

**Insights into Gaining the Best Value for Consumers
Purchasing Consumer Electronics**

A Study Released by



**The American Consumer Institute
Center for Citizen Research**

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November 10, 2009

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Executive Summary

Wal-Mart has developed a reputation and brand that conveys its position as being the lowest-priced retailer.¹ With its purchasing power and scale, as well as being the world's largest retailer, many shoppers believe that Wal-Mart has the lowest prices, though actual empirical evidence supporting this view is generally scant and somewhat anecdotal. While the retailer may have among the lowest prices for its goods, so may others; and while it may have the lowest prices in some of its departments, it unlikely offers the lowest prices in every category of products it sells or for every product.

One area where consumer savings is so important is consumer electronics. According to the Consumer Electronics Association, the average American household owns 23 consumer electronic products and has spent over \$1,200 in last twelve months.² During this holiday season, 80% of consumers plan to buy consumer electronics for themselves or as a gift for others.³ Wal-Mart has aggressively expanded into the consumer electronics market offering “rollback prices” and now accounts for 20% of the retail market behind only Best Buy. But is Wal-Mart the low priced retailer for consumer electronics?

This report looks at the perception and the facts as to whether Wal-Mart is the low priced retailer for consumer electronics products. The report begins by surveying consumers who have shopped at the two largest consumer electronics retailers – Wal-Mart and Best Buy – and asks

* This research, written and released by the American Consumer Institute Center for Citizen Research, is based on public data, including analyst reports, a market basket price analysis of like products by TeleNomic Research, which received an unrestricted grant from Best Buy, and consumer survey of electronic shoppers by the Research Network. The American Consumer Institute Center for Citizen Research, an independent nonprofit educational and research institute, does not endorse any retail provider, but provides this information as a service to consumers. A special thanks to Professor Joseph Fuhr, economics professor at Widener University and Senior Fellow at the American Consumer Institute, for helpful comments on this report, and Katie Miller, who edited the document. For more information about the institute, see www.theamericanconsumer.org.

¹ See “Wal-Mart: Low Price Reputation Generated High Sales,” [Investorguide.com](http://www.investorguide.com/120508/Wal-Mart-Low-Price-Reputation-Generated-High-Sales.html), 12/5/2008, at <http://www.investorguide.com/120508/Wal-Mart-Low-Price-Reputation-Generated-High-Sales.html>.

² Data provided by the Consumer Electronics Association, Arlington, VA., www.ce.org.

³ “The 16th Annual CE Holiday Purchase Pattern Study,” The Consumer Electronics Association, October 2009.

consumers their opinions about which store has the lowest prices, as well as about other attributes that are important to consumers, such as quality and staff support. Finally, this report determines which store offers, in fact, lower-priced consumer electronics based on the prices of a comprehensive market basket of products available in both stores. The following are the key findings of this report.

- For retail electronic goods, consumers believe that product quality, knowledgeable staff, and finding in-store help are more important factors than retail price.
- In terms of which company does a better job serving its customer, shoppers rank Best Buy higher than Wal-Mart in most respects, including overall, as well as in terms of higher product quality, more knowledgeable staff, ease in finding help, wider electronics selection and better post-sales support.
- In contrast, consumers (particularly lower income) overwhelmingly believe that Wal-Mart offers lower prices for consumer electronics.
- However, contrary to conventional wisdom, an analysis of a market basket of electronic products finds no significant difference between Best Buy's and Wal-Mart's consumer electronic prices – either for online or in-store shopping.

In other words, the major finding of this report is that there is little evidence to support the public perception that Wal-Mart is the lowest priced retailer for consumer electronic goods. Why consumers have this belief is another matter – possibly reflecting effective marketing or customer shopping experiences across other departments within Wal-Mart. It may also reflect some common retail tactics – such as selling inexpensive off-brands, offering only the least expensive model in manufacturer's product line, avoiding post-sales services (such as repair, delivery and installation), and giving consumers inadequate information to compare prices between stores.

To this last point, Wal-Mart does not put large shelf tags on all of its electronic products. The lack of shelf information, in-store help and knowledgeable staff make it difficult for consumers, particularly low-income consumers and less “tech savvy” consumers, to make informed decisions when buying electronic products, particularly as these products have become increasing more complex and technical in nature. If more consumer information were made

available, Wal-Mart consumers would be better able to compare products and prices, facilitating better buying decisions. That, in turn, would allow consumers to find better deals and save on their purchases.

In summary, this research finds that consumer electronic shoppers need to do their homework and carefully compare prices. While many consumers, particularly lower income consumers, believe that Wal-Mart has lower prices, the reality is that Wal-Mart's consumer electronics products are priced about the same as Best Buy's products. Additionally, because consumers require more information to make informed decisions on the purchase of electronic equipment, consumers may in many instances receive a better overall value by purchasing from a full-service retailer. As we edge toward the holiday season, these preliminary results amplify for consumers the importance of comparative shopping before making a purchase.

Insights into Gaining the Best Value for Consumers Purchasing Consumer Electronics

Introduction

There is a general belief that big box stores provide consumers with potentially lower prices than their smaller counterparts, possibly the result of volume discounting and greater efficiencies. This notion is supported by survey research which found that 97% of consumers have shopped in big box stores and 86% of them cite lower prices as the reason.⁴ Most notable among the big box stores is Wal-Mart, the world's largest retailer. The perception is that Wal-Mart, perhaps through its economies of scale and scope or its effective branding, is well-regarded as the low-priced provider of retail goods to consumers. And, while Wal-Mart may well be low-priced in many cases, the chain offers such a wide sundry of products – including prescriptions, apparel, toys, health and beauty aids, small appliances, food, hardware, and household goods – that it seems expedient to generalize that Wal-Mart is, across-the-board, the lower-priced retailer. While it may be the case that Wal-Mart offers the lowest prices for some products, it does not do so for all product categories.

The Circuit City and Tweeter has retailers looking to gain market share by offering more attractive pricing and finding ways to bring consumers into their stores. Best Buy and Wal-Mart, currently the two largest retailers in the consumer electronics market and the focus of this study, are aggressively fighting for these consumers. For its part, Wal-Mart has expanded its electronics product line, widening aisles, and adding new displays.⁵ Meanwhile, Best Buy has responded by airing ads that point to an experienced sales staff and wider selection of products.

The average American household owns 23 consumer electronic products and has spent over \$1,200 in last twelve months.⁶ During this holiday season, 80% of consumers plan to buy consumer electronics for themselves or as a gift for others.⁷ Retail electronic price competition remains intense, with quality adjusted prices generally declining due to innovation, technical

⁴ “American Consumer Institute Survey Finds Consumers Prefer Shopping at Larger Stores and Wholesale Clubs” News Release, American Consumer Institute, April 13, 2006.

⁵ “Best Buy Gives up Market Share to Wal-Mart,” *Retailer Daily*, June 3, 2009, www.retailerdaily.com.

⁶ Data provided by the Consumer Electronics Association, Arlington, VA., www.ce.org.

