

Consumer Affairs Victoria

Consumer detriment in Victoria: a survey of its nature, costs and implications

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“ Preface ”

Consumer detriment causes significant financial and emotional costs for consumers. Many different types of problems occur across a wide variety of markets for goods and services, and consumers are often dissatisfied with how problems arise and how complaints are managed by businesses.

More often than not, dissatisfied consumers will tell their friends and acquaintances about their problems, and dissatisfaction will affect future business transactions, particularly if consumers are treated in a manner they regard as unfair.

As well as the more traditional types of problems in markets – faults that can be observed – other types of detriment are emerging that may not be so obvious, but which Consumer Affairs Victoria (CAV) is beginning to explore. These include claims about attributes such as ‘environmentally friendly’ that are difficult for consumers to assess and marketing techniques designed to raise levels of impulse spending.

This research paper aims to present a more detailed picture of consumer detriment in Australia and suggest future research directions. It is one in a series designed to stimulate debate on consumer policy issues. It does not represent government policy and is intended as a basis for discussion only. It is informed by a report by Ipsos consultants (2006) commissioned by Consumer Affairs Victoria.

Consumer Affairs Victoria would welcome your comments on the paper. These may be directed to:

Jane Harris
Consumer Affairs Victoria
Level 24, 121 Exhibition Street
Melbourne
VIC 3000
Tel: (03) 8684 6472
Email: jane.harris@justice.vic.gov.au



Dr David Cousins
Director
Consumer Affairs Victoria

“ Consumer detriment in Victoria: a survey of its nature, costs and implications ”

Consumer detriment refers to the range of impacts on people that occur when goods and services do not meet their expectations. Reducing consumer detriment is one of the main objectives of consumer affairs organisations.

Consumer affairs organisations have traditionally made extensive use of complaints data to trigger investigations and to allocate resources to policy analysis of problem markets. The implied assumption, often, is that complaints are representative of consumer detriment. While this may have been a valid assumption in the past, many things have changed since consumer protection frameworks were set up in Australia in the 1960s and 70s. The number and variety of goods and services from which consumers are expected to choose has increased dramatically while time pressures appear to have also increased. Although information might often be easier to access with modern technology, the types of information consumers require to make confident purchases has grown more complex. Thirty years ago an apple might have been judged by its colour, firmness and taste but now people might also want to know where it was produced, whether chemicals were used to produce it and many other attributes that are difficult to verify. Selling methods and the nature of retailing have changed dramatically, and modern marketing is increasingly sophisticated in appealing to people's aspirations and behavioural tendencies.

Professor Alan Fels, (Dean, Australia and New Zealand School of Government and former Chairman of the Australian Competition and Consumer Commission), in closing the National Consumer Congress organised by Consumer Affairs Victoria (CAV) on March 17 2006, stated that:

“Australia needs a world class consumer policy to make markets work more effectively and better in serving the needs of the population – and in looking after vulnerable and disadvantaged consumers. To advance towards this goal, Australia needs to make it a priority – a much higher priority than now. To make this happen is a challenge for all of us. We can take some inspiration from the UK example of deciding to make such a goal a high priority.”

The first component of world class consumer policy, he said, would be an evidence base of consumer problems, because at least some consumer protection regulation is based more on assumptions than rigorous research and analysis of consumer experience.

Consumer Affairs Victoria has researched and commissioned a survey of the types of problems consumers encounter in Victoria when buying goods and services, and how much this consumer detriment is costing individuals and the economy. Information of such detail has not been gathered in Australia in this form before, but in a similar study in 2000 by the United Kingdom Office of Fair Trading, 68% of participants reported instances of detriment in the previous 12 months, costing £8.3 billion per annum. This corresponded to 1.1% of GDP or roughly £180 per annum for every adult in the UK (UKOFT 2000). It was recognised that the numbers did not include emotional costs or “unrevealed detriment” – where consumers are unaware they have incurred losses.

Consumer Affairs Victoria's survey is comparable with the UK survey, but is broader in some areas because it includes questions about:

- emotional costs associated with problems in markets
- how consumers behave after they encounter problems (who they complain to; whether they discuss experiences with friends and acquaintances; and whether these experiences affect subsequent dealings with businesses)
- “unrevealed detriment”¹ associated with credence attributes (like environmentally friendly and organic) and people's confidence in claims made about these products
- impulse spending and the extent to which it is regretted.

The following definition was used as the basis for developing the survey:

“Consumer detriment (to the individual consumer and/or society as a whole) can constitute:

- *satisfaction (utility) less than was reasonably expected when a purchase was made, whether revealed or not, and*
- *dissatisfaction due to the inability to make desired purchases, because of missing markets, non-credible claims and/ or physical disadvantage.”*

Following extensive cognitive and pilot testing to finalise the telephone survey, data collection was conducted between March 21 and March 28 2006. The survey resulted in a completed sample of 1001 randomly selected consumers aged 16 years or more, 601 recruited from the Melbourne metropolitan area and 400 recruited from regional Victoria.

CAV intends to use the survey data to assist in ongoing analysis of policy interventions appropriate for different types of markets and in adjusting resources to focus attention where appropriate.

¹ The UK survey report (UKOFT 2000) recognised that their results did not include “unrevealed detriment” where the consumer is unaware that they have experienced losses, and to the extent that this is so, their results could underestimate the magnitude of consumer detriment.

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“Profiling the nature and costs of consumer detriment”

1

The consumer detriment survey was based on problems people had experienced in the previous 12 months (to March 2006), whether they were reported or not. Consumers were asked a number of questions about these problems, including:

- the category of goods and services
- the nature of the problem
- how many times problems happened
- the ‘out-of-pocket’ costs incurred.

To keep the telephone interview to a manageable time, consumers who reported they had experienced more than two problems were asked if these extra problems could be probed in a second interview at a later date. Two hundred of these additional interviews were conducted. Further details about the methodology, including the questionnaire, are available in a report by Ipsos consultants (2006) available on CAV’s website at www.consumer.vic.gov.au.

To estimate costs associated with each reported incidence of detriment, respondents were asked about costs associated with three categories:

- repairing and replacing items
- following problems up and resolving them (eg telephone and travel costs)
- their personal time expended in resolving problems.

The survey data was weighted based on aggregated population statistics for metropolitan and rural/regional areas in Victoria. Data was also weighted by gender and employment status (employed/unemployed – where the latter includes people voluntarily taking a leave of absence from the formal workforce to raise children etc). All weightings were based on Australian Bureau of Statistics data and classifications for regional and metropolitan areas.

The key findings about consumer detriment for the Victorian population, as extrapolated from the representative surveyed sample, are that:

- The total cost of consumer detriment in Victoria in the 12 months to March 2006 is estimated at \$3.15 billion, corresponding to approximately 1.5 per cent of gross state product (see table 1). This is similar in magnitude to results from the study in the United Kingdom (UKOFT 2000) where consumer detriment was estimated to cost £8.3 billion per annum, representing 1.1% of gross domestic product.
- This \$3.15 billion in annual consumer detriment is distributed roughly equally (about \$1 billion each) between three main cost categories:
 - repairing and replacing faults encountered in goods and services
 - following up and resolving problems (mainly out-of-pocket costs associated with travel, postage, telephone calls etc)
 - personal time (that could have been used more productively elsewhere).
- The United Kingdom survey (UKOFT 2000) also found these three costs categories to be about equally important in contributing to consumer detriment. However, CAV’s survey uncovered wide variation between the costs that are most important in some markets compared with others. For example, following up and resolving problems accounted for greater proportions of costs for building and renovations (about 50%) and recreation and leisure (about 60%). By contrast, in the transport sector, by far the most important cost was repairs and replacement (about 70% of detriment costs).

