cut meats, cheeses and chicken in addition to the prescribed products. To label some and not others would confuse consumers and may make them suspicious as to why some products are not labelled. Under this scenario, stores may be required to manage up to 200 extra tickets on a daily basis.

In addition to potentially labelling up to 200 products, the mandated 9mm font size requires some retailers to use two tickets on each item sold. That is, one ticket is used to identify price, product and any other information, while the second ticket is used to identify the required country of origin information. Were 3mm font mandated, only one label per product would be required. This is also largely true for 5mm type size. It is estimated that 70-80 per cent of products will require only one label. This percentage may increase if retailers make changes to font and layout or use abbreviations.

## **Avoiding the extra cost impost relates only to font size not CoOL**

Producing and managing an extra 85 and possibly 200 tickets on a daily basis requires extra set-up time, extra cleaning, extra printing and extra plastic tags. This adds to the costs of operating enclosed display cabinets.

Woolworths, Coles and Metcash have already or are planning to introduce new ticketing and information technology systems to ensure that accurate and compliant CoOL information is provided. In the cases of Woolworths and Coles these are centrally controlled computer-based systems. The costs are not trivial. However, the purchase, set-up and training for the new systems has occurred irrespective of the font size the required CoOL information is printed in. Therefore, for the purposes of this exercise these costs are incidental and need not be included. Only the marginal or extra benefit of avoiding the costs of managing extra tickets to comply with 9mm, by having a smaller font size (3mm or 5mm) instead, is considered here.

## Benefits from managing reduced number of tickets

Reducing the number of labels decreases the resources needed to run and manage enclosed cabinet operations. These resources include the time needed to set up the cabinet each day, label cleaning time, and label and ticketing items.

It should be noted that, individually, the benefits of avoiding the costs of extra tickets are not significant. However, when multiplied by the number of affected products, the number of days each store is open in a year and by the number of stores, combined, these numbers rapidly increase.

The font size specific costs vary according to the specific firm response implemented.

At one end of the spectrum, the large retailers Coles and Woolworths are using highly sophisticated, computer based systems to print product specific country of origin labels. This approach is based on high quality printed labels that are laminated and placed in encapsulated units, designed to prolong the life of a printed label.

Due to the nature of the franchise business, Metcash stores cannot feasibly install a centrally controlled system. Metcash propose to use printed CoOL and product/price information that is laminated and clipped onto affected products.

Smaller firms (such as most fishmongers) unable to justify the outlay of capital on specific printing and laminating systems appear to be opting for the use of CoOL toppers that will be placed on top of the current ticket.

There are distinct costs of using each system. However, the number of labels required drives the cost of each approach.

### *Automated labelling systems and encapsulated tickets*

Coles and Woolworths have opted for a single computerised system that is based on CoOL information inputted centrally and then accessible at individual stores. Both organisations have chosen to revamp their labelling processes and technology in response to the CoOL requirements. Along with the technological response, both have opted to use encapsulated tickets to mount each product's ticket.

For branding reasons, Woolworths has opted to use two labels for 9mm CoOL information. That is, one ticket is to be used to identify price, product and other information, while the second ticket is to be used to

identify the required country of origin information. The halving of the number of labels required per product if say 3mm was used would half the labelling costs to Woolworths.

For Woolworths, an encapsulated labelling system requires specific set up processes. At the start of each trading day, delicatessen managers are required to oversee the set up and placement of the delicatessen cabinet. This includes removing produce from storage and matching labels with the corresponding product. Additional labels require additional time spent searching for the applicable country of origin label for each ticket. It is crucial that this work be undertaken at a management level to ensure that mandated information, such as CoOL and health warnings is correctly displayed. Based on consultations with Coles and Woolworths, each additional label adds roughly 20 seconds to the set up of the delicatessen daily. The labour costs saved from preparing the delicatessen with only one ticket per product instead of two is \$0.13 cents per day. On an annual basis, the saved labour cost would be \$45.45 per ticket.

In line with health requirements, labels must be cleaned daily. That is, after the delicatessen has closed for the day, each encapsulated unit has to be pulled apart, the unit and ticket wiped down and placed in a sterile solution. The following day, the process has to be reversed, with labels reconstructed. The more labels required per product, the longer the time needed per product. Based on consultations with Woolworths on average this would require at least 30 seconds per label.

Additionally, after about 4 days of use, the ticket inside the encapsulated unit will require replacing due to either spoiling of the label through moisture seepage or the label information becoming obsolete due to the product being sold out, or price or product information changing. For automated labelling systems time is required to identify and print off the stipulated label from the computer system. Currently, this requires about 1 minute per label every 4 days. This task is performed by general delicatessen staff at a daily cost of \$0.14 per ticket. Annually, the savings from only cleaning one ticket per product would be \$49.50 per ticket.

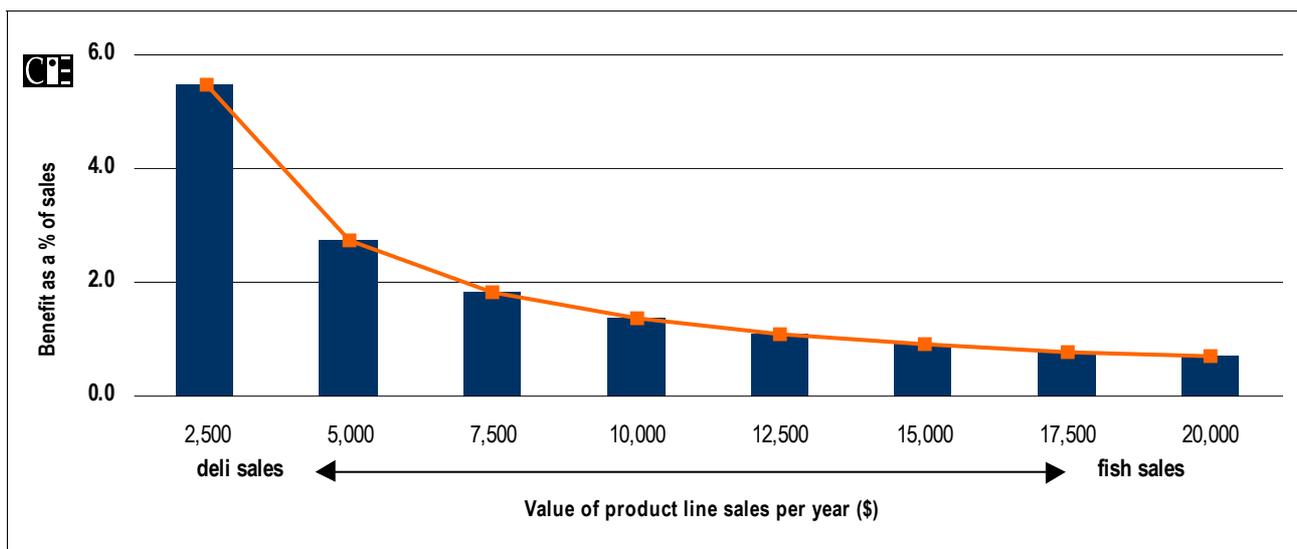
Along with the saved labour expenses, fewer tickets required would reduce expenditure on label consumables. These include ink, paper and laminate used to produce product, price and country of origin labels, along with a cardholder, tray clip and associated items. Depending on the item, the life expectancy of these consumable ranges from 30 days through to 6 months. The shorter the life expectancy, the more frequently the item requires replacement and the higher the overall per label costs. On a per product