⁷ The 16th Annual CE Holiday Purchase Pattern Study, the Consumer Electronics Association, October 2009.

change, and market rivalry. In addition, and in light of the slow economy, retail electronics may become a bright spot for consumers looking to save on their purchases this holiday season. According to seasonally adjusted figures from the Bureau of Labor Statistics Consumer Price Index, prices from September 2008 to September 2009 fell by 1.3%. However, during the same time period, consumer prices for electronic goods fell much faster, with photographic equipment, other video equipment and television prices falling by 3.6%, 10.15% and 27.1%, respectively. As the economy begins to recover from the current recession, the combination of low retail prices and rebounding discretionary income will provide savings opportunities for consumers as we approach the year's end. The key is for consumers to take advantage of this heightened rivalry and favorable retail electronic prices through comparative shopping.

However, price comparisons for electronic goods can be difficult and very confusing to make, as shoppers assimilate technical specifications in industry jargon and subtle quality differences in products. To better understand how consumers deal with this complexity, this report surveys consumers as to what they see as important factors when shopping for consumer electronics, such as higher product quality and more affordable prices. This report will analyze the consumer dynamics between Best Buy and Wal-Mart: first, by surveying consumers on their opinions of what is most important to them and which firm – Best Buy vs. Wal-Mart – better meets their needs for electronic products; and second, by actually comparing the prices of these firms to test if consumer perceptions match reality. In effect, does Wal-Mart have lower consumer electronic prices, as some may believe?

Consumer Perceptions and Preferences

In evaluating what attributes consumers take into account when considering electronic products and their preference of retail providers, a nationwide telephone survey of consumer opinions was conducted.⁸ The survey covered a 13-day span, beginning on August 27th and ending on September 8th, 2009. Respondents were limited to those 18 years of age or older, and prospective respondents were screened for those having shopped at both Best Buy and Wal-Mart. In other words, consumers that only shop at Best Buy or only Wal-Mart were excluded from the survey, since it was felt that shopping experience in both stores was necessary to make informed

⁸ The survey questions are listed in **Appendix I** of this report.

judgments about these stores. After finding consumers who had shopped in both shores, a trained interviewing staff at the Research Network completed 1,050 household interviews, targeting every state and the District of Columbia. A list-assisted sampling method was used to develop the random-digit dial sample.⁹

The overall response rate for this research was 31.7%.¹⁰ Cases of unknown eligibility, such as answering machines, busy signals, no answer, and known ineligibility, such as disconnected numbers, businesses, and fax numbers, were excluded from this calculation as recommended by the American Association for Public Opinion Research.¹¹ Additionally, a five-callback rule before substitution was implemented for records of unknown eligibility.¹²

Several measures were taken to increase the response rate and the completion rate in this study. Those who initially refused were contacted again later and asked to complete the survey. Household respondents that continued to refuse were later contacted by a supervisor and encouraged to participate. Of those beginning the survey, 96.2% completed the interview. Only 3.8% of those beginning the survey finished less than 100% of the questions, resulting in 41 partial-completes. The results have an error rate of plus or minus 3 percentage points, in the worst case.¹³

The Importance of Quality and Price

After the initial screening questions to identify the consumer as both a Wal-Mart and Best Buy shopper, the survey asked electronics consumers to rank (on a scale from 1 to 5, with 1 being least important and 5 being most important) how important various factors are when shopping for consumer electronics goods. The factors included the importance of high-quality

⁹ R. Tourangeau, "Survey research and societal change," *Annual Review of Psychology*, vol. 55, 2004, 775-802.

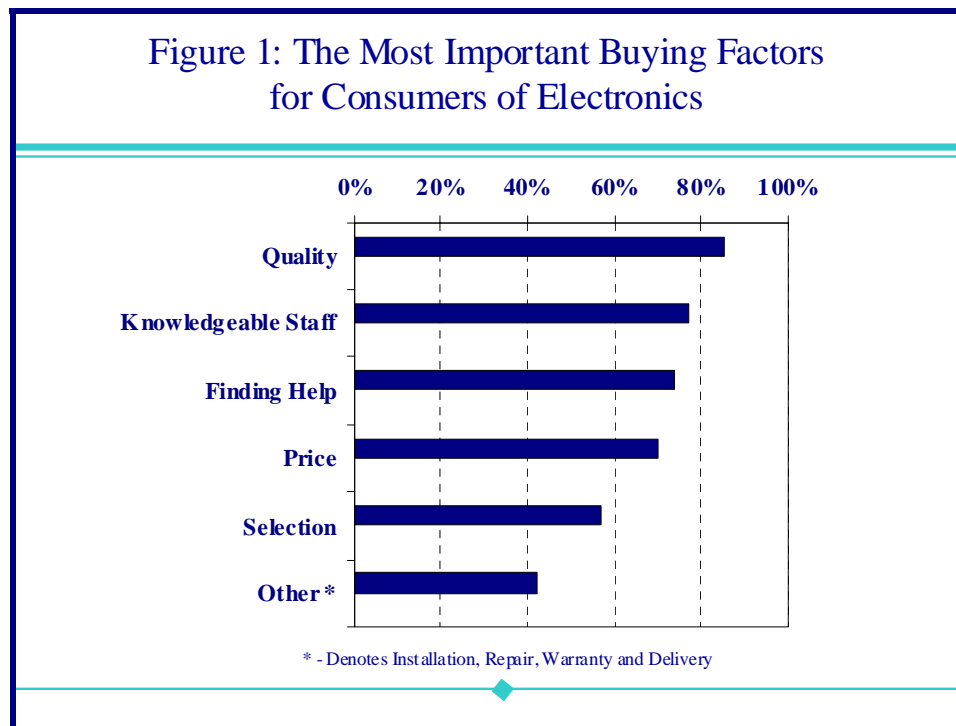
¹⁰ American Association for Public Opinion Research, response rate calculation RR6, see <http://www.aapor.org>.

¹¹ *Standard Definitions: Final Dispositions of Case Codes and Outcome Rates for Surveys*, American Association for Public Opinion Research. Ann Arbor: AAPOR, 2004.

¹² Of increasing concern to survey researcher is the use of call-screening devices, see P. Tuckell and H. O'Neill, "The Vanishing Respondent in Telephone Surveys," *Journal of Advertising Research*, 42 (5), 2002, 26-48. The Data-Tel predictive dialer used in this research anticipates call screening devices used to indicate that a household is ineligible, commercially known as a "Tele-Zapper." Additionally, this software passes calls that it deems as screened through the use of privacy blockers and screening services to an operator to determine the appropriate disposition code or action. This operator then continues the call normally.