- Five categories of products and services accounted for 72% of consumer detriment costs (table 1) and in descending order of contribution these were:
 - building and renovations
 - services (power, water, gas, phone)
 - transport
 - banking/finance
 - electronics and electrical goods.
- It is estimated that there were nearly 8 million different incidents of consumer detriment in Victoria in the 12 months ending March 2006 (see table 2), with 63% of Victorians aged 16 or over reporting at least one incident. This is comparable with the 68% reported in the 2000 study by the United Kingdom Office of Fair Trading.
- In terms of numbers of incidents (table 2), the categories where consumers experienced the highest numbers of problems, in descending order of importance, were:
 - food and drink (16% of all incidents)
 - services (power, water, gas, phone)
 - electronics and electrical goods
 - clothing, footwear, cosmetics and personal products
 - transport.
- Food and drink was the category for which the most repeat detriment experiences were recorded, with 50% of individuals who reported detriment in this category having had two or more incidents, followed closely by clothing and footwear, with 46%. Scams and get rich quick schemes was the category with one of the highest percentages of single reported incidents (83%) but the fact that some people report two or more incidents even in this category is still concerning.
- The average unit cost to a consumer who encounters a problem with a good or service is estimated at \$406 but obviously this average conceals great variation between categories of goods and services (table 2). The range is an average of \$38 per incident for food and drink, up to \$1600 for buildings and renovations. Other categories with relatively high average unit costs were buying, selling or letting a home, recreation and leisure, transport, and banking/finance.
- Women report just over half (53%) of incidents of detriment and account for greater proportions in building, renovations and repairs (16% of total detriment versus 7% for men). Men report relatively more incidents in the categories of transport, food and drink, and electronics.

The degree to which the results are comparable with those in the United Kingdom's 2000 study is interesting from a number of perspectives. First, it gives us further confidence that the magnitude of detriment costs that consumers report can be relied upon as representative of what is happening in Victoria. Second, it shows that consumer affairs departments within governments oversee areas worth a great deal to an economy. Consumer affairs policies, including regulations, and providing information to producers and consumers, can potentially lead to significant improvements in the competitiveness of an economy. This is because (among other reasons) resources consumers and producers expend in dealing with detriment can be used more productively elsewhere.

To explore the *nature* of problems causing detriment to consumers in each of the categories of goods and services, an open-ended question was asked so that respondents could explain the problem in their own words. Ipsos then coded the responses into the following categories:

- Defective or substandard goods or services.
- Non-delivery of goods and delay or non-completion of services.
- Product or service was unsafe or a health hazard/not able to be consumed.
- Selling techniques.
- Difficulty in getting faults put right or problems fixed. Also includes inadequate offers by the seller after being told about the problem.
- Misunderstood contract terms or conditions OR unfair terms and conditions in contracts or one-sided contracts that allow the provider of the goods or services to opt out or change the price, quality etc.
- Weights and measures; for example, a chicken weighing less than what was marked on the bag or a load of firewood that was less than the agreed weight or volume.
- Final charge exceeded quoted price/increased costs/price too high/overcharging.
- Other problem or complaint.

Table 3 shows the categories of goods and services, the type of problems encountered and the percentages of problems falling into each type, where these were 20% or greater.

Table 1. Total cost of consumer detriment by category, extrapolated to the Victorian population from a representative survey sample

| Category of goods or services | Total detriment cost | | Type of cost | | |
|--|----------------------|----------------------------|---------------------------------|----------------------------------|-----------------|
| | \$ millions | % of total detriment costs | Repairs/ replacement costs \$ m | Follow-up/ resolution costs \$ m | Time costs \$ m |
| Building and renovations, repairs and maintenance of your home | 706.4 | 22.4 | 175.5 | 345.4 | 185.6 |
| Services: power, water, gas, phone | 562.6 | 17.9 | 221.4 | 164.4 | 176.8 |
| Transport including repairs, purchase or hire of motor vehicles, public transport and fuel | 417.5 | 13.3 | 303.9 | 36.4 | 77.2 |
| Banking, finance, credit, debt, savings and insurance | 308.7 | 9.8 | 42.2 | 123.4 | 143.2 |
| Electronics/electrical goods | 270.0 | 8.6 | 97.7 | 15.6 | 156.6 |
| Tenancy and accommodation | 192.4 | 6.1 | 84.1 | 54.9 | 53.4 |
| Buying, selling or letting a home | 147.9 | 4.7 | 50.9 | 46.3 | 50.6 |
| Scams and get rich quick schemes | 129.9 | 4.1 | 0.0 | 104.2 | 25.7 |
| Recreation and leisure, including holiday travel | 116.1 | 3.7 | 35.6 | 66.8 | 13.7 |
| Other household goods/furnishings/fittings | 79.8 | 2.5 | 43.0 | 3.2 | 33.5 |
| Other professional or personal services | 73.1 | 2.3 | 30.4 | 14.7 | 28.0 |
| Food and drink | 46.5 | 1.5 | 5.3 | 3.6 | 37.6 |
| Clothing, footwear cosmetics and other personal products | 44.4 | 1.4 | 14.3 | 7.1 | 23.0 |
| Local council | 1.6 | 0.1 | 0.0 | 0.2 | 1.4 |
| Telemarketers/unsolicited phone calls | 0.6 | 0.0 | 0.0 | 0.2 | 0.4 |
| Other | 53.6 | 1.7 | 2.7 | 18.8 | 32.1 |
| TOTAL | 3,150.9 | 100.0 | 1,107.2 | 1,005.1 | 1,038.6 |

Table 2 - Incidence of consumer detriment and unit costs by category, extrapolated to the Victorian population from a representative survey sample

| Category of goods or services | Number of incidents (rounded to nearest thousand ('000)) | Proportion of incidents of all detriment % | Average unit cost \$ |
|--|--|---|----------------------------------|
| Food and drink | 1,217 | 15.7 | 38 |
| Services: power, water, gas, phone | 1,172 | 15.1 | 480 |
| Electronics/electrical goods | 1,144 | 14.7 | 236 |
| Clothing, footwear, cosmetics and other personal products | 786 | 10.1 | 56 |
| Transport including repairs, purchase or hire of motor vehicles, public transport and fuel | 771 | 9.9 | 541 |
| Banking, finance, credit, debt, savings and insurance | 616 | 7.9 | 502 |
| Building and renovations, repairs and maintenance of your home | 441 | 5.7 | 1,604 |
| Scams and 'get rich quick' schemes | 374 | 4.8 | 348 |
| Other household goods/furnishings/fittings | 311 | 4.0 | 256 |
| Other professional or personal services | 241 | 3.1 | 303 |
| Recreation and leisure, including holiday travel | 213 | 2.7 | 545 |
| Tenancy and accommodation | 197 | 2.5 | 978 |
| Buying, selling or letting a home | 116 | 1.5 | 1,279 |
| Telemarketers/unsolicited phone calls | 58 | 0.7 | 10 |
| Local council | 34 | 0.4 | 47 |
| Other | 75 | 1.0 | 715 |
| TOTAL | 7,763 | 100.0 | 406 (weighted average) |

Table 3 – The nature of problems consumers encounter

| Category of goods or services | Nature of problem and percentage of problems in this category due to this |
|--|--|
| Food and drink | Unsafe/health hazard (59%) |
| Services: power, water, gas, phone | Defective/substandard (38%) Difficulty getting faults put right (23%) |
| Electronics/electrical goods | Defective/substandard (78%) Difficulty getting faults put right (25%) |
| Clothing, footwear, cosmetics and other personal products | Defective/substandard (79%) |
| Transport including repairs, purchase or hire of motor vehicles, public transport and fuel | Defective/substandard (56%) |
| Banking, finance, credit, debt, savings and insurance | Difficulty getting faults put right (29%) Final charge exceeded quote (26%) |
| Building and renovations, repairs and maintenance of your home | Difficulty getting faults put right (35%) Defective/substandard (31%) Non-delivery/delay (29%) |
| Scams and ‘get rich quick’ schemes | Selling techniques (96%) |
| Other household goods/furnishings/fittings | Defective/substandard (66%) Difficulty getting faults put right (30%) |
| Other professional or personal services | Non-delivery/delay (25%) Defective/substandard (23%) |
| Recreation and leisure, including holiday travel | Defective/substandard (48 %) |
| Tenancy and accommodation | Difficulty getting faults put right (32%) Non-delivery/delay (21%) |
| Buying, selling or letting a home | Difficulty getting faults put right (42%) |
| Telemarketers/unsolicited phone calls | Selling techniques (84%) |
| Local council | Difficulty getting faults put right (38%) Non-delivery/delay (21%) Other (21%) |

The types of problems encountered vary widely between different types of markets. In some, the product itself is most commonly regarded as the problem. Defective or substandard products accounted for nearly 80% of problems with electronics and electrical goods and nearly 80% of problems with clothing, footwear, cosmetics and other personal products. For food and drink, almost 60% of problems are due to products perceived as being unsafe or a health hazard. However, in other markets,

dissatisfaction is caused more by difficulties in getting faults put right than by the fact that faults arose in the first place. This is true for banking/finance, building and renovation, tenancy and accommodation, buying, selling or letting a home, and local council issues. Selling techniques accounted for 96% of problems associated with scams and get rich quick schemes.