basis, the benefit of consumables per ticket per year will be an estimated \$42.12.

Overall, each ticket costs \$137.07 per year. Of this, 69 per cent is comprised of labour costs and the remaining 31 per cent attributable to consumable items.

The actual benefit from reducing font size on specific food lines, however, will not be felt evenly. Rather, delicatessen and fish products with smaller turnovers will benefit more than those products with higher sales. Assuming an annual average turnover of \$10 000 on each fish line and \$2 500 on each delicatessen line, the \$137.07 per product cost saving to Woolworths is equivalent to 1.4 per cent of all fish sales and 5.5 per cent of all delicatessen sales per year (see chart 3.1).

### 3.1 Lower volume delicatessen sales benefit the most from 3mm font size instead of 9mm



Data source: CIE (2006).

With the typical Woolworth's store selling roughly 85 products covered by the Standard, and 9mm font requiring two tickets per product, the benefit of mandated 3mm CoOL over 9mm CoOL would exceed \$11 000 annually. Across Woolworth's 726 stores, the total benefit implications of 3mm font over 9mm font exceeds \$8.4m annually (see table 3.2).

## 3.2 The marginal benefit of 3mm CoOL font to a large supermarket

| <i>Woolworths cost structure</i>            |             | <i>9mm</i>        | <i>3mm</i>       | <i>Marginal benefit</i> |
|---|-------------|-------------------|------------------|-------------------------|
| <b>Consumables items</b>                    |             |                   |                  |                         |
| <i>Costs per item</i>                       |             |                   |                  |                         |
| Ink and paper                               | \$          | 0.30              | 0.30             |                         |
| Encapsulation unit                          | \$          | 0.19              | 0.19             |                         |
| Clip  | \$          | 1.39              | 1.39             |                         |
| Base unit                                   | \$          | 0.53              | 0.53             |                         |
| Lamination                                  | \$          | 0.10              | 0.10             |                         |
| <i>Life expectancy per item</i>             |             |                   |                  |                         |
| Ink and paper                               | Days        | 4                 | 4                |                         |
| Encapsulation unit                          | Days        | 30                | 30               |                         |
| Clip  | Days        | 180               | 180              |                         |
| Base unit                                   | Days        | 180               | 180              |                         |
| Lamination                                  | Days        | 4                 | 4                |                         |
| <i>Consumables used per year</i>            |             |                   |                  |                         |
| Ink and paper                               |             | 90                | 90               |                         |
| Encapsulation unit                          |             | 12                | 12               |                         |
| Clip  |             | 2                 | 2                |                         |
| Base unit                                   |             | 2                 | 2                |                         |
| Lamination                                  |             | 90                | 90               |                         |
| <i>Days store open per year</i>             |             |                   |                  |                         |
| Days open                                   | Days        | 360               | 360              |                         |
| <i>Annual consumable costs</i>              |             |                   |                  |                         |
| Cost per ticket                             | \$          | 42.12             | 42.12            |                         |
| Number of labels per product                |             | 2                 | 1                |                         |
| <b>Total consumable costs</b>               | \$          | <b>84.24</b>      | <b>42.12</b>     | <b>42.12</b>            |
| <b>Labour costs</b>                         |             |                   |                  |                         |
| <i>Cleaning and set up costs per ticket</i> |             |                   |                  |                         |
| Daily cleaning and replacement              | Minutes     | 0.50              | 0.50             |                         |
| Deli staff cost                             | \$ per hour | 16.50             | 16.50            |                         |
| Daily set up                                | Minutes     | 0.30              | 0.30             |                         |
| Deli management cost                        | \$ per hour | 25.00             | 25.00            |                         |
| Cost per ticket per day                     | \$          | 0.26              | 0.26             |                         |
| <i>Annual labour costs</i>                  |             |                   |                  |                         |
| Cost per ticket                             | \$          | 0.26              | 0.26             |                         |
| Number of labels per product                |             | 2                 | 1                |                         |
| Days store open                             | Days        | 360               | 360              |                         |
| <b>Total labour costs</b>                   | \$          | <b>189.91</b>     | <b>94.95</b>     | <b>94.95</b>            |
| <b>Firm wide costs</b>                      |             |                   |                  |                         |
| Cost per product (labour & consumable)      | \$          | 274.15            | 137.07           | 137.07                  |
| Affected products per store                 |             | 85                | 85               |                         |
| Number of stores                            |             | 726               | 726              |                         |
| <b>Total cost</b>                           | \$          | <b>16 917 740</b> | <b>8 458 870</b> | <b>8 458 870</b>        |

Source: Woolworths, Coles and CIE (2006). Note: The 5mm option has not been specifically analysed but it is evident that where the country of origin statement can fit on one label, the costs are the same as for 3mm. Where this is not possible, costs will be greater.

Recognising the potentially high consumer costs of complying with the new 9mm standard and the potential need to use two tickets per product, Coles have opted to place all price, product and CoOL information on to only one large ticket with thin 9mm font. Coles are particularly concerned about consumers' preferences for an uncluttered cabinet display. Interestingly, when Metcash previously designed a two ticket system to accommodate prescribed product ingredients information in enclosed cabinets, it was largely rejected by its stores due to concerns about the cluttered appearance. An additional million dollars was spent designing a new key-coded system displayed outside the cabinet.