¹³ A discussion of the results will follow, but detailed reports are available in **Appendix II** of this report.

products, having the most knowledgeable staff, being easiest to find help, having lowest priced products, having the widest product selection, and having more after-sales support options (such as installation, repair, warranty and delivery). As **Figure 1** shows the percentage of consumers who ranked the factor as being “most important” (a rank of 5) to them when shopping for consumer electronics. As the figure shows, having a lower product price (70%), while important, was less important to consumers than higher product quality (85%), having access to a more knowledgeable staff (77%), and being able to find in-store help (74%), which may reflect, in part, consumers’ desire for better information on products when shopping for consumer electronics.¹⁴

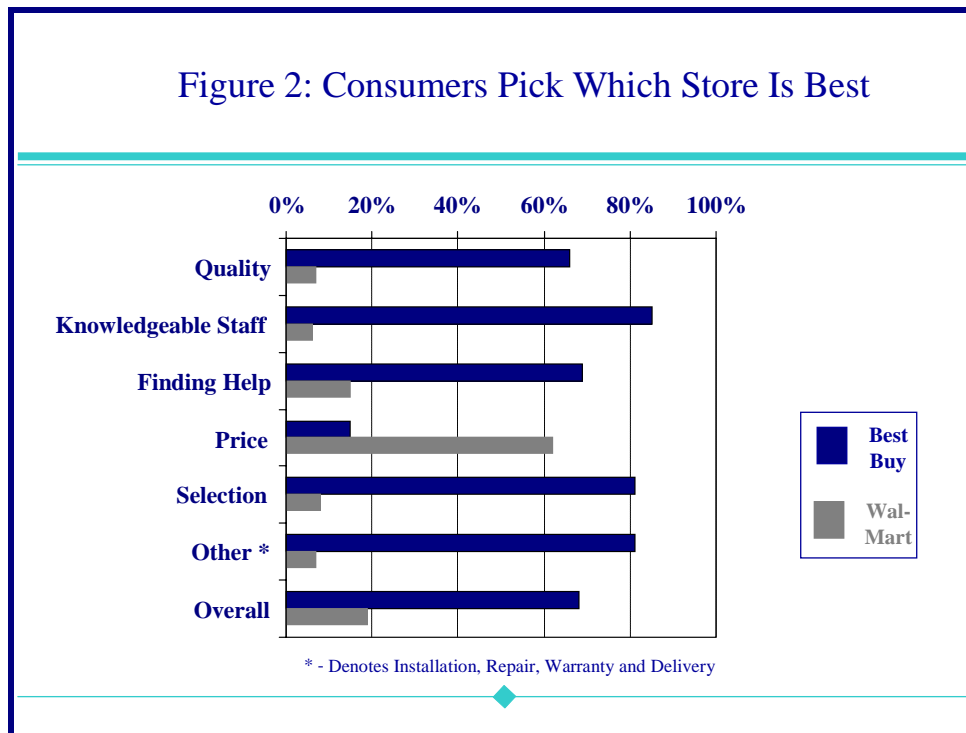


Preference: Wal-Mart or Best Buy

Next, consumers were asked to consider which of the two stores ranked better for the following factors – higher service quality, more knowledgeable staff, easier to find help, lower price, wider selection, and more options for after-sales support. According to the survey results, consumers feel that Best Buy provides significantly better quality (66% vs. 7%), has a more

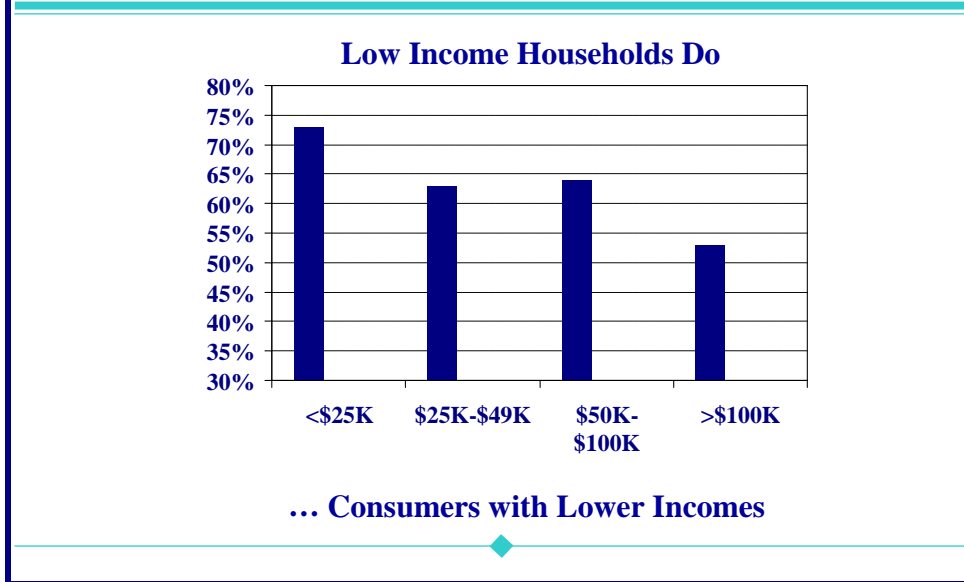
¹⁴ 96% of consumers ranked quality a “4 or 5.” Again, details are provided in **Appendix II** of this report.

knowledgeable staff (85% vs. 6%), makes it easier to find in-store help (69% vs. 15%), and provides a wider product selection (81% vs. 8%) than Wal-Mart – in addition to providing better after-sales support (69% vs. 7%). Overall, consumers picked Best Buy – by 68% to 19% over Wal-Mart. However, consumers did perceive Wal-Mart substantially better in one area – price (14% vs. 62%), as depicted in **Figure 2**.



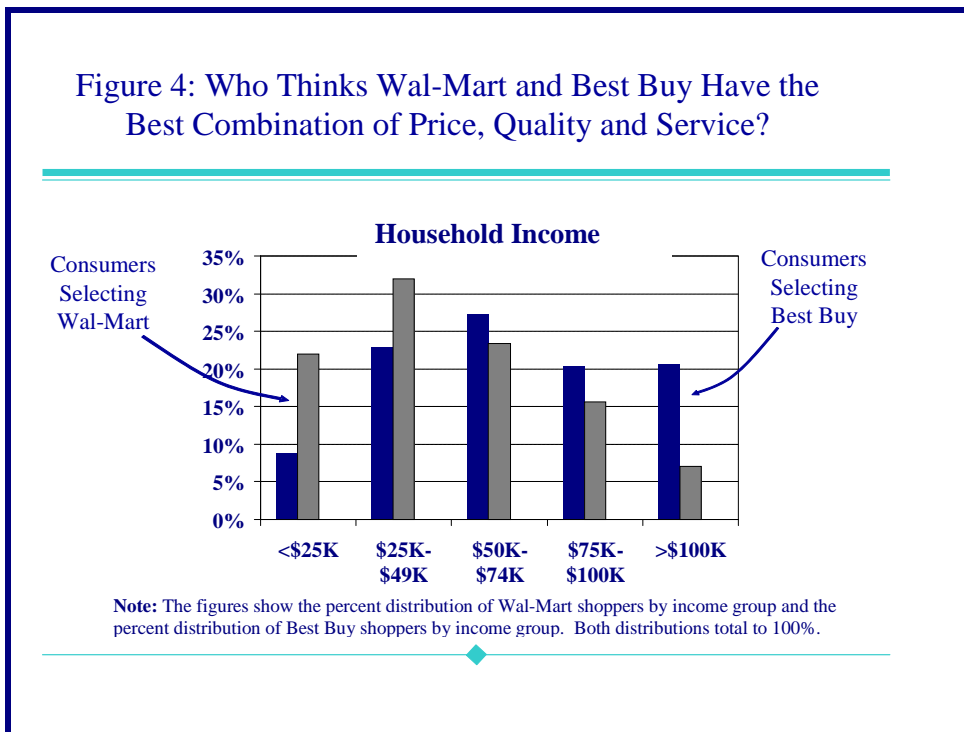
Who believes that Wal-Mart is lower priced? The answer may depend on the socioeconomic and demographic characteristics of the shopper. As **Figure 3** shows, the vast majority of lower income consumers believe that Wal-Mart has lower prices, but as household income increases, the Wal-Mart's perception of having lower prices narrows. In effect, consumers that have lower incomes want to shop in stores that they believe have lower prices. Since these surveyed consumers have shopped at both Wal-Mart and Best Buy, what the survey results do not show is that the demographic and socioeconomic make up of shoppers who only shop at Wal-Mart or only at Best Buy could have even more divergent characteristics than shown here, but this is a topic for further research.