“ *Emotional costs* ”

2

Problems in markets can have emotional impacts on consumers, because they can cause annoyance, frustration, stress and disappointment, as recognised by the United Kingdom Office of Fair Trading (2000). Respondents in CAV's survey were asked, for each problem they had reported, to grade the emotional costs on a scale (very low, low, neutral, high, very high).

Emotional costs, such as annoyance, frustration, stress and disappointment were rated high or very high by 50% or more of consumers experiencing detriment in the majority of categories of goods and services, with such costs appearing to rise with the value of the goods and services. Seventy per cent of those experiencing detriment with building and renovations rated the emotional costs as high or very high, as did 69% of people experiencing detriment associated with buying, selling or letting a home. The percentage with high or very high emotional costs was also 50% or more for tenancy and accommodation problems, recreation and leisure, other professional or personal services, other household goods, furnishings/fittings, banking/finance; transport and utility services. By contrast, 25% of those experiencing detriment associated with food and drink ranked emotional costs as high or very high, as did 22% for clothing, footwear, cosmetics and other personal products.

These results support the views of the United Kingdom OFT (2000) that emotional costs contribute to detriment and could be very important, even though they are difficult to include in empirical estimations of the costs of detriment. Clearly this area requires continued research.

As part of its continued exploration of detriment, the United Kingdom OFT published a report titled *The psychology of consumer detriment* (Lunt 2006). This reviewed a wide range of literature about problematic psychological effects of consumption when something goes wrong. It concludes that psychological detriment has many potential dimensions and is exceedingly complex and variable between individuals because it can occur during decision-making, during interactions with sellers and/or after purchase (eg regret). Also, it can be long or short term in nature and can be related to specific shopping instances or to a person's worldview and basic values.

According to this report, those traditionally perceived as vulnerable consumers (less financial resources, less intelligent, elderly) have characteristics that make them susceptible to incurring emotional costs. These characteristics include short time horizons, lack of cynicism, pessimism, lack of confidence, higher preferences for stability, and avoidant approaches to stress and challenge. However, susceptibility to psychological detriment can have a great many other causes not confined to the characteristics traditionally associated with vulnerable consumers, including mood, temperament, loss aversion, susceptibility to advertising and social isolation.

Previous work by Consumer Affairs Victoria (2004) stressed the importance of careful analysis of what constitutes vulnerability and disadvantage in the context of susceptibility to detriment. It was argued that consumers with normal capacities and in ordinary personal circumstances may be susceptible to detriment, due to characteristics of a particular market, product or transaction. These often involve information-related problems, contractual complexity or sometimes adverse temporary circumstances (such as acute illness, retrenchment or bereavement) which affect how a consumer is positioned in transactions relative to sellers. Not all vulnerable consumers are disadvantaged consumers. Consumer disadvantage is a persisting susceptibility to detriment in consumption. A disadvantaged consumer, therefore, is a person in persistent circumstances and/or with ongoing attributes that cause a continuing susceptibility to detriment in consumption. Asher (2006) described this work by CAV in defining vulnerability as “rather groundbreaking” and of assistance in developing policies at his organisation, *Energywatch*, in the United Kingdom to meet the needs of a broader range of vulnerable consumers.

CAV's survey results, indicating emotional costs are significant to a large percentage of consumers, support the theories that being vulnerable to detriment, and the feelings of annoyance, frustration, stress and disappointment it can cause, is not narrowly confined in the community.

“What do people do when they encounter a problem?”

The actions people choose to take when they experience detriment are instructive for government agencies like Consumer Affairs Victoria. The key question is whether data on complaints received by consumer affairs organisations are representative of the overall nature and breadth of detriment in the community. Such information may also be relevant for businesses wishing to evaluate their own customer service policies, and how they respond to complaints from consumers.

The survey found that complaining to the seller or provider of the goods or services is by far the most common behaviour after experiencing detriment, with 53% of people taking this course of action. Twenty-one per cent complain to head office and 9% to the manufacturer. Approximately 4% of revealed consumer detriment is reported to Consumer Affairs Victoria and smaller percentages are reported to other nominated parties, including police or an ombudsman. Twenty-six per cent of people do not make any complaint upon experiencing detriment.

These statistics are, again, very similar to those obtained in the study by the United Kingdom Office of Fair Trading (UKOFT 2000). In this study, consumers were found to have taken some form of action in around 80% of cases, the great majority without advice or help from organisations such as the Office of Fair Trading. Therefore, they concluded that the number of complaints reported to such organisations clearly represented just the “tip of the iceberg”.

CAV's survey also requested information on how satisfied people were with outcomes. It was found that among consumers who had experienced detriment, well over half were very or quite dissatisfied with how the problem arose or how it was resolved. The percentage of dissatisfied consumers was more than 70% for 11 of the categories of goods and services and was highest for telemarketers/unsolicited phone calls, where 100% were dissatisfied, followed by local council (91%), tenancy and accommodation (83%), and other professional or personal services (82%).

The most common action taken as a result of this dissatisfaction was to *tell people you know not to do business with them* (61%) followed by (and often combined with) *do less business with them yourself* (43%) or *stop doing business with them altogether* (56%). Thirty-seven per cent said that they would *do nothing, just accept what has happened*. Six per cent of those surveyed were involved in or contemplating formal action against traders.

These results may be of interest to businesses that value their reputation and wish to encourage repeat custom and favourable word-of-mouth behaviour. Bad experiences can have strong emotional impacts on consumers and very often these are discussed with friends and acquaintances. They affect future decisions about where people shop.

Further questions were asked in the survey about consumers' general attitudes to fair treatment by businesses and how this affects their subsequent purchasing behaviour – these questions are discussed in section 4.

“ Detriment that may not be so obvious ”

4

Revealed detriment has been the focus of the report so far – problems that consumers become aware of and for which the costs can be measured. This section reports on the parts of the survey that dealt with what we call “unrevealed detriment”. This is where the consumer may not necessarily become aware that a problem exists, or where the detriment may not be as obvious as, say, a faulty pair of shoes.

Questions were asked to elicit information on the importance of unrevealed detriment from two sources:

- a) credence qualities - for which consumers may be willing to pay a price premium but whose presence is costly or impossible for consumers to verify before or after purchase
- b) behavioural tendencies related to impulse spending and unfair treatment.

4.1 Credence attributes in goods and services

Consumers are increasingly interested in a wide variety of credence attributes when they make purchasing decisions. The term *credence* reflects the fact that the *credibility* of claims made about goods and services with these attributes is important in determining how efficiently markets will operate (Nelson 1970, Darby and Karni 1973). Credence attributes can be categorised as (Codron, Sterns and Reardon 2000, Cole and Harris 2005):

- sanitary (eg the absence of chemical or pesticide residues, or harmful pathogens)
- health (eg nutrient and fat content)
- environmental (eg production techniques that are green, sustainable, or eco-friendly)
- geographic affinity (eg a preference for locally grown produce)
- religious (eg kosher foods)
- social affinity (eg respect for labour standards, preservation of small producers, local employment, rural lifestyle, or fair trade considerations)
- animal welfare considerations.

Credence attributes pose very different challenges for policy makers than search or experience attributes (box 1) because of information imbalances (often called information asymmetries) – sellers know more than buyers about attributes that will probably not be discovered even after purchase or use (Caswell and Mojdukša 1996, Cason and Gangadharan 1999, Karl and Orwat 2000, Cole and Harris 2005). This means there is a higher likelihood of any cheating being undiscovered, so complaints will not be made and/or consumers may not make purchases due to lack of confidence. This type of detriment can cause welfare losses so that the economy underperforms (see appendix 1).

Box 1. Classification of product characteristics

- **Search:** characteristics can be checked by looking at, feeling, smelling or otherwise searching the product before purchase. For an orange, this might be size and colour.
- **Experience:** characteristics can be checked after the good is consumed or experienced. For an orange, this could be the taste.
- **Credence:** claims about characteristics can't reasonably be checked by consumers at all, even after the item has been used or consumed. For example, it is difficult (costly) to detect whether an orange has low pesticide residues, before or after purchase (Cole and Harris 2003).

Note that the line between experience and credence qualities of a good may not always be sharp, particularly if the quality will be discerned in use, but only after a lapse of a considerable period of time (Darby and Karni 1973).