While there are no direct cost savings to Coles associated with printing, cleaning and managing only one ticket per product, there are associated indirect benefits from having a font size less than 9mm. Primarily, 9mm CoOL information has been placed on the ticket at the expense of the size of the product and price information and the overall level of label clutter. It is, however, very difficult to value the exact benefit to Coles of avoiding this clutter and moving to a 3mm mandated font. What can be determined from the different responses taken by Coles and Woolworths is that the current Coles option is not costless, and may even be significant. That is, if there were significant and obvious cost advantages of one approach over the other, both organisations would be expected to take the cheapest option. That the Coles option is not costless, changing the required font size from 9mm to 3mm should be expected to deliver similar gains to Coles customers as are expected to be achieved by Woolworths customers but in different ways. Coles customers will not have compromised other information that they value more highly than CoOL information.

### *Laminated CoOL information*

Similar to Woolworths, the 2 500 affected Metcash stores have opted to use propriety labelling systems. However, rather than using a centralised system, Metcash affiliated stores are managing CoOL requirements on a store by store basis, with setup and management guidance and advice provided by the Metcash head office. Metcash has determined the most cost-effective way to handle mandatory 9mm font size is to use two tickets: one with the product and price information and the second with CoOL.

Importantly, the Metcash option differs from the Woolworths option by not using encapsulated units. The benefit of this approach is reduced cleaning times; the cost being more expensive lamination costs in order to ensure reasonable life expectancy of tickets.

On a per store and per product basis, the 9mm font impacts are similar to those felt by Woolworths. Specifically:

- consumable items such as ink, paper, card holders, hinge blocks and tray clips need replacing at regular intervals. Per ticket, consumable items annually cost \$71.55. This cost is driven largely by use of more expensive ink, paper and laminate options relative to the Woolworths option;
- each ticket requires 15 seconds per day for cleaning costs. This is shorter than the Woolworths time due to Woolworths' use of the encapsulated tickets. Annually, per ticket cleaning the per ticket cost of cleaning is \$23.88; and
- daily delicatessen set up costs are similar to Woolworths, with each ticket requiring 20 seconds of management time each day to ensure the labels and all warning and mandated information are correctly displayed. Per ticket, annually, the labour costs from preparing the delicatessen are \$42.93 per ticket. This is slightly lower to Woolworths due to Metcash stores being open 340 days per year rather than 360 for Woolworths.

Overall, each ticket costs \$137.86 per year. Of this, 48 per cent is comprised of labour costs and the remaining 52 per cent attributable to consumable items.

The typical Metcash store has approximately 20 products covered by the Standard. With 2 500 Metcash stores operating enclosed cabinets across Australia, moving to the 3mm CoOL option from the current 9mm requirements, the savings would be \$2 757 per store, and more than \$6.8m across all stores.

### *Country of origin toppers, pre-made and printed labels*

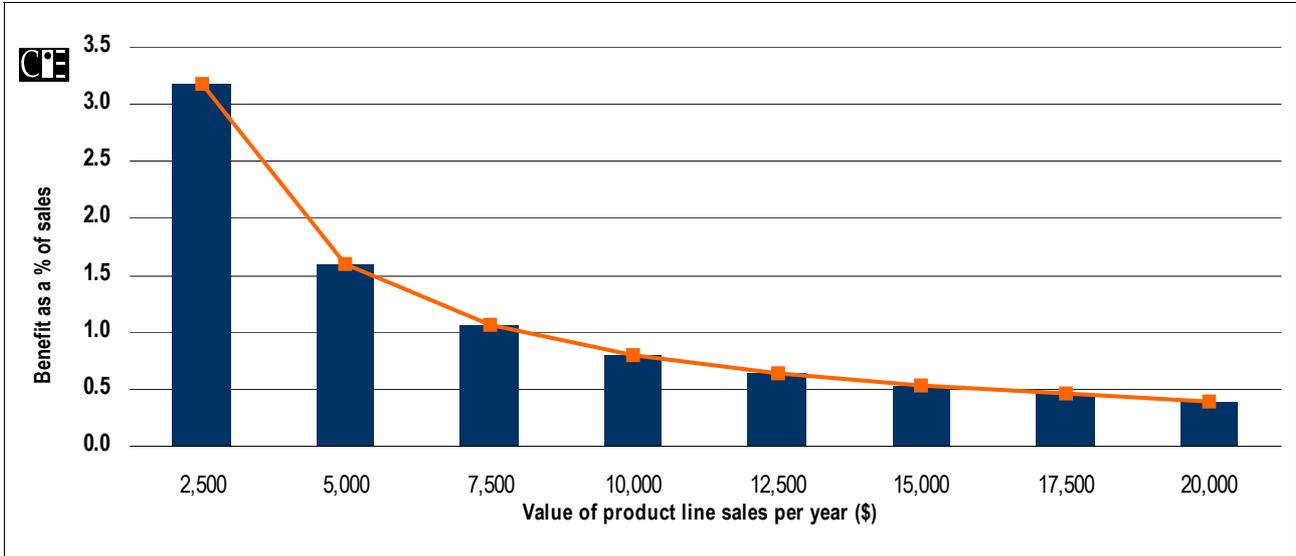
Smaller firms and independent stores are unable to justify the significant capital outlay incurred by Coles, Woolworths and Metcash for automated labelling systems. There are 1 581 independent delicatessens and 1 239 fishmongers in Australia. Advice from fishmongers is that 9mm CoOL means these stores use country of origin 'toppers', placed on top of the existing product and price label. These toppers are purchased from a manufacturer and pre-printed with the required information. Therefore, to cover all feasible combinations of fish products on display, retailers are required to purchase more than the number of products on display.

Alternatively, were 3mm-font size mandated these stores would be able to return to their pre-existing processes of making printed labels. Thus, the CoOL would be printed in conjunction with the product name. The product and country of origin label would need replacing on average once per month, depending on how the label is maintained and the frequency of the change in products. Similar to the Woolworths and Metcash costs, the marginal benefit to small retailers of 3mm over 9mm is the saving from not having to purchase CoOL toppers, reduced costs associated with cleaning and maintaining toppers and the reduced set up time needed each day to set up the display cabinet. The specific benefits are:

- each product on display will no longer require retailers to purchase three toppers on average to cover all potential and feasible labelling requirements. Three toppers cost \$4.95 (\$1.65 each) and last 12 months;
- saved cleaning costs of the additional toppers is similar to Metcash retailers. By not using toppers will save an additional 15 seconds product per day. Annually, saved cleaning costs will be \$24.75 per product; and
- cabinet set up in fishmongers at 3mm font size will no longer require managers to locate and place the correct country of origin topper on each label. Daily, this process will save 15 seconds to the set up time needed per product displayed. On a per product basis, this will save an additional \$50.00 per year.