Figure 3: Who Thinks Wal-Mart Has The Lowest Prices?

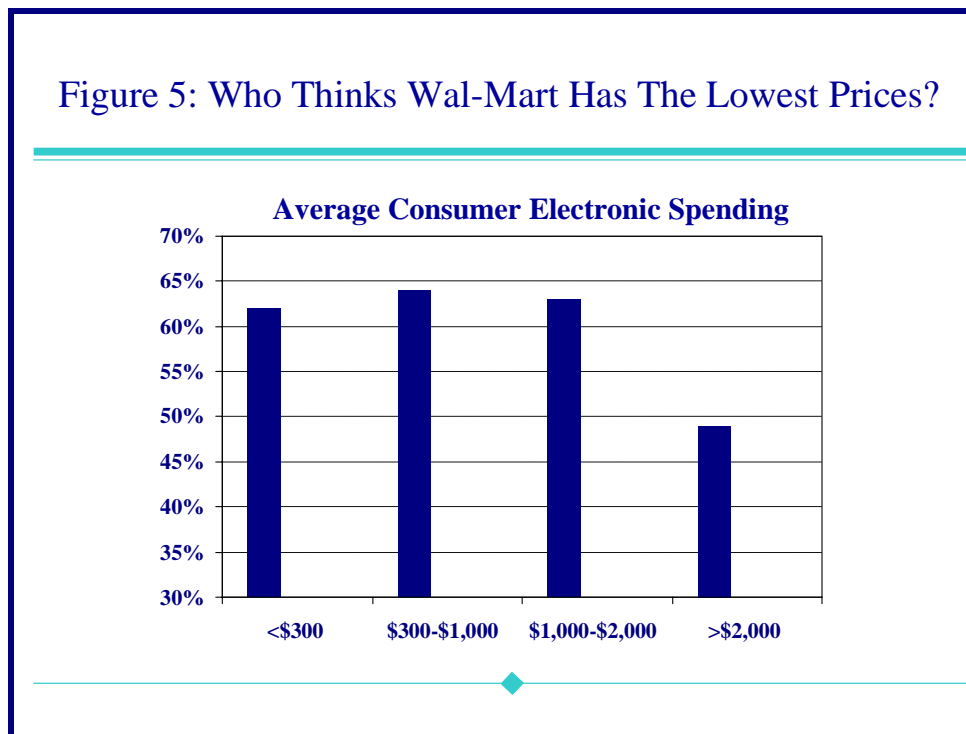


Similarly, as shown in **Figure 4**, as household income increases so does support for Best Buy as best overall.

Figure 4: Who Thinks Wal-Mart and Best Buy Have the Best Combination of Price, Quality and Service?



Along similar lines and as shown in **Figure 5**, as consumers who spend more on consumer electronic products, they are less likely to believe that Wal-Mart has lower prices. This may well reflect the correlation between income and retail electronic spending, but it may also reflect something about the nature of some Wal-Mart shoppers and their perceptions of which store is lower priced. Consumers that spend less and buy few electronic products may be less inclined to shop around, have less experience in buying electronic products and rely more on the perception of who offers lower priced products.



If we think of “electronic savvy” consumers as those with more experience with shopping for electronics, comparing prices and models between stores, wanting technical details of products and buying more (and spending more) on electronics, these more inquisitive shoppers may better fit Best Buy’s customers, since they spend more on electronic goods, have a higher rank for Best Buy and believe that having access to a more knowledgeable staff is very important. On the other hand, if less savvy customers have less experience shopping, rely on perception and spend less in total on electronics, these shoppers may better fit Wal-Mart’s customers. This raises the question of whether or not Wal-Mart is truly low priced or whether

consumers are making less informed decisions, when simply comparing prices could provide the biggest savings to them.

In summary, despite the majority of consumers preferring Best Buy in terms of the combination of quality, price, knowledgeable staff and other factors, the majority of consumers believe that Wal-Mart has lower prices, consistent with its highly successful branding and publicizing of rollback prices. Is it perception or reality?

The Perception of Lowest Prices

While most surveyed consumers believe that Wal-Mart has lower prices than Best Buy, and this may be the case, it may also reflect a number of factors that have contributed to such an belief: 1) selling inexpensive off-brand products that may or may not meet the same quality of standards of products sold elsewhere, or “spec buying” where a manufacturer produces a brand solely for sale by the retailer, making identical comparisons between stores impossible; 2) selling the lowest quality model of a manufacturers product line; 3) lack of post-sale services; and 4) providing inadequate information to help the consumer make informed comparison of products. These issues and techniques may provide Wal-Mart and other stores with an appearance of lower priced goods, while making it harder for consumers to match identical products from one store to another. If identical products cannot be easily found, then prices cannot be directly compared.

1. Off-Brand and Spec Buying

All stores tend to have a few models and brands that other stores do not have, and for electronic goods, Wal-Mart and Best Buy are no exceptions. For example, Best Buy offers a presumed higher-quality private label lineup called Insignia, while Wal-Mart may carry just one HDTV set produced by Element and another set by Emerson. These flat panel TVs are priced lower than the head-to-head brands that Best Buy and Wal-Mart offer, such as Samsung and Sony HDTVs. A flat screen TV for less than \$199 at Wal-Mart may not be identical to any TV offered at Best Buy (despite its wider selection and range of quality). How do you compare prices if Wal-Mart’s P&F USA HDTV is not sold at Best Buy? The prevalence of different brands and off-brands makes it nearly impossible for customers to compare products, particularly if there are substantial quality differences.

Another way that retailers differentiate their products is to strike a deal with a manufacturer to produce a product that has unique specifications (and a unique model number), which the retailer will purchase at a favorable price in high volume. While all retailers can and may do “spec buying,” Wal-Mart, due to its size and potential economies of scale, can get manufacturers to make a deal to produce electronic equipment unique to Wal-Mart, giving it a potential advantage that other retailers cannot match. For instance, Wal-Mart’s introduction of an HP \$298 laptop (model number CQ50-139WM)¹⁵ with attractive specifications for a low-end model is likely a product designed just for Wal-Mart by HP. Similarly, Best Buy sells an HP printer (model C335) that looks identical to one sold at Costco (model C336), except one printer includes a USB cord and the other does not. Other manufacturers, such as ACER, may produce spec products as well. So, the practice may be common and, while there are certainly the potential for savings for consumers, consumers need to be careful to understand how seemingly similar products are not necessarily identical between stores.

