Is mandatory country-of-origin labelling a retrograde step in the long run?

Is Mandatory Country-of-Origin Labelling a Retrograde Step in the Long Run?

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Abstract *There is a strong push from the farming community in Australia to persuade the government to legislate the compulsory display of country-of-origin labelling on retail products. This research examines the label elements considered by grocery shoppers who are inclined to examine the country of manufacture. Shoppers are most likely to consider the brand name when choosing a product, with the odds ratio of taking note of the country of manufacture being the largest for those consumers who scrutinize the name of the product and for those who ascribe the highest importance to the product's country of manufacture. Overt identification as Australian origin, for products without a recognizable brand name may therefore not be advantageous to Australian producers. Country-of-origin prone shoppers also seek stronger reassurance from other cues on the product label. Shoppers would have to contend with the inevitable higher prices arising from label recomposition and country-of-origin compliance. To what extent increased prices would dampen demand is a moot point.*

Keywords

Country-of-origin, label, brand, grocery shoppers, country of manufacture

Introduction

In early 2005, the McDonald fast food operation in Australia decided to cut potato contracts with Australian farmers by 43000 tonnes (equivalent to 10 million Australian dollars), in favour of a New Zealand supplier. This move created a stir within the Australian farming community that accused manufacturers in Australia of seeking low quality substitutes from overseas in their product compositions because they were cheaper. For some time now, there has also been unrest in some quarters regarding the extent of "cheap" imports that are making their way to retailers' shelves and outselling many "Australian made" products. Sympathisers of Australian made products claim, that purchase and consumption of foreign made products deprive Australian workforce of job opportunities and have a negative impact on the Australian economy. Already, they argue that, Australia is reeling under a huge balance of trade deficit and unbridled consumption of imported goods does not help to allay this predicament.

Labelling laws in Australia do not require producers to explicitly display the country of origin, though it is obligatory to declare the address of manufacture. Supporters of the concept of country-of-origin (COO) labels, aver that if COO is canvassed on the labels, consumers will then have the ability to decide whether they would want to patronize an item that is not made in Australia. Proponents say that COO labels would protect consumers from food raised in uncertain conditions while ensuring that domestic growers would not share the blame when safety issues arise; they claim that foreign producers have the advantage in terms of pesticides and the cheap labour they can use. However, importers say that they already face stringent

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safety standards that domestic farmers face. Importers consider the labelling issue an attempt to squelch foreign competition, and caution that COO labels will drive up cost of food for every one.

Hon Christopher Pyne, Parliamentary Secretary to the Minister for Health and Ageing, in a media release on 11th August 2005, said that the Australian Federal government is putting pressure on the Australia-New Zealand Food Regulation Standards to strengthen COO labelling rules. Hudson (2005) reporting in the *Sunday Age*, states that under the new labelling rules, even the labels for unpackaged fresh fruit, vegetables, nuts and seafood, including delicatessen food, would also have to state the country-of-origin, not just the word "imported".

Background

Consumers across the world often casually display overt preferences for national product categories by conspicuous use of American casual wear, German automobiles and Italian and French designer fashion, thus suggesting a sense of respect and admiration for certain products emanating from specific countries. There is no gainsaying therefore that a product's COO is an important bias in consumer decision-making.

Roth and Romeo (1992) ascribe consumers' COO bias to products from a particular country, to the overall perception that they have formed of the country's production and marketing strengths and weaknesses. According to Nagashima (1970), it is not uncommon for firms therefore, when developing a corporate imagery for a product, to include significant emphasis on the product's COO among the various other marketing mix variables like product appearance, performance, brand name, price etc. Nagashima (1970) defines imagery of the COO as "the picture, the reputation, and the stereotype that business and consumers attach to products of a specific country. The image is created by such variables as representative products, national characteristics, economic and political background and history and traditions".

Piron (2000) identifies diverse ways with which COO is credited to impact consumers' evaluation of products. For instance, consumers' cognitive processes may include self-perception, expressed as a desire to match self and product images (Sirgy *et al*., 1991). Consumers may also be influenced by a halo effect (Erickson *et al.*, 1984); Johansson *et al.*, 1985) whereby a country's name triggers feelings that may be transferred on to the product. The COO may act as a summary construct, directly affecting consumers' attitudes towards the brand of a country instead of through product attribute ratings (Wright, 1975). Similarly, COO could also evince national stereotype response rather than product specific reactions (Rierson, 1967). Further, Samli (1995) believes that COO is a critical information cue that makes a product acceptable in different world markets.