The key difference between these categories is the amount of information consumers have, or can cheaply acquire, compared with sellers. For credence attributes, the transactions costs of evaluating and validating the characteristics of the products are prohibitive in relation to the marginal benefits (eg environmentally superior products) for each individual or household (Karl and Orwat, 2000). For example, orange growers know whether they have used pesticides, but consumers do not, and cannot discover this even after purchase without incurring prohibitively high costs.

The *Trade Practices Act 1974* (Commonwealth) and sections 9-12 of the *Fair Trading Act 1999* (Victoria) prohibit conduct that is misleading or deceptive, or is liable to mislead or deceive the public about attributes contained in goods and services. However, consumers do not always assume all deceptive producers will be caught. They generally require extra signals from producers that their claims can be believed and that they will get the quality they have paid for. When goods and services have credence attributes that are difficult or impossible to verify even after purchase, effective signalling and separating equilibriums (see appendix 2) may not always exist and some markets may under perform or not even exist at all (Akerlof 1970). This is detrimental for consumers willing to pay more for credence attributes, producers willing to produce them and the economy in general.

In markets for goods and services with credence attributes, Cole and Harris (2004) suggest relying on complaints to trigger investigations could result in weaker enforcement of claims than in other markets. The traditional approach may need to be supplemented by more proactive market monitoring and other government actions. Researching the magnitude of any potential problems in this area is the first step towards implementing new policy approaches for credence attributes, but only a limited amount of work has been undertaken in this area to date (see appendix 3).

In the current survey we asked questions about consumer purchases of a few of the most common products with credence attributes. These were non-cage laid eggs (eg free-range or barn laid), organic or biodynamic products, and environmentally friendly cleaning products (table 4). We also asked about general levels of confidence in the truthfulness and honesty of claims about these types of products and the reasons consumers may choose not to purchase them.

Table 4. Proportion of population purchasing credence attributes

| Credence attribute | Percentage of population purchasing in previous 12 months (%) |
|--|---|
| Free range/barn laid (non-cage laid) eggs | 59 |
| Organic or biodynamic products | 45 |
| Environmentally friendly cleaning products | 75 |
| None/Don't know | 16 |

All respondents were asked about their general level of confidence in the truth and honesty of claims made for these types of products:

- 4% said very low
- 16% said low
- 52% said neutral
- 25% said high
- 3% said very high.

These results are telling us that significant numbers of Victorian consumers appear willing to purchase goods with credence attributes, despite many feeling neutral at best about whether claims on products can be believed. This could reflect a ‘no news is good news’ attitude amongst the majority of consumers. Such an attitude would be consistent with suggestions in previous research (see appendix 3) that it tends to be scares or scandals that put people off, rather than any general feelings of unease about the possibility of being cheated, or any actual experiences of being cheated (which would be unlikely anyway because of the undetectable nature of credence characteristics). In Australia to date, there have not been many scares and scandals about credence attributes, as there have been in the European Union and USA for example. However, if any do occur, experience predicts that the impacts on consumer confidence and purchasing behaviour would be widespread.

The reasons people gave in the survey for not purchasing goods with credence attributes were difficult to interpret. *Lack of confidence in claims* was among the most important but was only explicitly given by less than 10% of people for each category of goods. *Price too high* and/or *Don't care about or dislike this attribute* were also relatively important. However, the highest percentage of responses was recorded in the *Other* category, meaning people gave a wide variety of reasons for not making purchases that were difficult to predict and difficult for interviewers to code. This probably indicates that people make purchasing decisions about credence attributes for complex reasons that were not able to be captured in the current survey. Further, more in-depth case studies would be required to obtain a better picture of what drives consumer behaviour in these markets.

4.2 Fair treatment and impulse spending

Agencies responsible for consumer policy are interested in the insights behavioural economics may offer about how governments should intervene in markets (Sylvan 2006). It is a routine observation made for centuries, including by Adam Smith himself, that instead of “robot-like logic” man displays “all manner of irrational, self-sabotaging, and even altruistic behaviour” (Lambert 2006). However, until quite recently it was generally believed it was enough that people behave more or less “as if” they are rational. And people’s mistakes may cancel themselves out: for every one who saves too little, someone else may save too much (The Economist, 2003). The awarding of Nobel Prizes² for research showing behavioural idiosyncrasies, along with prestigious research centres becoming involved (such as the Russell Sage Foundation in New York), has raised the profile of this area.

² Daniel Kahneman was awarded the Nobel Prize in 2002 “for having integrated insights from psychological research into economic science, especially concerning human judgement and decision-making under uncertainty... thereby laying the foundation for a new field of research... His work has inspired a new generation of researchers in economics and finance to enrich economic theory using insights from cognitive psychology into intrinsic human motivation” (<http://nobelprize.org>). His research is about how people make decisions under conditions of uncertainty.

The various threads of the behavioural economics literature are outlined in appendix 4. Although many are potentially relevant to CAV, empirical analysis is time-consuming and complex. The current survey could only begin the process by investigating two threads that were judged important.

a) a strong interest in ‘fairness for fairness sake’

People are not 100% self-interested but have a strong interest in fair allocations. This is not simply altruism (people putting positive value on the welfare of others) because, except in extreme cases, we often want fairness for fairness sake. An example of this is dividing \$10 found on the ground equally between the finders and ignoring wealth levels. People seem to implicitly, but pervasively, consider equitable sharing over changes in total endowments, not total endowments themselves. People generally have a one-pie-at-a time, piecemeal approach to fair-division problems.

Peoples’ behaviour is also influenced, much more than traditional economics predicts, by the behaviour, motivation, and intentions of others, such as whether they have ‘misbehaved’, are ‘undeserving’, or have not been ‘nice’. In response to friendly actions, people are frequently much nicer and much more cooperative than might be expected if they were acting purely from self-interest. Conversely, in response to hostile actions, they are frequently much nastier and even brutal in their subsequent dealings with the same people than traditional models would predict (Fehr and Gächter 2004). There also seems to be an emerging consensus that the propensity to punish harmful behaviour is stronger than the propensity to reward friendly behaviour (Fehr and Gächter 2004).

To study this area, CAV’s survey asked three questions about hypothetical problems in markets and consumers’ likely responses:

- i. “Imagine you have an experience at a local pharmacy where you believe that you were treated unfairly. Soon after, you require a different item and this store is the most convenient with competitive prices. Would you purchase this other item at the same store?”
 - 25% said definitely not
 - 41% said probably not
 - 2% did not know
 - 25 % said probably
 - 7% said definitely.

In other words, around 65% of consumers, upon experiencing unfair treatment would punish the business with retribution, at the expense of their own utility (i.e. at some cost to themselves).

- ii. “If you experienced *unfair* treatment, would you discuss this with people you know such as friends and acquaintances?”
 - 3% said never
 - 17% said occasionally
 - 22% said sometimes
 - 24% said usually
 - 33% said always.
- iii. “And how often do you discuss experiences of *good* treatment with people you know such as friends and acquaintances?”
 - 2% said never
 - 21% said occasionally
 - 22% said sometimes
 - 29% said usually
 - 26% said always

These answers agree with previous theories and research about the importance of fair treatment and the propensity to engage in retribution (appendix 4). They also agree with previous research suggesting that the desire to punish bad behaviour can be somewhat stronger than the desire to reward good behaviour.

The results of CAV’s survey, and similar previous research, clearly indicate that businesses should be very aware that they may suffer significant consequences, in terms of lost future custom, if they treat customers in ways considered unfair.

b) time-dependent preferences (desire for immediate gratification)

Economists almost always assume that people’s preferences for the goods and services they plan on consuming do not change according to when they are asked about them. However, it is increasingly being realised that people very often have a strong desire for immediate gratification that can significantly affect behaviour in markets and elsewhere (O’Donoghue and Rabin 2000, Loewenstein, Read and Baumeister 2003). From a long-term perspective a person might have one set of preferences (eg she prefers to save for a house), but when the future arrives she has a different set of preferences (she wants a new dress now). In other words, when considering tradeoffs between two future moments, we tend to give stronger relative weight to the earlier moment as it gets closer.

Of course people have every right to make purchases on impulse if they so desire. Such behaviour is only of interest to governments if they could potentially intervene to improve welfare in the community. In this context, it could be argued that marketers know a lot about people's tendencies to buy on impulse – there are informational imbalances between producers and consumers – and that they use this knowledge to try to increase levels of impulse spending. Consumers might benefit if they had more information about how marketers attempt to change their behaviour, and how they aim to entice consumers to make more impulse purchases.