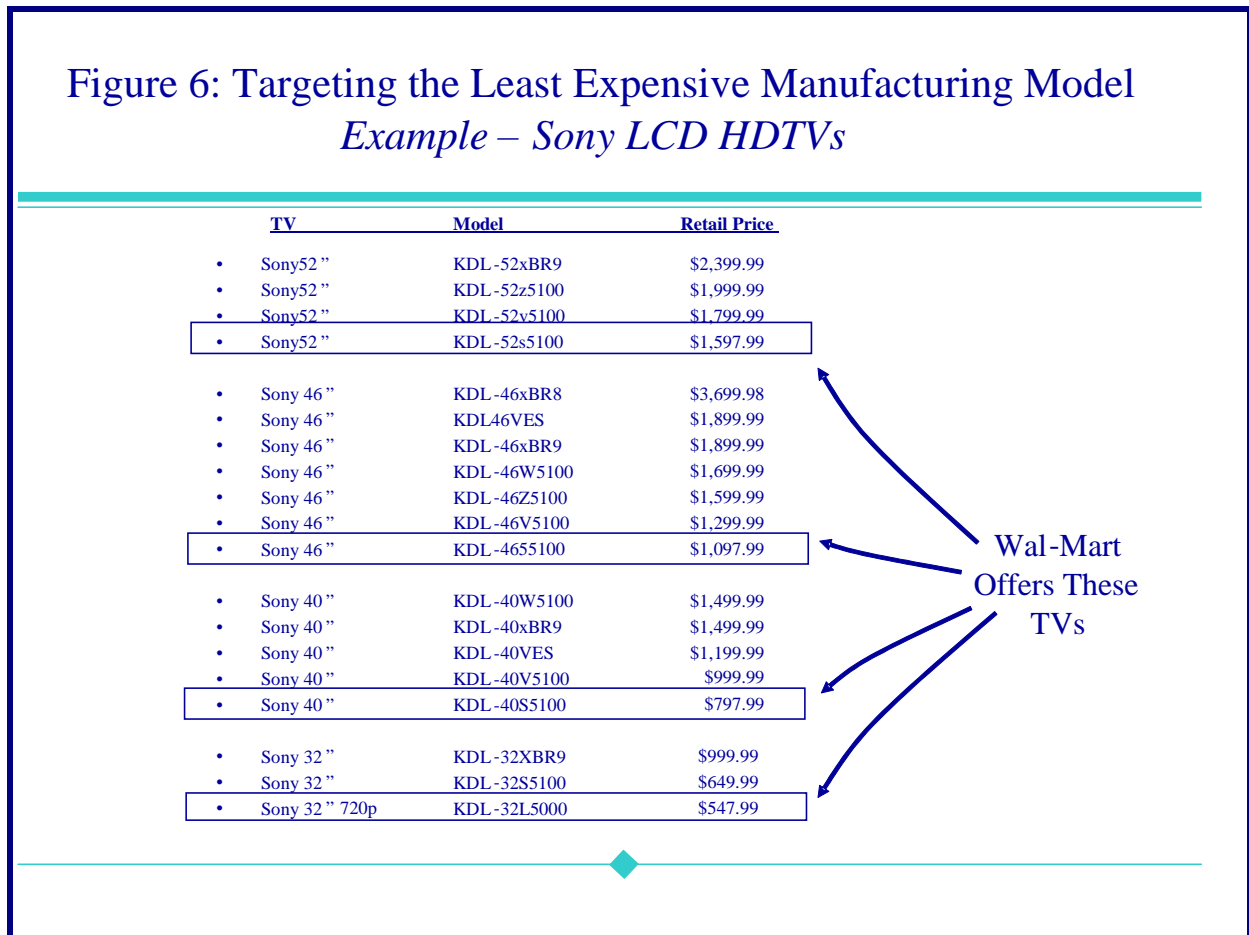
Consider the Blu-Ray 1080p DVD players sold at Best Buy and Wal-Mart. The specifications for Wal-Mart’s product (Samsung model DB-P1590 with a manufacturer’s suggested retail price of \$249.99) look identical to Best Buyer’s presumably newer model (Samsung model DB-P1600 with a suggested manufacturer’s retail price of \$299.99). However, while we estimate that Best Buy discounts its Blu-Ray player by \$70 off the manufacturer’s suggested retail price and Wal-Mart discounts its player by only \$32, Wal-Mart’s shelf retail price was less -- \$218 compared to \$229.99. Will consumers take the time to research the different model numbers and specifications, and will they understand which is the better deal?

Another example is that the product line-up between stores is not always the same. For instance, Wal-Mart sells the Sony Bravia 32” 720p LCD HDTV (model KDL32L5000), a model that Best Buy also sells, for about \$498 in its stores. However, at Wal-Mart Store #5281 in Woodbridge, NJ, the model was replaced by model (KDL32L4000) but priced the same -- \$498. Without a direct head-to-head comparison, there may be a perception of lower price, but the reality may not be so obvious.

¹⁵ Note the “WM” in the manufacturer’s model number. Is it just coincidence or does it stand for Wal-Mart?

2. Buying the Lowest Quality Model

When Best Buy’s Sony HDTVs are compared to those sold by Wal-Mart, a pattern develops. As **Figure 6** demonstrates, comparing Best Buy’s full line up of Sony HDTVs with Wal-Mart’s lineup, Wal-Mart appears to select only the least expensively priced Sony TV products. For example, for a 32” Sony, Wal-Mart offers only the lower quality resolution HDTV, a quality resolution that may soon be phased out, while Best Buy offers more choices and higher quality set with more functions and features.



Similarly, also as shown in **Figure 7**, Wal-Mart only sells Samsung’s least expensive models when compared to the full Samsung product line sold at Best Buy. Again, the 32” Samsung offered by Wal-Mart has a lower quality resolution compared to the other Samsung HDTVs offered by Best Buy.

Figure 7: Targeting the Least Expensive Manufacturing Model
Example – Samsung 32” LCD HDTVs

TV	Model	BBY Price
• Samsung 46 ”	UN46B8000	\$2,099.99
• Samsung 46 ”	UN46B7100	\$1,799.99
• Samsung 46 ”	LN46B750UF	\$1,699.99
• Samsung 46 ”	UN46B6000VF	\$1,599.99
• Samsung 46 ”	LN46B650TIF	\$1,499.99
• Samsung 46 ”	LN46B7640	\$1,399.99
• Samsung 46 ”	LN46B550KIF	\$1,199.99
• Samsung 46 ”	LN46B530P7F	\$1,199.99
• Samsung 40 ”	LN40B6000FX2A	\$1,599.99
• Samsung 40 ”	LN40B640	\$999.99
• Samsung 40 ”	LN40B630	\$949.99
• Samsung 40 ”	LN40B550K1FXZA	\$899.99
• Samsung 40 ”	LN40B530P7FXZA	\$799.99
• Samsung 32 ”	UN32B6000V	\$1,299.99
• Samsung 32 ”	LN32B640	\$799.99
• Samsung 32 ”	LN32B550K1F	\$709.99
• Samsung 32 ”	LN32B460B2D	\$649.99
• Samsung 32 ”	LN32B460B2D	\$549.99
• Samsung 32 ” 720p	LN32B360C5D	\$449.99

Wal-Mart's
TVs

3. Post-Sale Services

In addition, Best Buy offers in-store delivery and other post-sales services such as repair and warranty, which Wal-Mart does not. For instance, for HDTVs, Best Buy offers delivery, hook-up, and disposal of the old TV, and if the purchase is valued over \$900, Best Buy will include these services at no additional charge. Wal-Mart does not offer these in-store services, which makes comparisons based solely on price not completely accurate.¹⁶ As one Wal-Mart employee in Tampa explained, “We will take it to your car and that’s about it.”