Given that COO declarations on the labels can arouse national sentiments in consumers' choice of products, countries seeking to direct patronage to home grown/produced items by overtly displaying COO on labels are vicariously attempting to subdue demand for imported products. Gordon (2005) explains that the explicit label notice is just "protectionism" dressed up to encourage patriotism and cautions that this attempt to inhibit free trade may face the risks of reciprocal measures from potential trading partner countries. Bairns (2005) finds it strange that Australian farmers are outraged when Japanese or European politicians argue for protection of

their domestic farming on this basis. According to Bairns (2005), there is more than a dose of raw hypocrisy in the very vocal special interest groups who sloganeer about the need to consume Australian produce in order to preserve the Australian farming way of life.

Gordon (2005) also questions whether the additional information of COO on the label is relevant to the consumer decision-making process of product choice. Akaah and Yaprak's (1993) who studied the effect of COO on product evaluation claimed that a product's intrinsic (reliability, performance) cues have a more significant bearing than extrinsic (e.g. COO, price) cues on consumers' decision making. According to Piron (2000), COO as a decision-making attribute, is quantitatively low across products' typology of luxury/necessity and public/private dimensions, though it statistically affects the rankings of other product attributes. With luxury products, knowledge of a product's COO may prompt consumers to reshuffle the priorities of purchase decision making attributes, while the change is more modest with necessity products (groceries are likely to be necessity products, consumed in the consumer's private domain outside the public gaze). There does not seem to be evidence in marketing literature of efforts to uncover the shopping profile of customers who consider COO vis-à-vis other elements on the labels of products that they buy.

Marino (2005) reports that research done by Coles supermarkets (one of Australia's biggest retail majors) found that 83-90 % of Australians want to buy Australian produce. More than three quarters (77%) said that they would pay slightly more for Australian produce and 99% wanted to "know more" about where the food came from. However, a similar survey done early this year by the American Meat Institute (AMI), reported in its June 2005 fact sheet, showed results, which are at gross variance with findings of the Coles' research. AMI's investigation identified that 75% of the respondents did not want to see any more information that cluttered the label, and less than 0.7% of them named COO labelling as something they would like to see added to food labels. AMI reports that its findings are consistent with earlier research done by the International Food Information Council Foundation (IFIC), which communicates science-based information on health, nutrition and safety for the public good.

The American Meat Institute in its June 2005 fact sheet also cautions that featuring COO labelling could be tedious, especially if the package requires identifying the source of different ingredients that constitute the product. Variants of the products with combinations of other ingredients would only make the challenge of recognizing the country source of every component even more onerous. Moreover the clutter on the products' labels would vitiate the ability of the labels to provide clear information to customers.

The Parliamentary Secretary to the Australian Federal Minister for Health and Ageing, told the media on 11th August 2005 that in the case of packaged food, the government supported a clearly separate and obvious COO labels, in large and bold font, to ensure that there is no confusion with other information provided on the label. Product labels after all, according to Wright (1997), are designed so that they are the primary source of information to the consumer, particularly at the point of purchase. In an earlier study, Davies and Wright (1993) identified that the dependence that the consumer places on a product's label is product specific and contingent on how the information on the label fits in with the consumer's prior knowledge and attitudes of that particular brand. While enunciating a code of practice for label design, Humphries (1998) observed that, of all the information on the label, the product name is the principle means outlining to the consumer what the product exactly is. The label

information and expiry dates must also be easy to read and must position the customer to make efficient purchases. In a recent study Huq (2005) *et al.* found that *perishability* is an important piece of information to consumers as it refers to the physical deterioration of a product, implying either a fixed or random product lifetime, after which the product unit has no value to the consumer. A study by the Australian Government Department of Health and Ageing confirms that consumers are indeed seeking more extensive information from labels, (directions, product description and composition) to make informed and healthy choices.

Research Problem and Methodology

With the imminent introduction of COO labelling in Australia, the inventory of different label combinations would without doubt frog-leap adding significantly to the packaging overheads. Undoubtedly there is an associated cost to the effort of providing this additional information, which inevitably would have to be borne by the consumer. It appears that the jury is still out on the effect of COO being able to precipitate parochial sentiment in consumer choice. Overall extant research seems to point out that while consumers will use COO as a stimulus in purchase decisions, other cues that rouse cogent behavioural variables might take precedence over COO in making product choices at the point of purchase. As a corollary, it would be instructive to know what are the intrinsic and extrinsic product appeals that COO-prone shoppers may find compelling enough to compete with the pull of COO. Further, since literature is silent on what implicitly drives shoppers to consider COC, it would be useful to find out how attitudinal and purchase behavioural variables explain the shoppers' inclination to consider the COC evidenced on product labels.