In CAV's survey, people were asked:

- i. "Have you made any purchases over \$20 in the past year that were unplanned or on the 'spur of the moment'?"
 - 79% said yes
 - 21% said no or can't remember
- ii. "And how many of these have you made?"
 - 53% said 1-10
 - 19% said 11-20
 - 6% said 21-30
 - 2% said 31-40
 - 5% said 41-50
 - 9% said 51 or more
 - 6% didn't know
 - the mean was 31 (standard deviation 113.1).

- iii. "What percentage of these purchases have you regretted?"
 - 56% said none
 - 18% said 1-10
 - 6% said 11-20
 - 4% said 21-30
 - 2% said 31-40
 - 8% said 41-50
 - 6% regretted a larger percentage
 - the mean was 14 (standard deviation 24).
- iv. "What was the main reason or reasons that you regretted this/these purchases? (open ended and fully probed question)"
 - 39% said the purchase was not needed or was unnecessary
 - 22% stated financial reasons
 - 10% said the purchase was not useful
 - 9% said it didn't live up to expectations
 - 6% said they changed their mind after purchase
 - other responses such as pressure from others to buy were mentioned by smaller percentages of respondents.

These results indicate that Consumer Affairs Victoria may have a role in providing more information to consumers about marketing factors aimed at influencing their impulse spending behaviour.

“ Policy implications and further research ”

5

The results of CAV's consumer detriment survey will have many applications. They will be used to inform inquiries, such as the review of food regulation currently being undertaken by the Victorian Competition and Efficiency Commission and the Productivity Commission Inquiry into Australia's consumer policy framework that has been foreshadowed by the Australian Government.

CAV will inform businesses about the results of the survey that relate to:

- how consumers behave when they experience a problem
- who they complain to
- how satisfied they feel about treatment received in response to complaints
- the extent to which problems are discussed with friends, acquaintances etc
- the importance consumers attribute to receiving fair treatment and that they will punish behaviour perceived as unfair by not returning to the business, even if this might inconvenience them
- how significant the emotional costs of problems can be to consumers.

To the extent that businesses are unaware of these issues already, efforts to address them could lead to significant benefits to consumers and businesses, and to the Victorian economy in general.

In the area of credence attributes, there is a need for more research into the benefits and costs of introducing more proactive monitoring of the truth and honesty of claims made in markets for goods and services with these attributes. There is also a need for more research into which credence attribute markets are under-performing or missing altogether because potential producers cannot convince consumers about the credibility of claims. Case studies would be useful.

If government intervention is justified in credence attribute markets, there is a range of policy instruments to select from, but little research on how to make selections to ensure the most efficient and least distortionary policy instruments are chosen.

The extent to which consumers in Australia use supermarkets for their guarantees, implicit or explicit, in delivering credence qualities, the importance of this versus other reasons for shopping at supermarkets, and likely trends for the future (eg whether Australian supermarkets will follow European trends for increasingly stringent environmental requirements) would also be a useful subject for future research.

CAV's survey has only briefly touched on the area of behavioural economics and policy implications require much more research. Although behavioural economics is becoming more widely acknowledged, policy debate on its implications has not progressed far, perhaps because:

- Talking about the distinction between rational and irrational behaviour is not very fruitful for progressing policy because it is a philosophical issue, involving value judgements, and it is possible to construct arguments about *any* behaviour to argue it is rational.
- Discussions can focus on whether behavioural economic findings mean the traditional economic models are no longer useful, but this is incorrect. They still provide a sound basic framework on which to base policy interventions based on identified market failures. This was argued in section 4 for the issue of impulse spending – government interventions should be based on identified informational imbalances between buyers and sellers.
- Many argue that even if behaviour is irrational, this does not mean government should interfere. Are not individuals the best judge of what is good for them and what is not? Is government interference paternalism?

Ng (2004 p279) argues that due to the prohibitive costs of paternalism, governments should not interfere in the day-to-day activities of individuals, despite the existence of substantial ignorance and irrationality. Positive correlations have been found between freedom, democracy and happiness. However, Ng stresses *this does not mean that research on the divergence of welfare from preference cannot make a positive practical contribution*. First, if individuals become aware of this divergence as a result of such research, they might adjust their preferences accordingly. For example, they might put more emphasis on things that are really important for welfare and spend less time and resources on competitive and largely fruitless consumption (Ng 2004).

This view might imply CAV has a role in providing more *information* to consumers about how their preferences might be diverging from what would make them happier. Vickers (2003 p 17) agrees, with some qualifications:

“While no-one would doubt the wisdom of banning quacks practising as doctors, or fraudulent adverts, there eventually comes a point beyond which constraining freedom of contract further brings costs that outweigh benefits. These costs, which consumers ultimately bear and which may be hidden from view, can stem from less choice and competition as well as the costs of the regulation itself. Indeed, the best solutions often involve better consumer information rather than less consumer and producer choice. But improving consumer information is often easier said than done, especially information that is of immediate and direct practical use – for as consumers we are all boundedly rational – and rationally so. The underlying policy questions of when and how to constrain contracting, and of how to enhance practical consumer information, are hard.”

As a start, CAV could investigate the feasibility of informing consumers about ways in which marketers aim to shift their preferences so that their consumption behaviour diverges from that which would provide highest welfare.

Future research could also investigate the link between credit card debt and the empirical importance of impulse spending. This could also be linked to research into the potential policy implications of apparent weak links between happiness and consumption. The HILDA³ survey data provides a focus for this type of analysis in Australia. CAV could consider inserting additional questionnaires into HILDA, such as a module to examine impulse/compulsive spending and its impacts.

In summary, the policy implications of the survey work are obviously wide-ranging and complex. As markets evolve, governments must constantly re-evaluate policy frameworks to maximise welfare by ensuring markets operate as efficiently and fairly as possible. CAV will continue such processes for its broad policy frameworks, such as the Fair Trading Act, and also for industry-specific frameworks, using the survey results to prioritise and inform its research and reviews.

³ The Household, Income and Labour Dynamics in Australia Survey (HILDA) began in 2002 to accumulate data on changing household situations, similar to that collected in long running household surveys in the UK, USA and Canada. Data is collected from the same families each year to track changes in three main areas: economic and subjective well-being; employment; and family situations. There is scope for additional questions each year, and the data is available for research purposes.

Bibliography

- Akerlof, G. (1970), The market for "lemons": quality uncertainty and the market mechanism, *Quarterly Journal of Economics*, 89, 488-500.
- Asher, A. (2006), Address to Consumer Affairs Victoria Third National Consumer Conference, 15-17 March, Melbourne.
- Australian Consumers' Association (2004), Supermarket sales tactics, *Choice*, May.
- Cason, T. and Gangadharan, L. (1999), *Environmental labelling and incomplete consumer information in laboratory markets*, University of Melbourne Department of Economics, Research Paper Number 708, September.
- Caswell, J. and Mojduszka, E. (1996), Using informational labelling to influence the market for quality in food products, *American Journal of Agricultural Economics*, 78, 1248-1253, December.
- Codron, J-M., Sterns, J. and Reardon, T. (2000), Consumer preferences, experience and credence issues and their strategic implications for French and US fresh produce sectors. Paper prepared for '2000 International Food and Agribusiness Management Forum', Chicago, June 24-25.
- Cole, A. and Harris, J. (2003), Ecolabelling, credence attributes and the role of government, Department of Primary Industries Economics and Policy Research Branch Working Paper.
- Cole, A. and Harris, J. (2004), Believing environmental labels, *Consuming Interests* No. 101, Spring, 26-28.
- Cole, A. and Harris, J. (2005), Rising interest in credence qualities in agricultural products and the role for government. Paper prepared for the 49th Australian Agricultural Economics Society Conference, 9-11 February 2005, Coffs Harbour.
- Consumers' Association of Canada (2001), Monitoring Consumer Information on Environmental Labels and Claims, Research Report.
- Darby, M. and Karni, E. (1973), Free competition and the optimal amount of fraud, *Journal of Law and Economics*, 16, 67-88.
- Dulleck, U. and Kerschbamer, R. (2005), Experts vs Discounters: Competition and Market Unravelling When Consumers Do Not Know What they Need, *CEPR Discussion Papers* 5242.
- Fels, A. (2006), Congress Impressions and Concluding Remarks. Paper prepared for Consumer Affairs Victoria's Third National Consumer Congress, 15-17 March.
- Fehr, E. and Gächter, S. (2004), Fairness and retaliation: the economics of reciprocity, Ch. 18 in Camerer, C., Loewenstein, G., and Rabin, M. (eds), *Advances in Behavioural Economics*, Russell Sage Foundation, New York.
- Fischhoff, B. (1975). Hindsight \neq foresight: The effect of outcome knowledge on judgment under uncertainty. *Journal of Experimental Psychology: Human Perception and Performance*, 1, 288-299.
- Griffin, E. (1997) *Cognitive Dissonance Theory of Leon Festinger*, McGraw Hill, Inc.
- Hoch, S. and Loewenstein, G. (1991), Time-inconsistent preferences and consumer self-control, *Journal of Consumer Research*, Vol. 17, 492-507.
- Hsee, C., Zhang, J., Yu, F. and Xi, Y. (2003), Lay rationalism and inconsistency between predicted experience and decision, *Journal of Behavioural Decision Making*, 16.
- Ippolito, P. (1990), Bonding and nonbonding signals of product quality, *Journal of Business*, 63 (1) 41-60.
- Jahn, G., Schramm, M. and Spiller, A. (2005), The reliability of certification: quality labels as a consumer policy tool, *Journal of Consumer Policy*, 28, 53-73.
- Jones, A. and Landsell, N. (2000), *Environmental Labelling*, Staff Working Paper, Productivity Commission, Melbourne

