Price Scanning Project

Competition Bureau
Fair Business Practices Branch

Price Scanning 1996 -1999

Introduction

Many retail outlets make use of electronic scanners to ring in prices at the check-out counter. While consumers are accustomed to the technology, they are also concerned that prices charged are not always accurate. Consumers want to be confident that the prices that they are charged at the check-out counter match the pricing that is displayed in stores or that is shown in advertisements.

Price accuracy errors impact upon consumers and businesses. Where overcharges occur, consumers suffer a direct loss to their pocket-book. Competitors may also be affected if consumers are attracted to a particular retail outlet as a result of a perceived price advantage that is not obtained. Pricing errors also have an impact upon the retailer concerned. The retailer's profit margins can be affected by undercharges, while overcharges can result in a loss of goodwill and lead consumers to shop elsewhere.

In 1996, the Competition Bureau carried out a "Snapshot" survey to obtain a sense of price scanning accuracy in Canada and to identify appropriate strategies for dealing with situations where price accuracy is low. This report describes the Bureau's activities to date in the price accuracy field.

What is the Role of the Competition Bureau in Promoting Price Accuracy?

The Competition Bureau is responsible for the administration and enforcement of the *Competition Act*, as well as three statutes concerning the accuracy and adequacy of information provided to consumers: the *Consumer Packaging and Labelling Act*, the *Textile Labelling Act*, and the *Precious Metals Marking Act*.

There is no federal legislation governing the question of price scanning accuracy per se. However, some types of price representations that result in overcharges to consumers may be examined under the *Competition Act*. The law prohibits the following matters:

- representations, in any form whatever, that are false or misleading in a material respect;
- the supply of a product at a price higher than the price currently being advertised. There is no infraction where the price advertised was erroneous and immediately corrected;
- where two or more prices are clearly shown on a product, its container or wrapper, and the product is not supplied at the lower price.

The Act contains a mix of civil and criminal provisions to deal with instances of misleading

representations and deceptive marketing practices. In a civil matter, the court may order the person to: not engage in the practice, publish a corrective notice, and/or pay a monetary penalty. Alternatively, in some circumstances, a matter could be referred to the Attorney General of Canada for consideration as to whether criminal charges should be laid. Where a prosecution is pursued, the person may be liable to a fine and/or a term of imprisonment.

Not all matters result in court proceedings however. The Competition Bureau may employ a variety of measures to promote and maintain conformity with the legislation. Depending on the circumstances, a warning letter may be issued to a party to provide an opportunity to voluntarily comply with the law. Alternatively, the Bureau may accept an undertaking which is, in essence, a written promise from a party establishing future conduct in respect of particular practices. In other instances, the Bureau may seek a consent order prohibiting a party from committing an offence or engaging in reviewable conduct. The Bureau also works with industry associations to enhance understanding of the legislation the Bureau administers and to promote industry initiatives aimed at improving compliance.

How Do Price Scanners Work?

Most products sold today bear a unique Universal Product Code (UPC) or bar code. When a cashier passes the UPC symbol on a package or product over an electronic scanner, a beam of light "reads" the symbol. The cash register is linked to a computer system where price and other product information is stored. The computer decodes the symbol and sends price information to the cash register. The cash register then prints the price on a receipt for the consumer and the price is also shown on the cash register display screen.

Why Do Errors Occur?

Price scanners are almost 100% accurate. It is human error which causes most pricing errors. For example, stores may quickly and easily change prices in their computer systems but fail to make timely and appropriate changes to shelf stickers and displays, or to price stickers on the product. Errors can also result at the data entry level when the prices are changed.

Some price scanning errors may be inevitable, but the manual entry of prices by a cashier does not result in better price accuracy. In fact, studies show a 4% to 16% rate of error when prices are entered manually by a cashier. Moreover, the receipts printed by older cash registers merely list a series of prices whereas most electronic scanners specify the item purchased and the price, making it easier for consumers to identify pricing errors and pursue correction.

Bureau Survey

In the summer of 1996, the Bureau conducted a survey of price accuracy in the Canadian marketplace. This survey included 84 companies operating 162 stores representing seven general retail categories: grocery, drug, department stores, hardware/ home improvement stores, business and office supply

stores, home electronics stores, and automotive stores. The survey included national and regional chain stores and independents. More than 15,000 items were checked.

The survey sampling procedure for the Bureau's survey was based on the United States National Institute of Standards and Technology (NIST) "*Examination Procedure for Price Verification*" as adopted by the United States National Conference of Weights and Measures. The procedure provides that a pricing error occurs whenever the price at a check-out is different than the lowest advertised, posted or marked price. This means that a pricing error occurs whether the scanned price is higher or lower than expected. A combined error rate, including both overcharges and undercharges, is determined for each store. The methodology deems that a store obtains a passing grade if an accuracy rate of more than 98% is obtained. However, the Bureau does not endorse any particular level of retail pricing errors for enforcement purposes.

The procedure calls for 100 items from each store to be chosen for price verification using a sampling plan which provides an assessment of the store's pricing system. Some items were selected because they were being sold at their "regular" price while others were selected because they appeared in promotional materials or were featured in end-of-aisle or other in-store displays at a "sale" price.