This research investigates the attitudes and responses of shoppers to information on labels and packages during the purchase of their preferred items. In the absence of COC being specified on labels, country of manufacture was used as a surrogate for COC. Also, rather than seek from shoppers their *intentions* to observe COC while making their item choices, it was considered more appropriate to ask them to report on their *actual behaviour* i.e. whether they usually took note of the country of manufacture as evidenced in the address of the manufacturer on the labels/packages of grocery products.

The research methodology included the personal administration of a structured questionnaire among 473 randomly selected grocery shoppers across Melbourne, *exiting* one of Australia's biggest supermarkets, namely, Safeway. The survey was conducted over a two-week period in the second quarter of 2005. The respondents were specifically asked whether they usually observed the country of manufacture of grocery items that they purchased. Since the survey was conducted almost soon after the respondents had made their purchases, it is reasonable to expect them to recall the elements on the label that influenced their choice. The respondents were also asked to rank the importance that they ascribed to various aspects of information that they observed on the labels, like the name of the product, product composition, usage instruction, product description, use-by date and address of manufacturer. On an ordinal scale, the survey measured shoppers' behavioural variables considered important in the literature, like frequency of shopping, proneness to price specials, inclination to switch to alternate brands and extent of patronizing home brands.

Since the aim of this study is to find out how cogent attitudinal and purchase behavioural variables explain the shoppers' inclination to consider the country of

manufacture evidenced on product labels, we focus on the following binary response measure:

REGCOU: *Do you usually take note of the country of manufacturer?* (Yes / No)

We have modelled this dummy variable (REGCOU) with a binomial regression model also know as Binomial Logit model (see e.g. Franses, P.H. and Paap, R. 2001, Ch 4).

Model

Binomial regression models in general can be looked at from several angles. One possible approach is based on a continuous but unobservable, also called latent, variable Y^*, which is supposed to be linearly related to a set of explanatory variables, X_1, X_2, …, X_K. In symbols

$$y_i^* = \beta_0 + \beta_1 x_{1,i} + \beta_2 x_{2,i} + ... + \beta_K x_{K,i} + \varepsilon_i = \mathbf{X}_i\boldsymbol{\beta} + \varepsilon_i \qquad (1)$$

where $\mathbf{X}_i$ is an $n \times K$ matrix of n observations on the K explanatory variables, $\boldsymbol{\beta}$ is a $(K+1) \times 1$ vector of the coefficients, and ε_i is a stochastic error term.

In the present context, the latent variable can be some unobserved measure of the importance of use-by date ascribed by the respondent. It is mapped onto an observable binomial variable Y, like any of the two dependent variables, by the following rule:

$$y_i = \begin{cases} 1 \text{ if } y_i^* > 0 \\ 0 \text{ if } y_i^* \le 0 \end{cases} \qquad (2)$$

The combination of expressions (1) and (2) yields the following binomial regression model:

$$\begin{aligned} P\left(y_i = 1 \mid \mathbf{X}_i\right) &= P\left(y_i^* > 0 \mid \mathbf{X}_i\right) = P\left(\mathbf{X}_i\boldsymbol{\beta} + \varepsilon_i > 0 \mid \mathbf{X}_i\right) = F\left(\mathbf{X}_i\boldsymbol{\beta}\right) \\ P\left(y_i = 0 \mid \mathbf{X}_i\right) &= P\left(y_i^* \le 0 \mid \mathbf{X}_i\right) = 1 - F\left(\mathbf{X}_i\boldsymbol{\beta}\right) \end{aligned} \qquad (3)$$

where F denotes the cumulative probability distribution function of ε_i. As regards this error term, there are many possible choices, but the two most popular options are the standard normal and logistic random variables. In the latter case, F is the cumulative standard logistic distribution function,

$$F\left(\mathbf{X}_i\boldsymbol{\beta}\right) = \frac{e^{\mathbf{X}_i\boldsymbol{\beta}}}{1 + e^{\mathbf{X}_i\boldsymbol{\beta}}} \qquad (4)$$

and the resultant model is called a Binomial Logit model. It is a non-linear regression model whose unknown parameters can be estimated by the Maximum Likelihood method. Due to non-linearity, the coefficients cannot be interpreted in the usual way, namely, as the marginal effects of the explanatory variables on the dependent variable. However, the signs of the regression coefficients determine the directions of

these effects: a positive slope estimate means that the probability of 'success' ($Y = 1$), is an increasing function of the corresponding explanatory variable, while a negative slope estimate implies just the opposite.