- Kahneman, D., Knetsch, J. and Thaler, R. (2004), Fairness as a constraint on profit seeking: entitlements in the market, ch. 8 in Camerer, C., Loewenstein, G., and Rabin, M. (eds), *Advances in Behavioural Economics*, Russell Sage Foundation, New York.
- Kahneman, D., and Tversky A. (1979), Prospect theory: and analysis of decision under risk, *Econometrica*, 47, 263-92.
- Karl, H. and Orwat, C. (1999), Economic Aspects of Environmental Labelling in Folmer, H. and Tietenberg, T. (eds), *The International Yearbook of Environmental and Resource Economics 1999/2000*, Elgar, Cheltenham, United Kingdom, 107-170.
- Kirchhoff, S. (2000), Green Business and Blue Angels – a model of voluntary over compliance with asymmetric information, *Environmental Resource Economics*, 15, 403-420.
- Kirmani, A. and Rao, A. (2000), No pain, no gain: a critical review of the literature on signalling unobservable product quality, *Journal of Marketing*, 62, 56-79.
- Kivetz, Ran (1999), "Advances in Research on Mental Accounting and Reason-Based Choice," *Marketing Letters*, 10 (3), 249-266.
- Lambert, C. (2006), The marketplace of perceptions, *Harvard Magazine*, www.harvardmagazine.com
- Loewenstein, G., Read, D. and Baumeister, R.F. (eds) (2003), *Time and Decision – Economic and Psychological Perspectives on Intertemporal Choice*, Russell sage Foundation, New York.
- Lunt, P. (2006), The Psychology of Consumer Detriment, United Kingdom Office of Fair Trading Research Report, February.
- Macho-Stadler, I. And Perez-Castrillo, J. (1997), *An Introduction to the Economics Of Information*, Oxford University Press.
- Mirrlees, J.A. (1996), Information and incentives: the economics of carrots and sticks, Nobel Prize Lecture, December 9.
- Nelson, P. (1970), Information and consumer behaviour, *Journal of Political Economy*, 78, 311-329.
- O'Donoghue, T. and Rabin, M. (2000), The economics of immediate gratification, *Journal of Behavioral Decision Making*, 13(2), 233-250.
- Okun, A. (1981), *Prices and Quantities: A Macroeconomic Analysis*, The Brookings Institute, Washington D.C.
- Overall, R. (2004), *What do we mean by 'vulnerable' and 'disadvantaged' consumers?* Consumer Affairs Victoria Discussion Paper.
- Rabin, M. (2002), A perspective on psychology and economics, Alfred Marshall Lecture, *European Economic Review*, 46, 657-685.
- Shafir, E., Simonson, I. and Tversky, A. (1993), Reason-based choice, *Cognition*, 49, 11-36.
- Spence, A. (1973), Job market signalling, *Quarterly Journal of Economics*, August, vol. 87, no. 3, 355-374.
- Stiglitz, J. (2001), Information and the change in the paradigm in economics, Nobel Prize Lecture, December 8.
- Strotz, R.H. (1955-56), Myopia and inconsistency in dynamic utility maximisation, *Review of Economic Studies* 23(3), 165-80.
- Sylvan, L. (2006), Interface between competition and consumers, Presentation to Consumer Affairs Victoria's Third National Consumer Congress, 15-17 March.
- Teisl, M.F., Roe, B., and Levy, A.S. (1999), Ecocertification: why it may not be a "field of dreams", *American Journal of Agricultural Economics*, 81(5), 1066-1071.
- Thaler, R. H. (1980), Toward a positive theory of consumer choice, *Journal of Economic Behaviour and Organisation*, 1(1), 39-60.
- The Economist (2003), Behaviourists at the gates - How economists are using psychology to question orthodox policy prescriptions, May.
- Tversky, A. and Kahneman, D. (1971), Belief in the law of small numbers, *Psychology Bulletin*, 76(2), 105-110
- Tversky, A. and Thaler, R.H. (1990), Anomalies: preference reversals, *Journal of Economic Perspectives*, 4(2), 201-211.
- UKOFT, United Kingdom Office of Fair Trading (2000), *Consumer Detriment*, OFT 296, February.

Appendix 1: Welfare losses in markets for goods with credence attributes

Figure 1. Consumer detriment due to asymmetric information

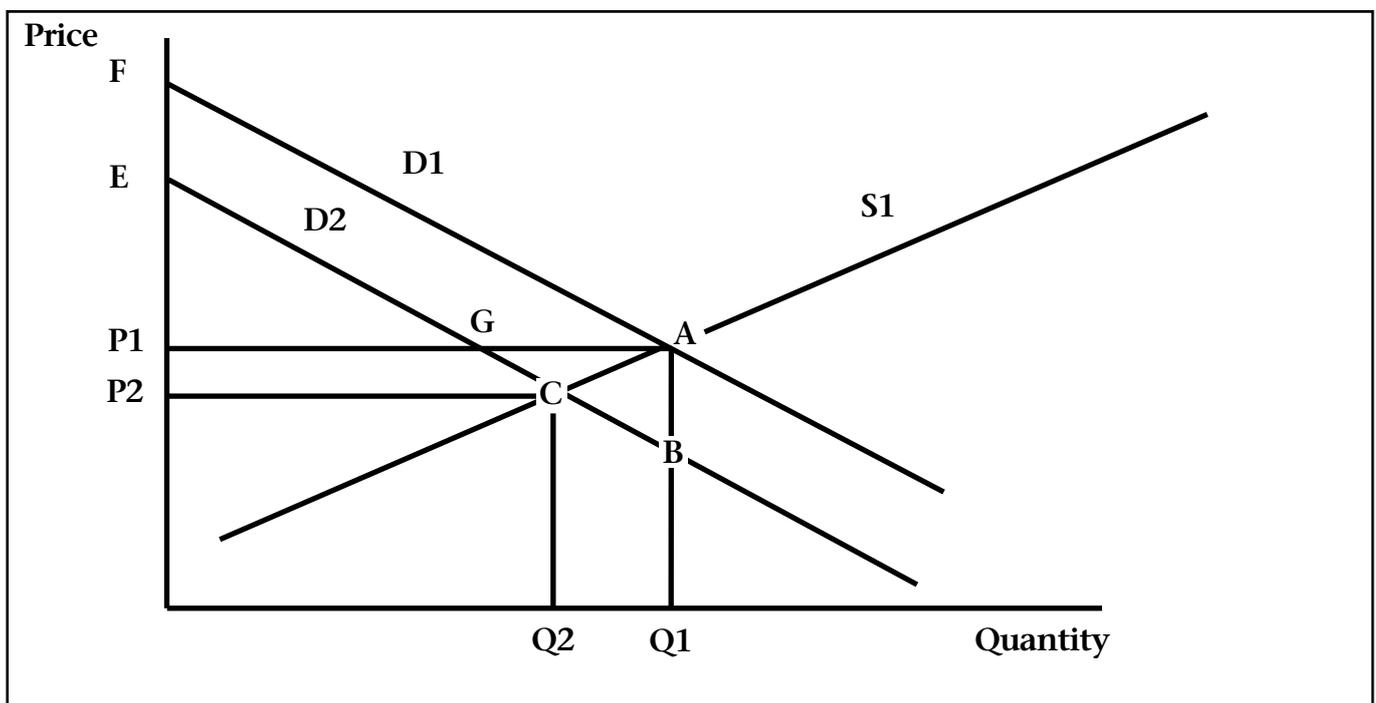


Figure 1 illustrates the potential welfare losses in a credence attribute market where there are high and low quality goods (Q1 and Q2), for which consumers are willing to pay P1 (demand curve D1) and P2 (demand curve D2) respectively. In the 'lemons' situation (Akerlof 1970), there is no market for high quality goods because sellers are unable to signal that this quality is present. Consumers who would have been willing to pay a premium for high quality are worse off, by the loss in consumer surplus of AGEF. Producers who would have supplied higher quality are also worse off by a loss in producer surplus of ACP1P2. There is also a deadweight welfare loss to the economy as a whole from under-consumption, or under-provision of the good with quality Q1, indicated by the area ABC.