4. Providing Inadequate Information

In the course of comparing product models and prices, it became very clear that consumers could easily be confused when buying electronic goods. It is true that buying

¹⁶ Wal-Mart has attempted to address this deficiency several times in the past, most recently announcing plans to sell third-party tech services for installation and repair. Michele Gershberg, “Wal-Mart Offers Tech Support for Shoppers,” *Reuters*, Oct. 22, 2009.

consumer electronics is much more complex than, say, buying eggs or bread. Consumer electronics are produced by many manufacturers and are widely differentiated by model, type, color and other features. Product specifications add a layer of complexity to consumer buying decisions – with technical terms like memory, storage, pixels, format, connectivity, compatibility, compression, HD decoders and so on. This means that collecting information can be a critical step for those shoppers wishing to make good buying decisions and save money.

Consumers may be disadvantaged by imperfect or asymmetric information when sellers have more and better information than buyers.¹⁷ Unlike assumptions of “perfect information” described in economic textbooks on competition, consumers can have an incomplete or inaccurate understanding of facts material to a particular choice. The costs of acquiring pertinent information – search costs – are often substantial. Rather than bearing search costs, the outcome of which is not predictable, consumers often buy products about which they are poorly informed.¹⁸ For this reason, it is crucial that consumer be given adequate information to understand the product they are buying and have enough information to make objective product and price comparisons.

In our comparison of Wal-Mart and Best Buy prices, it became obvious that getting adequate information on electronic products, particularly from Wal-Mart, was not easy. For example, Wal-Mart did not have all of its SKU and model numbers listed in its online product specifications. As **Figure 8** shows, except for price, Wal-Mart’s shelf labels often did not have information to clearly identify the product, model and pertinent specifications, and the font size

¹⁷ The implications of imperfect information informing consumer choices have been intensively studied. An extensive review and summary is beyond our scope here, but we can recommend a handful of studies and the references they cite. See Joan K. Lewis, Teresa Mauldin, “Returns to Investments in Information: Can Investments Reduce Bad Purchase Experiences of Consumers?” *Journal of Consumer Studies and Home Economics*, 20 (2), 183–199, 1996. The authors examine the impact of consumer information, information sources, information acquisition costs, and consumer demographics on “bad purchase” experience. The results suggest that age, education, extent of social contacts with relevant information and others were relevant. See also, George B. Sproles, Loren V. Geistfeld, and Suzanne B. Badenhop, “Types and Amounts of Information Used by Efficient Consumers,” *Journal of Consumer Affairs*, Vol. 14, Issue 1, p. 37, June 1980. The paper examines the efficiency of consumer decision-making as indicated by the types and amounts of informational resources utilized. They classify consumers in three groups ranked by their relative efficiency in making optimal choices in the context of their wants, needs and preferences, and the information available about alternatives. Taken together these papers indicate that inadequate consumer information leads to loss of consumer welfare; that information acquisition by consumers is often costly; and, that investing in better information can lead to increased consumer welfare.

¹⁸ See A. Postlewaite, *Asymmetric Information, Allocation, Information, and Markets*, (John Eatwell, Murray Milgate, Peter Newman, eds.), The New Palgrave, WW Norton, NY and London, 1989, pp. 35-38.

on the shelf labels was so small that the product name, SKU and model number were nearly illegible, making collection of basic information very difficult for some items. This made the price comparisons between stores very difficult and time consuming. Given the fact that Wal-Mart's consumers are more likely to have lower incomes, may be less tech-savvy, and believe that Wal-Mart has lower prices, it is very possible that consumers are buying electronic products at Wal-Mart without actually knowing if Wal-Mart is, in fact, lower priced. If customers do not speak English, it would be even more difficult to get technical information, particularly since Wal-Mart provides a lower-level of sales support. Inadequate information may influence consumer buying decisions and perpetuate the perception that Wal-Mart is the "low-price" retail brand for electronic products, and it may mean that consumers are paying too much for these products, because they are unable to make head-to-head comparisons of products with other electronic retailers.

Figure 8: Is Wal-Mart Priced Less?
Are We Comparing The Same Item?

Best Buy?



Wal-Mart?

Consumers Need Better Information

So, while it is helpful to note that consumers have a perception that Wal-Mart is low priced (and they may well be low priced), the basis for this relies solely on their opinion. Opinions can be influenced by Wal-Mart's low prices for non-electronic products, as well as by practices that include the use of off-brand products, spec buying, featuring only the least

expensive models in a manufacturer's line, excluding post-sale services, and providing consumers with inadequate product data to make informed decisions. However, unlike opinion research, lower prices can be corroborated with real empirical evidence. Does Wal-Mart, in fact, have lower priced electronic goods compared to Best Buy? This is a testable hypothesis, and the next section of this study will compare prices of identical electronic products between these two retail chains.

Price Analysis

1. Deutsche Bank Finds Best Buy to Have Lower Prices for HDTVs

While ranking quality and other attributes is purely a subjective consumer assessment, price can be measured objectively and directly. As the Bureau of Labor Statistics compares retail store prices when calculating its Consumer Price Index, electronic prices can be compared directly by finding like products (model numbers) and developing a common market basket of goods. An example of this on the retail level was done by Charles Grom of J.P. Morgan, who compared 31 identical grocery items and found Wal-Mart to be lower priced than Kroger and Safeway for these food items.¹⁹

As to electronic prices, a recent analyst report compared Wal-Mart prices with Best Buy. Deutsche Bank Securities, in their August 31, 2009 consumer retail research report, analyzed prices for identical models of HDTVs in both Wal-Mart and Best Buy, and found Best Buy to have maintained lower monthly average prices over the last 11 consecutive months ending in August 2009.²⁰ The Deutsche Bank analysis suggests that the perception of Wal-Mart's position as the low-priced provider may, in fact, be a misperception.

In order to expand on the Deutsche Bank analysis and test whether or not Wal-Mart has lower prices than Best Buy, the first step is to identify the common products (by model number) between the two stores and develop a market basket of goods. The market basket was developed by listing and comparing products, carefully checking model numbers and noting the company SKU numbers. In order to make the analysis manageable and focus on products that consumers

¹⁹ See John Jannarone, "Wal-Mart Sharpens its Pricing Pincers," *Wall Street Journal*, M12, October 6, 2009.

²⁰ Mike Baker and Adam Sindler "Best Buy: Trends Should Bottom This Quarter," Deutsche Bank, Global Markets Research, August 31, 2009, page 4.

would be more apt to make price comparisons, the market basket included electronic hardware only – such as digital camcorders and cameras, computing equipment, HDTVs, home theatre, MP3 devices, DVD players and so on – and not accessories and products sold in jewel cases, like music. Computers and cellular phones were problematic, since seemingly similar products were not, in fact, identical, sometimes due to service terms and provider commitments, or due to an additional feature, such as a free cable or extra memory.

2. Developing a Head-to-Head Price Comparison

Following along the lines of the Deutsche Bank report, a broader and more comprehensive market basket of electronic products between Best Buy and Wal-Mart was developed for the purpose of analyzing price levels between the two stores. Similarly, in order to understand whether Best Buy's prices are higher or lower than Wal-Mart's prices, the products needed to be identical.

Once the initial market basket was determined, TeleNomic Research priced a market basket of hardware products in 6-paired Wal-Mart and Best Buy stores, located in near-proximity with one another in order to account for any price competitive effects. In one incident, the Wal-Mart was paired with a Best Buy that was located across the parking lot, and in another incident the paired stores were on the adjoining blocks. Using MapQuest, these paired stores averaged 1.54 miles apart by car, with 3.05 miles being the furthest apart.