Per product displayed, total annual benefits will be \$79.70 from moving to 3mm from 9mm. The majority of this benefit (85 per cent) is the decreased labour cost of cleaning and delicatessen set up. Assuming an average turnover of \$10 000 on each fish line, the per product benefit is equivalent to 0.8 per cent of all fish sales from fishmongers per year. The actual benefit, however, will not be felt evenly across all fish lines. Rather, products with smaller turnovers will be impacted upon most severely. As a percentage, the cost benefit impact on smaller lines could be as high as 3.2 per cent (see chart 3.3).

## 3.3 Benefit on individual fish product lines



Source: CIE (2006).

Small and medium sized fishmongers have on average 60 to 90 products on display at any one time. Large fishmongers may have more than 130 on display. Conservatively, if we assume that the average fishmonger has 90 products on display, the benefit for the 1 239 fishmongers nationally will be \$8.9m per year (see table 3.4).

## 3.4 The marginal benefit of 3mm over 9mm CoOL font to fishmongers

| <i>Fishmonger cost structure</i>            |             | <i>9mm</i>       | <i>3mm</i>     | <i>Marginal benefit</i> |
|---|-------------|------------------|----------------|-------------------------|
| <b>Consumables items</b>                    |             |                  |                |                         |
| <i>Costs per item</i>                       |             |                  |                |                         |
| Ink, paper and laminate                     | \$          | 7.60             | 7.60           |                         |
| Topper (three required at \$1.65 each)      | \$          | 4.95             |                |                         |
| Hinge block                                 | \$          | 0.25             | 0.25           |                         |
| Tray clip/base                              | \$          | 1.00             | 1.00           |                         |
| <i>Life expectancy per item</i>             |             |                  |                |                         |
| Ink, paper and laminate                     | Days        | 540              | 540            |                         |
| Topper                                      | Days        | 360              | 360            |                         |
| Hinge block                                 | Days        | 180              | 180            |                         |
| Tray clip/base                              | Days        | 180              | 180            |                         |
| <i>Consumables used per year</i>            |             |                  |                |                         |
| Ink, paper and laminate                     |             | 0.67             | 0.67           |                         |
| Topper                                      |             | 1                | 1              |                         |
| Hinge block                                 |             | 2                | 2              |                         |
| Tray clip/base                              |             | 2                | 2              |                         |
| <i>Days store open per year</i>             |             |                  |                |                         |
| Days open                                   | Days        | 360              | 360            |                         |
| <i>Annual consumable costs</i>              |             |                  |                |                         |
| Cost per ticket                             | \$          | 12.52            | 7.57           |                         |
| Number of labels per product                |             | 1                | 1              |                         |
| <b>Total consumable costs</b>               | <b>\$</b>   | <b>12.52</b>     | <b>7.57</b>    | <b>4.95</b>             |
| <b>Labour costs</b>                         |             |                  |                |                         |
| <i>Cleaning and set up costs per topper</i> |             |                  |                |                         |
| Daily cleaning and replacement              | Minutes     | 0.25             |                |                         |
| Deli staff cost                             | \$ per hour | 16.50            |                |                         |
| Daily set up                                | Minutes     | 0.30             |                |                         |
| Deli management cost                        | \$ per hour | 25.00            |                |                         |
| Cost per ticket per day                     | \$          | 0.21             |                |                         |
| <i>Annual labour costs</i>                  |             |                  |                |                         |
| Cost per topper                             | \$          | 0.21             |                |                         |
| Number of toppers per product               |             | 1                |                |                         |
| Days store open                             | Days        | 360              |                |                         |
| <b>Total labour costs</b>                   | <b>\$</b>   | <b>74.75</b>     | <b>0.00</b>    | <b>74.75</b>            |
| <b>Firm wide costs</b>                      |             |                  |                |                         |
| Cost per product (labour & consumable)      | \$          | 87.27            | 7.57           | 79.70                   |
| Affected products per store                 |             | 90               | 90             |                         |
| Number of stores                            |             | 1 239            | 1 239          |                         |
| <b>Total cost</b>                           | <b>\$</b>   | <b>9 731 478</b> | <b>844 131</b> | <b>8 887 347</b>        |

Source: Industry (2006). Note: The 5mm option has not been specifically analysed but it is evident that where the country of origin statement can fit on one label, the costs are the same as for 3mm. Where this is not possible, costs will be greater.

## Total retail benefits

The benefit of mandated 3mm over 9mm-font CoOL appears to be significant.

### *3mm benefits are substantial*

The benefits in table 3.5 provide a breakdown of the benefits for only some of the stores likely to be affected by moving from 9mm to 3mm font size.

#### 3.5 Marginal benefit of 3mm over 9mm

| <i>Benefit component</i>                      | <i>Fishmongers</i> | <i>Metchash stores</i> | <i>Woolworths stores</i> |
|---|--------------------|------------------------|--------------------------|
|   | Unit               |                        |                          |
| Annual benefit per additional ticket required | \$ 79.70           | 137.86                 | 137.07                   |
| Number of affected products per store         | 90                 | 20                     | 85                       |
| Benefit per store                             | \$ 7 173           | 2 757                  | 11 651                   |
| Number of stores affected                     | 1 239              | 2 500                  | 726                      |
| <i>Benefit per retailer type</i>              | \$ 8 887 347       | 6 892 770              | 8 458 870                |

Source: CIE (2006). Note: The 5mm option has not been specifically analysed but it is evident that where the country of origin statement can fit on one label, the costs are the same as for 3mm. Where this is not possible, costs will be greater.

Including Coles and independent delicatessens would raise these benefits further. To allow for this we assume:

- benefits to Coles are two-thirds the cost of Woolworths; and
- benefits to the 1 581 independent and small delicatessens are one-third of those of fishmongers due to the reduced range of products affected.

Based on these assumptions, the nation wide benefits would be \$33.7m per year. Were all this benefit passed onto consumers, prices would, on average, decrease by 1.6 per cent. It would decrease the price of:

- fish products by 0.9 per cent; and
- other prescribed products by 4.5 per cent.

As demonstrated in charts 3.1 and 3.3, there would be considerable variation in percentage cost decrease depending on the volume sales of each product line. This may hold implications for the domestic fishing sector. Because many domestically caught fish are sold in small volumes, a 3mm font size is less likely to put some domestic fish products at less of a price disadvantage relative to imported fish as will happen with 9mm. The problem is that 9mm font, high costs and higher prices is likely to result in

some substitution of high volume imported fish lines for low volume domestically caught fish. A 3mm font would avoid this substitution which could otherwise impact negatively on the Australian fishing industry.