Figure 1 also depicts the situation if consumers are cheated – they think they have bought high quality (Q1) but have actually bought low quality (Q2). Consumers lose by an amount indicated by the area AGEF, whether they find out they have been cheated or not. Producers who cheat gain by an amount indicated by the area ACP1P2 (ignoring any considerations about whether or not they are caught and whether this affects their future welfare). The deadweight welfare loss ABC is now due to over-consumption, or over-provision, of Q2, being passed off as Q1.

“ *Appendix 2: Signalling by the private sector in credence attribute markets* ”

Most of the theoretical analysis of credence attribute markets has focussed on whether the private sector can overcome asymmetric information (thereby avoiding market failures) by signalling (see for example Spence 1973, Mirrlees 1996, Ippolito 1990, Kirmani and Rao 2000, Stiglitz 2001). When they can, it is called a separating equilibrium (Macho-Stadler and Perez-Castrillo 1997) and the consensus is that this will be a case by case proposition depending on:

- The feasibility and costs of signalling, or the ability of the seller to signal trustworthiness by investing in reputation, branding, advertising, sunk costs, guarantees, third-party certification or whatever tool suits the circumstances. Studies over the past thirty years have shown that many of these commonplace features of markets exist purely to counteract the potential for strategic behaviour (adverse selection and moral hazard) due to asymmetric information⁴.
- The additional cost of producing high versus low quality products.
- The marginal benefit to consumers (the price premium they are prepared to pay for high quality).

For each particular product, service or industry, there will be a different combination of the above variables and sometimes this combination will not allow information asymmetries to be resolved via private sector signalling. Government's role is to research when these problems represent market failures that would be cost effective to address, achieving a net gain for the economy.

⁴ Reflecting the importance with which such research is regarded, Nobel Prizes have been awarded over the past ten years specifically for analysing of the impacts of asymmetric information on markets (to James Mirrlees and William Vickery in 1996 and to Michael Spence, Joseph Stiglitz and George Akerlof in 2001).

“ Appendix 3: Evidence of misleading and deceptive conduct in credence attribute markets ”

There has been little empirical analysis of the extent of cheating in credence attribute markets and what impacts such behaviour has on market performance. Teisl, Roe and Levy (1999) assert that the use of misleading environmental claims is not trivial. They refer to a 1991 study showing 50% of environmental advertising was misleading or deceptive and to a study by the Consumers' Association of Canada (CAC) of approximately 200 examples of environmental labels and claims – most did not conform to the ISO 14201 standard on self-declared environmental claims and declarations. Dulleck and Kerschbamer (2005) review literature on the behaviour of expert sellers of credence services who “identify the quality that fits a customer's need best by performing a diagnosis”, including mechanics, financial advisers, taxi-drivers and physicians. Consumer concerns about being defrauded by experts are not unfounded, they conclude, quoting studies showing high percentages of unnecessary auto repairs and some types of medical treatments (eg caesareans) are correlated with variables related to the knowledge and/or finances of recipients. None of these studies are particularly recent however. The most recent study quoted was in 1999 and there is no Australian data.

Despite the limited empirical attention paid to it, researchers have pointed to the potential consequences of lack of trust in credence attribute markets. Wills and Harris (1994) discuss the ramifications of a major incident involving substitution of kangaroo meat for beef in Australian exports to Japan that adversely affected not just the individuals responsible, but Australian exports and the country's reputation. Kirchhoff (2000) asserts that the rise in the percentage of new product introductions claiming to be environmentally friendly during the 1990s in both Europe and the United States has led to confusion and mistrust on the part of consumers because of the variety of firms' claims and their unobservable impact

on the environment. Jahn, Schramm and Spiller (2005) stress the strong negative effects that “numerous crises and scandals (mad cow, foot and mouth etc)” have had on consumer confidence in the European food sector over the past few years, asserting that a general lack of trust can spread into markets such as organics where “lack of trust is still one of the most important diffusion barriers”. In Australia, media reports (eg *Sunday Age*, 30 July 2006, p7) of allegations that cage laid eggs are being passed off as barn laid (approximately 20-30% price premium) or free range (40-50% price premium) have led to calls for governments to investigate.

Codron, Sterns and Reardon (2000) assert that because verifying credence claims is costly to the individual consumer, it usually occurs through exogenous events like high profile news events (eg the alar chemical scare in the U.S. apple market), product recalls or public health alerts. For Australia, Jones and Landsell (2000) suggest that both consumer mistrust and confusion can influence consumers' choices, with labels consumers perceive as being not credible or biased likely to be discounted or ignored. They state that “in the extreme, consumers may no longer take any notice of any labels, even those provided by truthful firms with environmentally superior products”. In other words, “market failure at a higher level” (Jahn et al 2005) can occur when there are externalities, or spillover effects on other producers, associated with the opportunistic behaviour of some individuals in credence attribute markets. Clearly these issues are potentially important, not just for anyone who is unfortunate enough to be cheated, but for players in associated markets and therefore the economy in general. In other words, the economic impact could exceed those indicated by deadweight losses of ABC in figure 1 of appendix 1 that occur in isolated markets only.

“Appendix 4: The threads of behavioural economics”

“Is there no arguing with tastes?” (Hoch and Loewenstein 1991 p493)

The traditional economic model of how people make choices assumes they maximise their utility (or satisfaction, or welfare) given a set of stable, well-defined preferences over all available goods and services, and an ability to process available and changing information effectively and efficiently. Rabin (2002) provides a useful classification of the three main components of this model and some of the sub-categories that behavioural economists have tested and researched.

A How do people form preferences?

Research under this category concerns ways in which preferences may deviate from the traditional model.

A.1 Reference, adaptation and losses

- *Reference-based utility* - Overwhelming evidence shows that humans are often more sensitive to how their current situation differs from some reference level than to the absolute characteristics of the situation. People care a lot about changes (in wealth, consumption, ownership, health), not solely about absolute levels as traditional models assume.
 - *Loss aversion* – people are significantly more averse to losses than they are attracted to same-sized gains.
 - Loss aversion is related to the striking *endowment effect* (Thaler 1980; Kahneman, Knetsch and Thaler 1990) – once a person comes to possess a good she immediately tends to value it more than before she possessed it.

- A comparable phenomenon – the *status quo bias* – holds in multiple-good choice problems. People tend to prefer the status quo to changes that involve losses of some goods even when these are offset by gains of other goods.

A.2 Social preferences, fair allocations, reciprocity and attribution

- Kahneman, Knetsch and Thaler (2004) report results of various surveys on attitudes to fairness and their findings are enlightening in explaining sluggishness in markets and related phenomena such as prices not fully adjusting to shocks. They find that apparent deviations from the simple model of a profit-maximising firm occur because fair behaviour is instrumental to firms maximising long-run profits. Customers who suspect that a supplier treats them unfairly are likely to start searching for alternatives (Okun 1981). “Retailers will have a substantial incentive to behave fairly as a large number of customers are prepared to drive an extra five minutes to avoid doing business with an unfair firm. The threat of future punishment when competitors enter may also deter a temporary monopolist from fully exploiting short-term profit opportunities” (Kahneman et al 2004 p263-4).
 - For example, people were asked whether it was fair or unfair for a hardware store to increase the price of shovels from \$15 to \$20 after a large snowstorm - 82% of respondents considered it unfair for the store to take advantage of the short-run increase in demand.