The 12 stores were located in: New Haven, CT (Wal-Mart Store #5439 and Best Buy Store #1488 on September 9, 2009); Woodbridge, New Jersey (Wal-Mart Store #5281 and Best Buy Store #456 on September 10, 2009); Frederick, MD (Wal-Mart Store #2233 and Best Buy Store #427 on August 29, 2009); Fairfax, VA (Wal-Mart Store #2015 and Best Buy Store #273, on September 6, 2009); Orlando, FL (Wal-Mart Store #890 and Best Buy Store #571 on September 3, 2009); and Tampa, FL (Wal-Mart Store #5036 and Best Buy Store #462 on September 4, 2009). Four of the six Wal-Mart stores were Supercenter stores, which offer a wider selection of groceries and other goods than other Wal-Mart stores, but the electronic selection was similar in all stores.

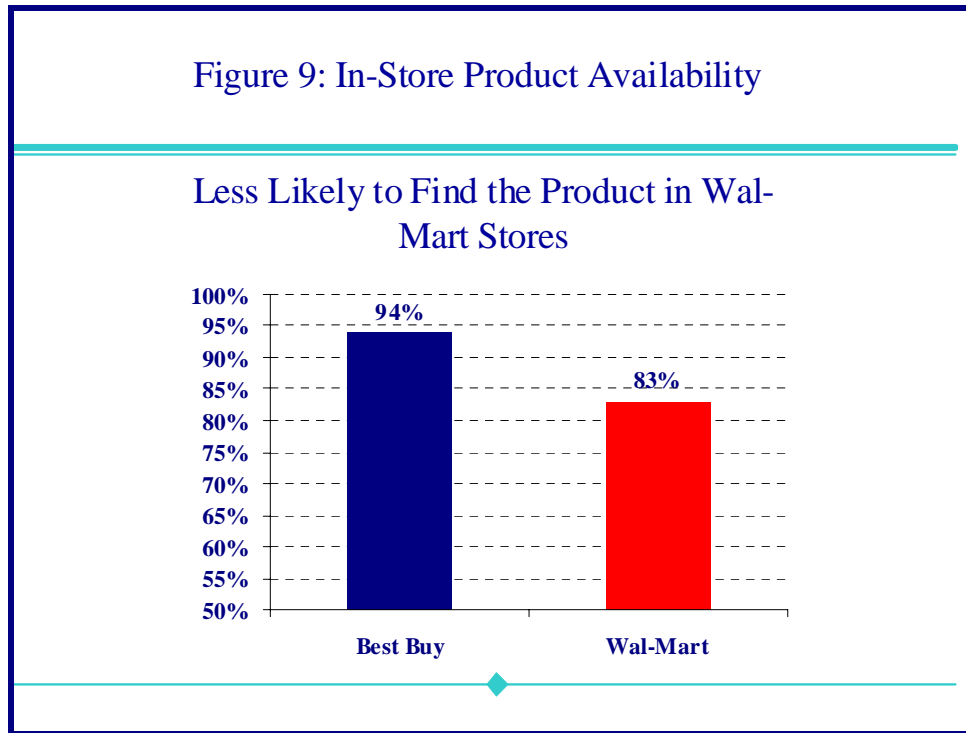
In addition to comparing prices for in-store shopping, the prices for the market basket of products were compared online, including the cost of shipping. The following are the 71 products that made the final market basket:²¹

Samsung 32" 720p 60 LCD HDTV	Samsung 40" 1080p LCD HDTV
Samsung 46" 1080p LCD HDTV	Sony Bravia 32" 720p LCD HDTV
Sony Bravia 40" 1080p LCD HDTV	Sony Bravia 46" 1080p LDC HDTV
Sony Bravia 52" 1080p LDC HDTV	Samsung 1,000W Home Theatre System
Sony Bravia 1,000W Home Theatre	Samsung Blu-Ray 1080p Output
Sony Blu-Ray 1080p Output	Sony PS DVD Player w/ MP3 Playback
Canon PowerShot 10MP Digital Camera	Canon PowerShot 12.1 MP Digital Camera
Kodak EasyShare 10.2MP Digital Camera	FUJIFILM FinePix 10MP Digital Camera
FUJIFILM FinePix 10MP Digital Camera	FUJIFILM FinePix 10MP Digital Camera
Nikon Coolpix 10MP Digital Camera S230	Nikon Coolpix 10MP Digital Camera S220
Nikon Coolpix 10MP Digital Camera L20	Olympus Stylus 10MP Digital Camera
Sony Cyber Shot 10.1MP HJ20 Dig. Camera	Sony Cyber Shot 12.1MP T90 Dig. Camera
Sony Cyber Shot 12.1MP W220 Dig. Camera	Sony Cyber Shot 12.1MP W290 Dig. Cam
Microsoft - LifeCam VX-3000 Webcam	Cannon EOS vRebel XS 10.1MP Digital SLR
Nikon D40 D-SLR 6.1 MP, 18-55mm	Flip Video UltraHD Camcorder
Sony Handycam DVD Camcorder	Sony handycam DVD Camcorder 60GB
Sony Handyman DVD Camcorder 60GB	Sony Flash Mem Handycam Camcorder
Sony 5MP Webbie HD Camcorder	Apple iPod Nano 8 GB MP3 Player
Apple iPod Nano 16GB MP3 Player	Apple iPod Touch 16GB MP3 Player B
Apple iPod Classic 120 GB MP3 Player	Zune 120GB MP3 Player
Sony Walkman 4GB Video MP3 Player	Seagate FreeAgent Desk Drive 500GB ext. 2.0
Seagate FreeAgent1TB HD ext. 2.0	Seagate Internal 500GB Desktop HD
Seagate 250GB FreeAgent GO Portable HD	Seagate 320GB FreeAgent GO Portable HD
Western Digital My Book Ess. 1TB Ex. HD	Western Passport 250GB Ext.1 Portable HD
Western Passport 320GB Ex. Portable. 2.0 HD	Western Passport 500GB Ext Portable 2.0 HD
HP 20" Widescreen Flat Monitor LCD 2.0 HD	Kodak EasyShare 8" Digital Photo Frame
HP Officejet AIO 6500 (not wireless)	Canon PIXMA AIO
Belkin Wireless-G Router 4-port	Belkin Wireless-N Router 4-port
Linksys Wireless-N Router 4-port	Linksys Wireless-G Router 4-port
Linksys 802.11g USB Adapter	Linksys Ultra Range Plus Wireless-N Adapter
NetGear 802.11g Wireless Router	Nintendo - Wii Console
Microsoft Xbox 360 Elite Console 120GB	Sony PlayStation PS3 Console
Microsoft Xbox 360 Networking Adapter	Microsoft Xbox 360 Controller
Nintendo Wii Remote Controller	Nintendo Wii Nunchuk Controller
Sony Play Station 3 Dual Shock Controller	Magellan Roadmate 1440 GPS
TomTom XL 330S Portable GPS	

In total, over 1,000 online and in-store prices were collected. While efforts were made to find every product, as **Figure 9** shows, both stores occasionally did not have these electronic products available for comparison, sometimes pulling shelf labels when an item was out of stock,