Independent variables

The following three groups of independent variables were considered in the analysis:

1. *Characteristics of shopping behaviour* (measured on ordinal scales) viz, regularity of reading labels before purchase, store loyalty, shopping frequency, time spent in store, size of average shopping bill, frequency of response to promotional offers, proportion of store brands in shopping basket and satisfaction with shopping experience.

2. *Features on the label*:
    a. Dichotomous measure (Yes/No) of sighting of name of the product, address of manufacture, product composition, product description, directions of product usage, use-by date and promotion deals.
    b. Ranked importance (1: not important, … , 4: very important) ascribed to each of the above-mentioned features and also to other label features, namely, Country of manufacture, label's background colour, label's text font size, and label's language.

3. *Demographic* factors like gender and age.

Data Analysis and Findings

Binomial Logit analysis

A Binary Logit model was estimated for the dummy dependent variable, REGCOU. The analysis was conditional in the sense that only those respondents were considered who at least "sometimes" read the product labels. The analyses started with an 'unrestricted' specification and those independent variables which seemed to be less important and proved insignificant both individually and jointly, were subsequently dropped from the model. The final, 'restricted' specification is reported in Table 1.

McFadden R^2, which is a measure of the quality of the model, is 0.103. While this is not very large, the *LR* and *z* test statistics suggest that the remaining eight explanatory variables are significant, both jointly (practically at any level) and individually (at least at the 10% level).

As regards the signs of the coefficients, they imply that the estimated probability of *taking note of the country of manufacture* increases by the *age of the shopper* (AGE), by the *overall satisfaction of shopping experience in the store* (SATISF), by *taking note of the name of the product* (REGBRA), by *taking note of product composition* (REGCOM), *by taking note of the product's use-by date* (REGUBD) and by the *importance ascribed to the product's country of manufacture* (IMPCOU). On the other hand, the estimated probability of *taking note of the country of manufacture* decreases by the *amount of time that the shopper spends each time they visit the store* (TIME) and by *importance ascribed to the product's use-by date* (IMPUBD).

Table 1 Binary logit regression results for REGCOU

Dependent Variable: REGCOU
Method: ML - Binary Logit (Quadratic hill climbing)
Included observations: 363

Variable	*Coefficient*	*Std. Error*	*z-Statistic*	*Prob.*
C	-0.696	0.731	-0.952	0.341
TIME	-0.480	0.150	-3.193	0.001
AGE	0.222	0.095	2.331	0.020
SATISF	0.186	0.116	1.600	0.100
REGBRA	0.744	0.235	3.167	0.002
REGCOM	0.666	0.232	2.869	0.004
REGUBD	0.572	0.289	1.983	0.047
IMPCOU	0.399	0.130	3.077	0.002
IMPUBD	-0.451	0.127	-3.544	0.000
Log likelihood	-225.043	Avg. log likelihood		-0.620
Restr. log likelihood	-251.005	McFadden R-sq		0.103
LR statistic (8 df)	51.923	Probability (LR stat)		0.000

It is also clear from Table 1 that the *importance ascribed to the product's country of manufacture* (IMPCOU) is only one of eight important factors explaining purchasing behavior. The seven other regressors are strongly significant as a group, and a restricted binary Logit model without them has hardly any explanatory power.[i] Moreover, IMPCOU is not even the single most important determinant of whether shoppers *take note of the country of manufacturer* (REGCOU); judging by the beta coefficients, REGBRA and IMPUBD have a larger relative effect on it.[ii]

Odds ratios

Apart from the signs of the regression coefficients, it is also customary to interpret ordered regression models by considering the odds ratio (Franses, P.H. and Paap, R. 2001, Ch 4). The odds ratio can be calculated for any combination of independent variable values.

Table 2 shows the odds ratio of *taking note of the country of manufacture* (REGCOU), comparing the *importance ascribed to the product's country of manufacture* (IMPCOU) and the *age of the respondents* (AGE) and *taking note of the name of product* (REGBRA). All other variables in the model have been fixed at their sample medians. It is apparent that the odds ratio of taking note of the product's country of manufacture is the *largest* among those who scrutinize the name of the product and among elderly shoppers.