- Conventional economic analyses assume as a matter of course that excess demand for a good creates an opportunity for suppliers to raise prices and that such increases will indeed occur. The profit-seeking adjustments that clear the market are in this view as natural as water finding its level – and as ethically neutral. The lay public does not share this indifference. Community standards of fairness effectively require the firm to absorb an opportunity cost in the presence of excess demand, by charging less than the clearing price or paying more than the clearing wage.
- Kahneman et al highlight the *features* of an issue that will be important in determining consumer attitudes about its fairness or otherwise.
 - One important feature is the *reference transaction* – a firm is not allowed to increase its profits by arbitrarily violating the entitlement of its transactors to the reference price, rent or wage. For example, it is generally considered unfair to raise the price of old stock when the price of new stock increases.
 - Another important feature is *framing* - people are more sensitive to out-of-pocket costs than to opportunity costs and more sensitive to losses than to foregone gains. Thus, their fairness judgements depend on how propositions are put to them.
 - An action that deliberately exploits the special dependence of a particular individual is exceptionally offensive.
 - Only goods for which an active resale market exists, and especially goods that serve as a store of value, can be sold freely by auction or other mechanisms allowing the seller to capture the maximum price (eg it is seen as unfair to auction the last of an in-demand toy just before Christmas).

B. How do people process information and form beliefs?

Research under this category suggests that rather than forming beliefs through Bayesian reasoning⁵, people often form potentially distorted beliefs about the world. Researchers have documented many systematic departures from perfect rationality in judgments under uncertainty. Kahneman and Tversky (1974) call these heuristics⁶ that reduce complex tasks of assessing information to simpler judgmental operations. Sometimes they can be useful but sometimes they can lead to severe and systematic errors, through biases in judgment.

B.1 The law of small numbers

- People exaggerate how closely a small sample will resemble the parent population from which the sample is drawn (Tversky and Kahneman 1971). For example, experiments have shown people view it as comparably likely that at least 80% of 20 coin flips will be heads as that at least 80% of 5 coin flips will be heads when the probabilities are in fact about 1% and 19%, respectively.
- Another implication is that people expect too few lengthy streaks in sequences of random events so they tend to generate spurious explanations for long streaks that are determined by chance (eg the gamblers fallacy that 'heads is due').

B.2 Belief perseverance and confirmatory bias

- *Anchoring* - once strong hypotheses have been formed, people are often too inattentive or resistant to new information contradicting their hypotheses. This may help explain why fresh thinkers often contribute.
- Going one step further, people even misread additional evidence as additional support for initial hypotheses (*confirmatory bias*).

⁵ Baye's Rule is that the conditional probability of a set of possible causes for a given observed event can be computed from knowledge of the probability of each cause and the conditional probability of the outcome of each cause.

⁶ Commonsense rules (or sets of rules) intended to increase the probability of solving some problem.

B.3 Other biases

- People are prone to *overconfidence* in their judgments.
- *Hindsight bias* – people exaggerate the degree to which their beliefs before an informative event were similar to their current beliefs. For example, after a politician wins an election it is often labelled as inevitable – and people believe they always thought it was inevitable (Fischhoff 1975).
- People *disproportionately weight salient, memorable or vivid evidence* when making judgments even when they have better sources of information. For example, assessments of a given city's crime rate are likely to be too influenced by whether we know a victim, even if we are familiar with more relevant general statistics.

C Is maximising utility or satisfaction the right model?

This category of research questions the assumption that people optimise their welfare by maximising their utility from consuming goods and services.

C.1 Do we know what makes us happy?

- People *mispredict or misremember* their own utility and misperceive their own future tastes. For example, they typically *underestimate how quickly and fully they will adjust to change*, with the classic example being lottery winners who end up less happy than they had anticipated. People have difficulties in using the past to assist choice in the future and tend to remember extremes of pain and pleasure more than the average.
- Another pattern is the theory of *melioration* – current choices are made with insufficient concern for utilities of later choices. For example, eating at a favourite restaurant too many nights in a row, even though utility is also gained from variety.

C.2 Elicitation effects - framing and context

- People often lack stable preferences that are robust to different ways of eliciting those preferences.
- *Framing* applies to situations where logically equivalent (but not transparently equivalent) presentations of the same thing lead to choosing different options.
 - Research on *preference reversals* shows people choose bets with a high chance of winning small amounts but put a higher price on bets with a low chance of winning big amounts. Consider an H bet that with 8/9 chance yields \$4 and with 1/9 chance yields \$0, and an L bet with a 1/9 chance to win \$40 and 8/9 chance of \$0. Most subjects choose the H bet over the L bet when asked to choose between the two. But when asked to state the lowest price at which they would be willing to sell each gamble, most subjects put a higher price on the L bet. Economic theory says these two elicitation procedures should yield the same preferences (Tversky and Thaler, 1990).
 - The Australian Consumers' Association (2005) discusses traps in supermarkets and cite research showing that more than 50% of shoppers couldn't resist a "buy-one-get-one-free" promotion. They ask "but did you even need one in the first place, never mind two?" (www.choice.com.au).
- *Context* effects refer to situations where the addition of a new option to a menu of choices (eg a more expensive option) increases the proportion of consumers choosing one of the existing options.
- Shafir, Simonson and Tversky (1993) propose choices can often be depicted as a search for the option that is supported by the best overall reasons. For example, people may explicitly state a given choice is a compromise between two other choices. In other words, people rationalise their choices with reference to other choice sets. Some reasons are more salient, plausible and easier to verbalise than others, and may therefore receive more weight in the choice process when the decision-maker is

required to reason out-loud or on paper before making a choice. Moreover, it seems logical that reasons would loom larger in the choice process than in the consumption experience so that the reasons that guided a consumer's choice may become irrelevant or even regretful at the time of the actual consumption (Kivetz 1999). The apparent existence of separate valuation scales for choosing and for assessing experiences leads to what Hsee, Zhang, Yu and Xi (1999) term as decision/consumption inconsistency. When choosing, people are concerned with reasons, objective rules and rationales. However, during the consumption phase people tend to focus on feelings and subjective experiences.

- Giffin (1997) retells an Aesop fable (the origin of the term sour grapes) to demonstrate the *need* for people to have explanations for behaviour. A fox had tried in vain to jump up and reach a cluster of grapes from a vine above his head. After a few attempts the fox gave up and said to himself, "These grapes are sour, and if I had some I would not eat them". By changing his attitudes towards the grapes, he provided an acceptable explanation for his behaviour.

C.3 Time-variant preferences

- The behaviour predicted by models of time-variant preferences can differ markedly from that predicted by the exponential model. For example, the latter does not explain efforts at self-control – engaging in behaviour to restrain our own future flexibility through self-commitment devices such as buying small packages of enticing foods so as not to overeat; contributing to Christmas Clubs and the like. Strotz (1955) labels people who are fully aware of their future self-control problems as sophisticated and people who are fully unaware that they will have a self-control problem as naïve. However, Hoch and Lowenstein (1991) attempt to model a situation more closely associated with reality – people's moods (including patience) differ and so an either-or approach is not accurate – sometimes an individual consumer's behaviour is based on reasoned actions and sometimes it is more emotional. They model time-inconsistent preferences as sudden increases in desire brought on by a shift in a consumer's *reference point*. Reference point shifts can be precipitated by any number of factors that are well known to marketers and incorporated into marketing strategies, such as:
 - physical and sensory proximity – marketers place products strategically in stores and try to conjure up the experience of consumption through samples, smells and advertisements showing products in use

- temporal proximity – the immediate availability of a reward will tend to increase the desire for it. Willingness to delay gratification in exchange for greater rewards decreases as consumption becomes imminent, partly due to a reference point shift
- social comparisons – people faced with adverse social comparison want what their more fortunate peers already possess and they do not want to wait.
- After a reference point shift, consumers not only attach positive utility to the object itself, but they also attach *negative* utility to *failure* to consume the object. This can be thought of as a psychological state of deprivation analogous to physiological states of need ranging from hunger and thirst to addiction. In other words, consumers adapt to possession of not-yet purchased items because their reference points have shifted. Consumers are then faced with a self-control problem that Hoch and Loewenstein frame as a struggle between two psychological forces – desire and willpower. This model helps explain why certain types of goods (eg dessert) are associated with impulsivity and not others (eg gasoline). Also, not all impulse-buying represents time-inconsistent behaviour – these are confined to those that are "novelty or escape purchases which break normal buying patterns" (Hoch and Loewenstein 1991).

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Consumer Affairs Victoria

Victorian Consumer & Business Centre

113 Exhibition Street

Melbourne 3000

Telephone 1300 55 81 81 (local call charge)

Email consumer@justice.vic.gov.au

Website www.consumer.vic.gov.au



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