### *5mm also has benefits*

The 5mm option has not been specifically analysed but it is evident that where the country of origin statement can fit on one label, the costs are the same as for 3mm. Where this is not possible, costs will be greater.

At 5mm, simple country of origin information such as 'Product in Australia' may fit on one ticket without unduly compromising the display of other information. However, information such as 'Made in Australia from imported and local ingredients' will not. Similarly where there are mixes of imported products retailers may face difficulties. Between 20 and 30 per cent of products might require second labels. Mostly these would affect delicatessen products although some mixed and prepared fish products will also be affected.

If only 30 per cent of the affected products required two labels the benefit estimates would decline by 30 per cent. That is, instead of a nationwide benefit of \$33.7 million (compared to the 9mm standard), the estimate would be \$23.6m.

## **Sensitivity analysis**

There are a number of uncertainties surrounding the exact values used in the calculations. As such it is important to determine the robustness of the results. This is known as a 'sensitivity analysis'.

In the case of the fishmonger, Metcash and Woolworths costs, conservative assumptions have been made about their magnitude. Moreover, even quite large changes in these factors do not of themselves affect the estimated benefits dramatically.

In analysing the robustness of the results, key parameters were varied simultaneously around their mean values and the cost structure recalculated to identify the sensitivity of the results to these changes (table 3.6).

## 3.6 Input parameters varied in the sensitivity analysis

| <i>Input variable</i>  | <i>Units</i>                 | <i>Distribution</i> | <i>Minimum</i> | <i>Mean</i> | <i>Maximum</i> |
|--|------------------------------|---------------------|----------------|-------------|----------------|
| ▪ The number of Coles and Woolworths products covered by the Standard                      | Number                       | Triangular          | 75             | 85          | 200            |
| ▪ The number of Metcash, independent delis and fishmonger products covered by the Standard |                              |                     |                |             |                |
| – Metcash stores   | Number                       | Uniform             | 16             |             | 24             |
| – Independent delis  | Number                       | Uniform             | 24             |             | 36             |
| – Fishmongers  | Number                       | Uniform             | 72             |             | 108            |
| ▪ Display cabinet set up time  |                              |                     |                |             |                |
| – Metcash stores   | Minutes                      | Triangular          | 0.21           | 0.30        | 0.39           |
| – Woolworths   | Minutes                      | Triangular          | 0.21           | 0.30        | 0.39           |
| – Fishmongers  | Minutes                      | Triangular          | 0.21           | 0.30        | 0.39           |
| ▪ Life expectancy of consumable items  |                              |                     |                |             |                |
| – Metcash stores   | As a % of the original value | Uniform             | 75             |             | 150            |
| – Woolworths   | As a % of the original value | Uniform             | 75             |             | 150            |
| – Fishmongers  | As a % of the original value | Uniform             | 75             |             | 150            |
| ▪ Ticket/topper cleaning times   |                              |                     |                |             |                |
| – Metcash stores   | Minutes                      | Uniform             | 0.20           |             | 0.30           |
| – Woolworths   | Minutes                      | Uniform             | 0.40           |             | 0.60           |
| – Fishmongers  | Minutes                      | Uniform             | 0.20           |             | 0.30           |
| ▪ Consumable costs   |                              |                     |                |             |                |
| – Metcash stores   | As a % of the original value | Uniform             | 80             |             | 120            |
| – Woolworths   | As a % of the original value | Uniform             | 80             |             | 120            |
| – Fishmongers  | As a % of the original value | Uniform             | 80             |             | 120            |
| ▪ Coles to Woolworths cost ratio   | %                            | Uniform             | 67             |             | 100            |
| ▪ Independent delis to fishmonger cost ratios  | %                            | Uniform             | 27             |             | 40             |

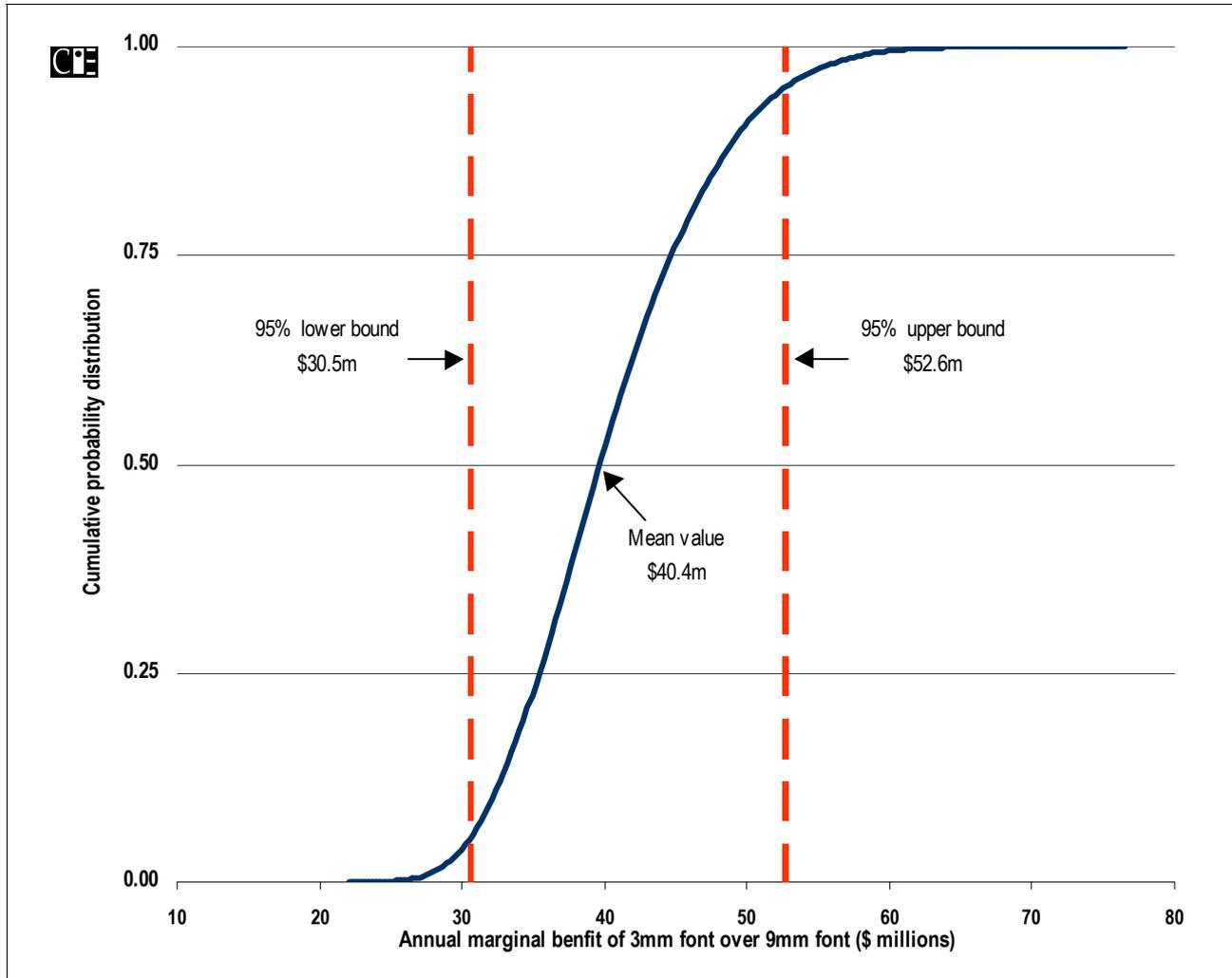
Source: CIE (2006).