Table 2 Odds ratios for REGCOU

	IMPCOU			
	1: Not Important	*2*	*3*	*4: Very Important*
AGE				
Less than 20 yrs	0.381	0.568	0.846	1.261
21-29 yrs	0.476	0.709	1.057	1.575
30-39 yrs	0.594	0.886	1.320	1.967
40-49 yrs	0.742	1.106	1.648	2.456
50-59 yrs	0.927	1.381	2.058	3.067
60 yrs or over	1.158	1.725	2.571	3.831
REGBRA				
No	0.282	0.421	0.627	0.934
Yes	0.594	0.886	1.320	1.967

Discussion

Shoppers who are inclined to scrutinize the country of manufacture inevitably take note of the item's brand name. This finding gives substance to the speculation of Piron (2000) that brand names could conjure up the brand's national identity since for most consumers some well known brands and COO form automatic associations; for instance Lindt chocolate regardless of where it is produced is linked to Switzerland. In other words, as conjectured by Piron (2005), the importance of a product's COO may be but indirect or by proxy, through the inseparable association of the products brand name and it's COO. Notably, no Australian brand (by country of ownership) features in the Business Week report (2003) of global brands. These mega brands are "global" in nature by virtue of deriving a significant proportion of their sales outside their home countries. Because of the recognition and credibility that they have established, regardless of where they are produced, these global brands draw worldwide patronage including that of Australian shoppers. Brands that make an overt display of Australian origin may therefore not automatically get consumer's preference if they are not sufficiently well known. At a cognitive level however, COO-inclined shoppers do not perceive their product preference to be *directed* by the item's use-by date.

Groceries can generally be considered to be low involvement products as they do not as per Solomon (1996) involve complex tasks in the purchase decision-making process. As a result the shoppers for groceries do not have to rationalize the high risk of monetary outlay, product performance and hedonistic outcomes. According to Li and Wyer (1994), as the purchase decisions for low involvement products become less elaborate, the importance of COO becomes less pronounced. On the other hand Solomon (1996) believes that the nature of products consumed publicly by consumers (like convertible sport cars), designate their rankings in society. Sirgy *et al.* (1991) postulates that consumers would like to be seen in public with COO rated products that are congruent with an image that they would like to project of themselves. The corollary to this is that products that are consumed privately (like groceries) expose their consumers to less social risk than those products that are consumed publicly. Consumers of grocery products should by this criterion be less concerned by COO. In this study we see that the estimated probability of taking note of the country of

manufacture decreases with the decrease in importance ascribed to the product's country of manufacture.

Younger shoppers as evidenced in this study, appear to be less interested in observing the country of manufacture. This finding is not unexpected, as social commentators have widely accepted that younger people are more willing to shed local inhibitions in adopting social changes in a dynamic world order. We also note that COO-prone consumers are likely to examine the product composition. It is reasonable to expect that shoppers of this profile would be sceptical of the ingredients that go into the product's formulation especially if the item is made in another country. Further, since a number of groceries are food items and if made abroad, the expiry dates of the products are also likely to be a concern to the COO-inclined shopper. Contrary to expectation, these shoppers are not disposed to spend a lot of time in the store. COO-prone shoppers appear however to regard the character of their store visit as a significant dimension of shopping experience.

Implications

The results of this study demonstrate COO labelling itself may not be persuasive enough to convince consumers to adopt a particular product. It appears that even COO-prone shoppers will invariably take notice of the brand name and it is reasonable to expect that they will find it hard to pull themselves away from the more recognizable brands. We have seen in the background literature that consumers may be influenced by the "halo" effect of these brands. According to (Plummer, 1985), it is possible however through sustained canvassing of the product's advantages to build the brand profile and convert the aspect of "origin" into a point of competitive difference. Undoubtedly the attempt here will be to cultivate a national stereotype response to locally made products, rather than allow customers to address intrinsic product specific attributes. Perhaps stores promoting county-of origin labelling might like to consider developing their own store brands that can gain credibility through the store's signature. In Australia, the penetration of private labels, as identified by Kerslake (2001), has stubbornly remained at around 12% for the past 20 years- 3% less than the global average and considerably less than, for instance, Britain's 31 % private label proportion. Miranda *et al.* believe that private label programs in Australia could succeed if Australian retail firms were able to position their store brands on some *quality* dimension. COO labelling might be a useful plank to position the store's private labels.