RESULTS

Survey sites were not selected by a statistically designed survey procedure, therefore the results cannot be statistically projected to the Canadian marketplace as a whole. The Bureau's survey in the summer of 1996 found a combined average error rate of 6.3% (3.0% overcharge rate and 3.3% undercharge rate, see: Table A). However, the global figures are not conclusive because of differences among the various retailers surveyed. The Bureau also found that the frequency of overcharges versus undercharges was fairly evenly split (47.8% and 52.2% respectively).

Table A
Summer 1996 - Combined Results for 84 companies

Total number of stores	Total Number of Items	Total Average Combined Error Rate (%)	Total Overcharge Rate (%)	Total Undercharge Rate (%)
162	15 132	6.3	3.0	3.3

Table B
Summer 1996 - Results by category for 162 Stores

Retail Category	# Stores	Combin-ed Error Rate (%)	Overcharge (%)	Undercharge (%)
Grocery	42	3.5	1.3	2.2
Drug	22	6.4	3.1	3.3
Department	62	7.0	3.6	3.4
Hardware/Home Improvement	17	7.2	3.9	3.3
Business/Office Supply	5	6.2	3.5	2.6
Home Electronics	13	12.1	4.7	7.4
Automotive	1	13.0	5.0	8.0

Following the 1996 summer survey, the Bureau carried out selective monitoring to focus on individual businesses. These were conducted in the fall of 1996, the summer of 1998, and the spring of 1999. This monitoring applied the same general methodology as the 1996 summer survey to a smaller sample. Since the selection criteria for inclusion in these monitoring activities differed for each exercise conducted, it is not appropriate to draw a direct comparison between the 1996 survey and the subsequent monitoring activities.

In the fall of 1996, the Bureau monitored 35 stores, (operated by 20 companies from all of the retail

categories) from the summer survey which had a combined error rate of 10% or more. The average combined error rate, determined by this fall monitoring, was 11.1% (overcharge of 5.6 % and undercharge of 5.5 %). This indicates that there were no significant changes amongst the stores that were monitored.

Following the fall 1996 monitoring, the Bureau concentrated its follow-up efforts on specific companies which had stores exhibiting an *overcharge* rate of greater than 5% . Senior officers of 14 companies were advised of the results for their stores. To ensure that commitments made by the management of these companies to implement and improve systems with respect to price accuracy were met, further monitoring was conducted in the summer of 1998.

In the summer of 1998, the Bureau monitored stores belonging to these companies and found an average combined error rate of 7.2% (overcharge 3.7 %, undercharge 3.5 %). It found marked improvement in some store categories, such as grocery stores, drug stores, business and office supply stores, and some improvement in most remaining categories.

Further monitoring efforts in June 1999, focused on companies exhibiting a 2% or greater overcharge error rate in 1998. Sixty three stores (operated by seven companies representing 5 retail categories) were monitored. In this instance, no companies were selected from the drug or grocery store categories.

Although this last monitoring effort showed an average combined error rate of 8.9% (overcharge 4.2% and undercharge 4.7%), there were improvements in some categories, most notably business and office supply stores and home electronics stores. Some companies have demonstrated no improvement, and the Bureau will consider them on a case-by-case basis.

Is Price Accuracy Improving?

The survey of 1996 and the subsequent targeted monitoring, has undoubtedly enhanced awareness of this issue on the part of consumers and business. In 1997, with the encouragement of the Bureau, the retail industry struck a Price Accuracy Committee representing a number of major retail associations and retailers. This Committee, in consultation with its members, produced a guide called “Pricing Accuracy Guidelines - Recommendations for Canadian Retailers.” The guide promotes accurate pricing amongst its members. It was made available to both member and non-member companies. Many stores now display signs explaining their price accuracy policy to consumers.

With the assistance of the Consumers Association of Canada, the Bureau published a consumer pamphlet, “Be a Smart Shopper - Make Sure You Pay the Right Price”. The pamphlet contains a number of tips for consumers to follow when shopping.

As a consequence of targeting its follow-up efforts on the performance of individual companies, the Bureau is not able to comment on the relative change of overall price accuracy in the Canadian

marketplace. The Bureau has found steady improvement in many of the companies that have been the subject of monitoring since 1996, however some individual companies have not improved at all. The Bureau will be addressing these issues in the fiscal year 2000-2001. In addition, the Bureau will be undertaking a more comprehensive survey in the Spring of 2000 in order to obtain a better picture of price accuracy in the Canadian marketplace.

The Bureau continues to recommend that consumers be vigilant about pricing accuracy. They are encouraged to note prices or special discounts as they are walking through the store, to point out errors if they think that they are being overcharged at the cash, and to check their receipt before walking away.

Consumers are also encouraged to report instances of price inaccuracies to the Bureau Information Centre:

Toll Free	1-800-348-5358
National Capital Region:	(819) 997-4282
TDD (for hearing impaired):	1-800-642-3844
Fax:	(819) 997-0324
E-mail:	compbureau@ic.gc.ca