Distributions chosen were either uniform or triangular, based on our understanding of the underlying variability of the variables.

The software program @Risk (version 5.4.3) was used to undertake this sensitivity analysis. This program calculated a probability distribution of the likely cost based on 100 000 iterations using different values for each of the specified parameters to test.

The results from the sensitivity analysis indicate the benefits are significant over a wide range of assumptions. Chart 3.7 shows that the range of possible direct benefits to Australian retailers varies from a minimum of \$22.1 million to a maximum of \$76.5 million, with an average of \$40.4 million. Furthermore, there is a 90 per cent chance that the direct benefit of 3mm over 9mm lies somewhere between \$30.5 million and \$52.6 million.

### 3.7 Range of direct marginal benefits per year



Data source: CIE (2006).

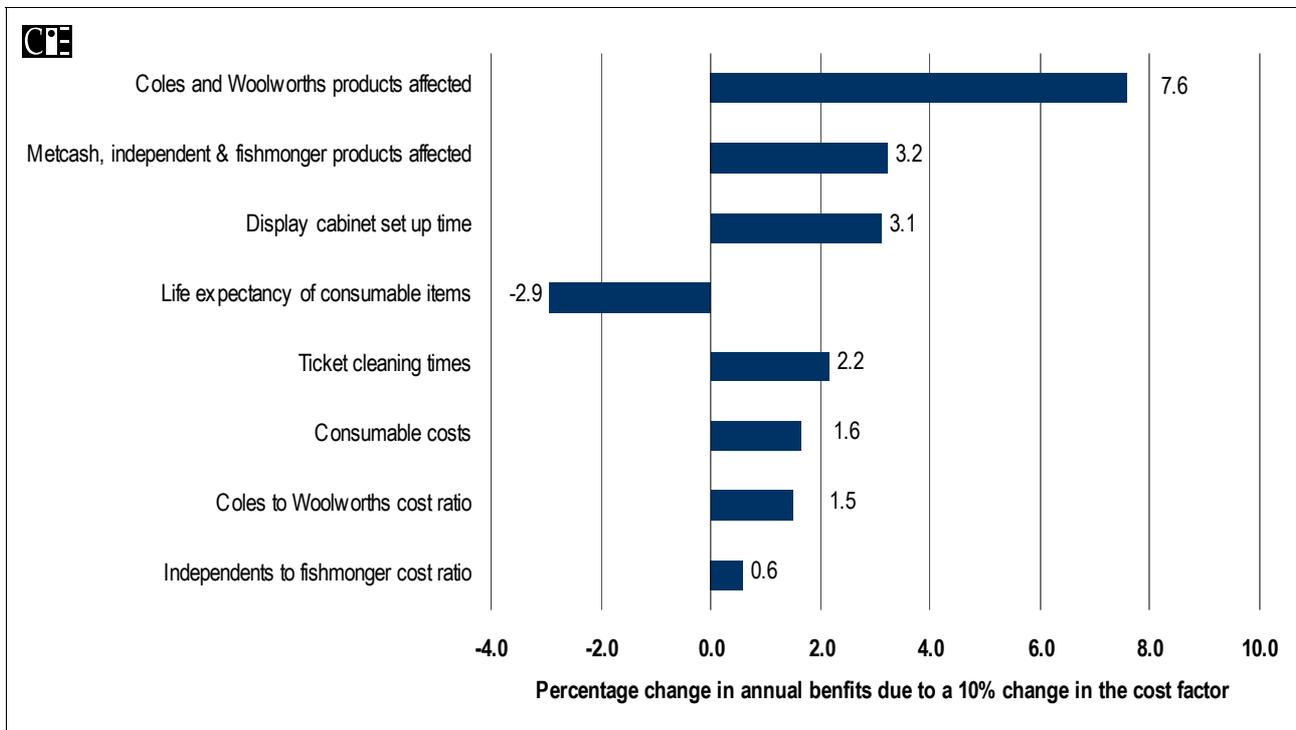
### *Benefits could be considerably higher if non-prescribed are also captured*

It is important to note that the calculated mean of \$40.4m is higher than the manually calculated annual benefits of \$33.7m. The lower figure is based on CoOL being applied in Woolworths and Coles stores to only the prescribed products. Given the possibility that Woolworths and Coles apply the CoOL information to all 200 products, the result is that the annual benefits are significantly increased, driving up the mean annual costs avoided to \$40.4m.

### *Main drivers and sensitivity testing show estimates are robust*

Chart 3.8 shows the relative importance of various parameter drivers. It shows how the Australia wide benefit estimate of switching from 9mm to 3mm would change were each cost component varied by 10 per cent. The single most important factor driving benefits from avoided costs is the number of products affected per store. For example, a 10 per cent increase in the number of Coles and Woolworths products covered by the Standard would result in annual benefits increasing by 7.6 per cent, or 3.1m per year.

#### 3.8 Parameter sensitivity analysis



Data source: CIE (2006).

It is important to note that for the remainder of the parameters, even quite large changes in these factors do not of themselves significantly affect the estimated dramatically. The negative value determined for the life expectancy factor is of the expected sign: an increase in the life expectancy of ticketing items means that less are required per year, thus reducing benefits from the costs avoided.

These results suggest that the benefit estimates are fairly robust. The robustness of the estimates is further heightened by the generally conservative assumptions made in building the model (as discussed above).

# 4

## *Cost savings to agencies*

The 9mm requirement of the new Code would create cost imposts and therefore strong incentives for some retailers not to comply with the 9mm font size requirement and possibly even with the CoOL requirement more generally. For large supermarkets with the capacity to install expensive centralised systems and with strong brand images to protect, compliance is likely to be the only option. However for smaller independent retailers, the incentives for non-compliance will be high with a 9mm font size.