The product label/package is the primary instrument for conveying to the consumer what the item can deliver. Literature makes it clear that the label/package of the product has the onus of reassuring consumers by letting them see in the product's presentation a theme that is consistent with their prior knowledge and attitude about the brand. While the Australian government appears to be committed to specifying that the COO label be in "large font and bolding", in order to have its desired effect of achieving parochial support, the composition and expiry date on the package must also be explicit. Through judicious inventory management, stores need to provide COO labelled stock with ample consumption time till the products' expiry dates. Also because shoppers of this ilk spend little time in the store, it is fair to assume that they are not inclined to browsing. It is therefore important for stores promoting COO labelling to keep their layouts and location of the products consistent, and identified by user-friendly signage. As noted by Moschis (1991), highly visible

directions, well-lit stores and well laid out aisles would particularly appeal to elderly shoppers (who appear to be more inclined to COO) and augment their shopping experience.

COO labelling however does not make sense because it is burdensome to retailers and food companies. In a global environment most quality products would draw their constituent ingredients or parts from different pockets of the world. Identifying the source of every single such element on different food combinations would be a nightmare for the label composer. The ensuing clutter on the label would eventually defeat the purpose of the packaging being the primary communicator of product information. According to Vanderpool (2005), the General Accounting Office estimates that the COO labelling program in the US would cost as much as 56 million US dollars annually and would be difficult to monitor. While such figures are not available in Australia, it is reasonable to believe that additional labelling requirements would raise retail expenses and incur compliance supervision costs. Grocery shoppers would invariably have to contend with the inevitable higher prices [iii].

Future Research

There is a great danger in cultivating among a multicultural society, a sentiment that suggests that what is home-grown is best and what is imported might corrupt. Future research could address whether and how COO on labels is influencing/has influenced (perhaps without being consciously perceived) consumers on the adoption of life style expression of other cultures. A wider consideration of the way consumption patterns, as a result of COO labelling, would morph on community linkages, will give an added dimension to Australia's strategic approach of integrating its pluralistic society and its role in the global economy. Hudson (2005) reports that the Federal Agricultural Minister, Peter McGauran who has championed COO labelling, said that it would enable consumers to make more informed choices. McGauran hoped that shoppers would be persuaded that "Australian produce is better because it is fresher, has more flavour and is home-grown". The minister's stance is a classic case of an attempt by local message makers, who according to Huey and Anderson (2003) use the media to perform and represent ideological sympathy explicitly to oppose globalised agriculture, creating protest and opposition without attempting to explain the local/global continuity. This subliminal jingoism displayed at the shop face is inevitably transferred to other aspects of consumption, like music, literature, dress etc., arising in reluctance to adopt "foreign" cultures and to that extent the process of social participation and integration of ethnic minorities is hampered (Bertone and Esposto, 2000).

Future research can also examine the implications of adoption of compulsory COO labelling on Australia's posturing of moral superiority in international trade forums. It must be remembered that Australian governments over the past two decades have advocated open markets and have contributed in some measure to reducing trade barriers around the world. As we have seen in the background literature, the implementation of COO labelling is perceived in some quarters as veiled protectionism, resisting the forces of free trade. The benefit protectionism can offer is short lived - the loser is always the consumer, and in the long run, the producers themselves. The high costs that the trade and retailers pay for complying with the COO regimes are passed on to the consumer predicating the slow and painful

demise of local producers. Perverting the course of global *core competencies* in favour of stroking short term national sentiments can only be done at a peril.

Conclusion

Many advocates of COO labelling ignore the complexity and the cost of such labelling. This study has identified that COO labelling needs to be supported by other cues which COO inclined shoppers consider more strongly than 'origin' if products are required to appeal to the parochial instincts of local shoppers. Moreover shoppers who are disposed to examine the country of manufacture are inclined to take note of the item's brand name. Even if a product is identified as "Australian made", unless it is a brand that consumers can recognize and are comfortable with its dimension of quality, there is no guarantee that they will buy the product. To what extent the inevitable higher prices arising out of label recomposition and country-of-origin compliance would dampen demand, is a moot point.

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[i] The McFadden R^2 of the binary logit model of REGCOU on a constant and IMPCOU is only 0.015.

[ii] The beta coefficients are -0.769 (TIME), 0.553 (AGE), 0.376 (SATISF), 0.751 (REGBRA), 0.663 (REGCOM), 0.464 (REGUBD), 0.748 (IMPCOU) and -0.884 (IMPUBD), respectively.

[iii] Wall *et al* (1991) noted that for luxury items, COO appeared to have a stronger effect than price in the assessment of product quality.