The stronger the incentives not to comply, the greater will be the need for surveillance and enforcement. These costs could be avoided with a 3mm font size.

### **Two types of enforcement costs could be avoided**

Potentially the tasks and costs of FSANZ, the ACCC and State Environmental Health Officers would all expand under the prescribed 9mm CoOL Code requirement. These costs would either be:

- direct resource costs if the increased functions of each organisation were funded from increased financial resources; or
- an opportunity cost if new functions are required to be undertaken within existing budgets because to complete new tasks would require reduced commitment to others - this would involve an opportunity costs or increased risk to public food health and safety.

If additional funds were provided, the extra cost would be the resource cost of the extra tasks plus the deadweight losses of raising additional taxes to pay for it (estimated at between 15 and 40 cents for every dollar of revenue raised, Lattimore 1997).

The opportunity costs of enforcement are difficult to quantify. What is clear is that consumers value food safety more than country of origin information<sup>2</sup>. Consumers will not willingly trade off food safety for the sake of larger font sized labelling about country of origin.

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<sup>2</sup> See Hughes (2003) and Kelly *et al* (2005) p. 555.

The implication of consumers' (and taxpayers') preference for food safety and health is that enforcement of the new Code will need to be fully funded. Assuming the funding is available for the new Code, the additional resources required would involve:

- increased frequency of retrospective CoOL checks by state Environmental Health Officers (EHO), requiring additional EHO time;
- increased number of complaints and enquires about compliance requiring additional head office work loads for Environmental Health Authorities (EHA) and associated bureaucratic and political involvements;
- increased effort required by EHAs to try and build goodwill with small retailers due to retailers' reduced acceptance and increasing frustration with the growing complexity, perceived trivia and creeping red-tape of food standards regulations;
- increased frequency of EHA retrospective checks of all food standards regulation due to the increased frustration by small retailers of the creeping burden of compliance and their consequent reduced willingness to comply;
- management and monitoring by FSANZ.

In addition to the resource costs are the costs that come from a perceived reduction in integrity, and therefore effectiveness, of food standards regulation by retailers. Many retailers are highly suspicious of the minutiae of specifying font size. Many see it as regulation being used to achieve misguided politically objectives not related to food safety and health that will create unreasonable bugbear and unnecessary interference in their business activities – 'yet more red-tape to small business', 'death by a 1000 cuts'. These costs could be avoided with a 3mm font size.

## **Estimates of enforcement costs that could be avoided**

The typical costs to an EHA of conducting a retrospective store check is around \$1000. In the event of a breach of a food standard, it is likely to take around 10 hours of an EHO's time to investigate, explain and act on the breach and to conduct subsequent checks to ensure compliance.

There are over 5000 independent small retailers in Australia likely to be directly affected by the 9mm requirement.

- Over 1200 independent fishmongers.
- Over 1500 independent delicatessens.
- Over 2500 independent small supermarkets.

Typically each store is checked once to twice a year by EHAs. If Woolworth and Coles are assumed to fully comply but it is assumed that 10 per cent of independent small retailers do not comply with the new 9mm Code, EHOs would be required to conduct an additional 520 to 600 retrospective store checks a year. At a cost of \$1000 per store, there would be a direct enforcement cost on EHAs of around \$0.6 million a year. Taking account of the costs of raising an additional \$0.6 million in tax revenue (say \$0.30 per dollar) to pay for the extra checking, the total cost to the economy would be around \$0.8 million.

The head office, bureaucratic and political costs of dealing with complaints, handling the media and court cases could easily see a doubling of the \$0.8 million estimate. Each complaint becomes a case with attendant costs of creating a file, letter writing, acting on the complaint, decision making, reporting back to the complainant, the potential for prosecution, the potential for appeal, the potential for political action, the potential for responding to sensationalist media coverage and the potential for hefty legal costs. Some prosecutions will be required to provide a deterrent effect.

If the major supermarkets are compliant and some smaller stores are not, the supermarket chains will have a strong incentive to lodge complaints and to ensure they are ruthlessly acted upon at the bureaucratic and political levels. FSANZ will have an on-going management and monitoring role that will further add to costs.

In addition to these costs are the costs that will arise indirectly as a result of increased friction created between retailers and regulatory authorities. It is easy to see this doubling the cost estimates. There may well be other costs that are difficult to anticipate or observe. So, although it is difficult to be precise about enforcement costs, it is easy to see that \$2 million a year is probably a minimal estimate. With a 3mm font size, these costs could be avoided.

## Opportunity costs

The costs discussed above assume the extra resources required for enforcement are in fact fully funded. In reality, given budgetary constraints, the limited resources of EHAs and their difficulties in recruiting and retaining staff now, effective enforcement is either likely to be compromised or if not, genuine health and safety activities are. The opportunity costs of this could far exceed the extra costs of funding full enforcement. An important benefit of switching from a 9mm font to 3mm (or 5mm) would be avoiding these costs.

# 5

## *Total benefits and costs*

The mandating of a specific font size less than 9mm would help to reduce the costs of implementing CoOL requirements. From shopper survey data it would appear that the benefits of the prescribed 9mm font size to consumers is small. Economically, the most efficient font size option would be 3mm, especially given survey data showing that at this size CoOL information is legible to 94 per cent of shoppers. Also 5mm offers substantial benefits compared to 9mm but the expected economic benefits are not as great as for 3mm.

### **With a smaller font size, compliance costs could be lowered by about 1.6 per cent of the value of products sold**

Evidence presented in this report suggests where food is displayed in an enclosed cabinet, were a 3mm font size required instead of 9mm the costs of compliance would be lower. Total costs would decline by between 0.7 and 10 per cent of the product value and average around 1.6 per cent. The savings would be highest for particularly low volume sales items such as some domestically caught fish species. The lower costs arise due to removing the need to manage double the number of information tickets per prescribed product.

Mandating 5mm country of origin may also lower costs. The extent of this reduction depends on the extent to which retailers are able to use one label rather than two, which is influenced by label layout and the possible use of abbreviations. Mandating a 3mm font size would lead to the largest cost reduction.

### **Costs avoided will be to the benefit of consumers and fishermen**

In most cases compliance costs are passed on to consumers in the form of higher retail prices. A result of the 9mm standard will be some substitution of consumption away from prescribed foods toward non-prescribed foods. In the case of fish in particular, this could result in reduced sales which will

impact back negatively on the Australian fishing industry. However, with a lower font size (3mm or 5mm), many of these costs could be avoided.

Moreover, the compliance costs with the 9mm standard will be highest for particularly low-volume low-value sales items such as some domestically caught fish species. As a result, with the 9mm font size prices rises for some domestic fish products are likely to be considerably greater than for imported fish. This will cause some substitution of high-volume imported fish lines for low-volume low-value domestically caught fish. This is another negative impact on the Australian fishing industry that could be avoided with a reduced font size.

## Consumers do not appear to value larger font sizes highly

Although consumers appear to regard CoOL information as important, they do not seem to be prepared to pay more to read the information in font sizes above 3mm. This would suggest the consumer benefits of a font size greater than 3mm are not large.

Shoppers' strongest preference appears to be for 5mm font size. However, perhaps because virtually all shoppers surveyed (94 per cent or more) can read CoOL information at 3mm, 5mm and 9mm, they do not appear to value larger font sizes highly.

- 96 per cent of consumers surveyed indicated they would not willingly pay extra to obtain CoOL information in font sizes larger than 3mm.
- Of the 4.0 per cent who indicated they would pay for a higher font size, they indicated they were prepared to pay between about 1 and 3 per cent of the value of the product, but when averaged across all consumers, the willingness to pay extra is only about 0.06 of one per cent of the value of the product (1.5 per cent times 4 per cent).
- Of the 6 per cent (12 surveyed shoppers) who indicated they could not read 3mm, only 2 ranked CoOL information as most important.
- Of the 25 per cent of people who could not read 2.5mm, only 6 per cent ranked CoOL as most important.
- In many cases, large font size was negatively perceived with around 44 per cent of shoppers indicating that 9mm CoOL information obscured their view of the product.

The findings of the specific consumer research conducted for this exercise are consistent with international research, which indicates that consumers do not value CoOL information highly. That said, some level of uncertainty

will always surround willingness to pay survey data simply because the data is not market tested. While it is not possible to be definitive about how much consumers value font sizes greater than 3mm, the value they indicate on average when asked is only about one twenty-fifth of the estimated extra cost of having 9mm compared with 3mm. That is, willingness to pay would need to be more than 25 times higher to match cost increases of 1.6 per cent. Even then the 9mm standard would only be regarded as marginally economical. Moreover, the information is likely to be of most value to those shoppers unable to read 3mm. But because only 6 per cent of surveyed shoppers fall into this category, imposing extra costs on all shoppers to benefit such a small group is highly inequitable.

## Sensitivity of the results

Willingness to pay would need to be about 50 times greater than indicated to suggest that mandating a 9mm font size where unpackaged foods are displayed in an enclosed cabinets is a good investment for the economy. This suggests there is a large gap between benefits and costs with the 9mm standard. Further, the costs associated with a 9mm font compared with the savings from 3mm do not include the costs of enforcement or the possible costs to the Australian fishing industry. Together these two costs would only need to be \$6 million to cause a 20 per cent increase in estimated cost. More likely these costs would be considerably more, perhaps \$12 million.

The value of Australian caught fish sold on the domestic market is around \$1.2 billion annually. It is easy to see that even a small decline could impose costs of \$12 million in terms of lost value added. With the 3mm option these costs could be avoided. They can also be substantially avoided with the 5mm option.

### *Potential impact on non-prescribed products*

Sensitivity testing on the 9mm option suggests that there is more scope that costs are underestimated than overestimated, particularly if non-prescribed products in enclosed cabinets are also end up requiring double labelling. This suggests that the advantages of a 3mm font compared with 9mm could be greater than indicated.

### *5mm standard also offers advantages*

Although consumers did not indicate a strong willingness to pay for 5mm font size over a 3mm font size, they nonetheless indicated a preference for

5mm over 3mm were it to be costless. They indicated these preferences even where abbreviations were used to make 5mm font size fit on one ticket.

Where the country of origin statement can fit on one label, a 5mm standard would be of a similar compliance cost relative to a 3mm standard and might provide a marginal economic benefit to consumers based on the evidence assembled here. However, it is estimated that in 20-30 per cent of cases a second label may be required which will increase costs relative to the 3mm standard.

In order to address this, one possibility is that a thinner font or redesign of the ticket layout may allow for unabbreviated information to be fitted on the ticket. However, this may either compromise brand font recognition or other information contained on the ticket due to a cluttered appearance. This would come at an economic cost but is difficult to quantify. Other retailers have indicated that they could use abbreviations in order to include the country or origin statement on one label.

### *3mm standard appears to be a safe minimum*

Legally, irrespective of the prescribed minimum font size, CoOL labels are required to be legible. Legibility is affected by more than font size. It is also affected by, among other things,

- the design of the font (particularly its width relative to its height) ,
- the degree of contrast between the colours used for the font and for its background,
- the length of the message relative to the space allowed for it,
- whether all capitals or a mixture of capitals and lower case are used (words in all capitals are generally considered to be less easy to read as they all have identical outline shapes), and
- the spacing between the letters, the words and the lines of text (Wheildon 1990).

#### *Even 2.5mm is legible under bad conditions*

Survey results provide findings on the legibility of 3mm as well as 2.5mm font sizes.

- The 3mm legibility test was conducted with black writing on either a white or a yellow background. Black writing on either of these two

backgrounds is regarded as providing good contrast, which assists legibility.

- The 2.5mm legibility test was conducted with white writing on a black background. White on black is regarded as not as readily legible as black on white, as it is the opposite of what we are accustomed to reading.
- The 2.5mm legibility test might well be regarded as having been conducted under inferior conditions.

*3mm is a 'high' minimum economically*

Because of the inferiority of the test conditions for the 2.5mm font test, survey results suggest that 3mm is a robust minimum standard. The results clearly indicate that:

- with a font size of 3mm and some mix of other factors affecting legibility, 94 per cent of surveyed shoppers could read CoOL information;
- with a 17 per cent lower font size of 2.5mm and probably an inferior mix of other factors affecting legibility, still 75 per cent of surveyed shoppers could read the CoOL information, and of the 25 per cent who could not, only 6 per cent are highly concerned about CoOL.

The conclusion that can be drawn is that most shoppers who are strongly concerned about CoOL information and most shoppers generally (even those not strongly concerned about CoOL) can read a font size less than 3mm even when other factors affecting legibility are not optimal. If we add to this the legal requirement that irrespective of font size a CoOL label must be legible, then the 3mm requirement begins to look like a safe minimum requirement if the policy objectives are:

- to ensure that virtually all shoppers can read it;
- other information of more value to consumers is not compromised.

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