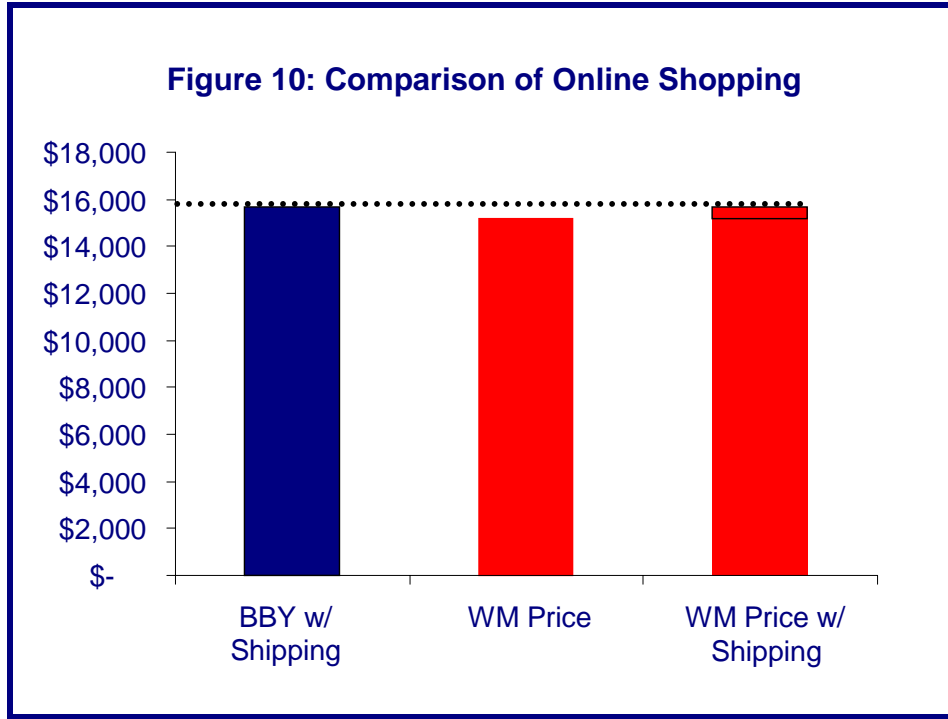
²¹ Several of these items, have since been discontinued, making the development of a comprehensive market basket an ongoing task.

not carrying an item in one store versus another, or not have the item available online. During the collection of in-store prices, if both the product and its shelf label could not be found in the store, it was noted as not available. In-store prices were compared only if a store's product could be matched to same product located in the nearby competitor's store. Sale prices were included, but prices for open-boxed items were not included.

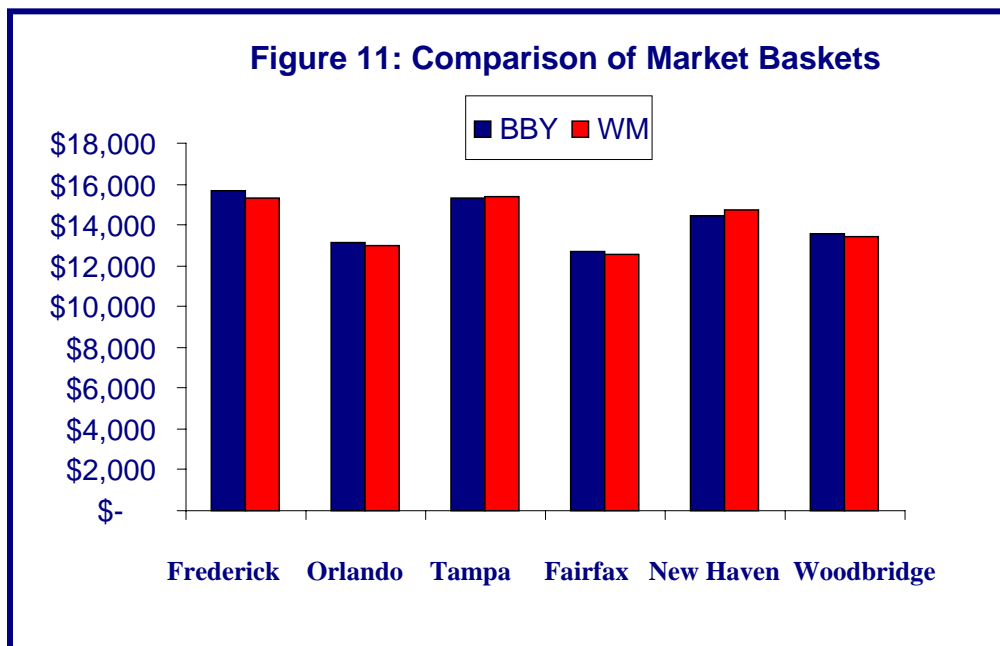


3. Price Results

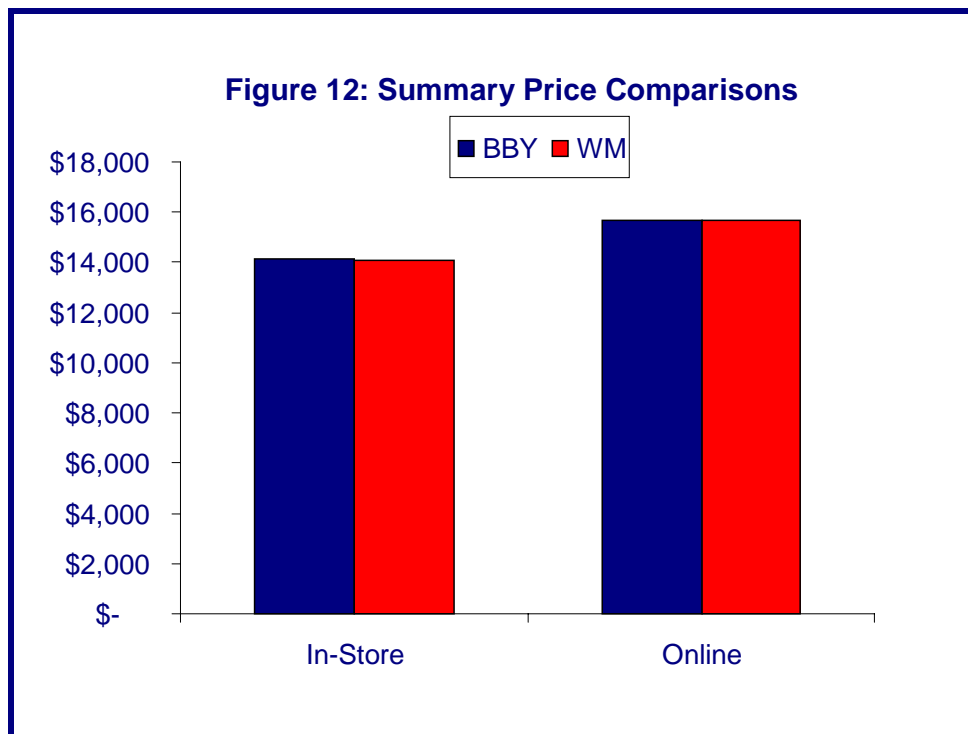
The analysis compares Wal-Mart and Best Buy online prices for the market basket of electronic goods and finds that Best Buy's prices are insignificantly different from Wal-Mart's prices, once the cost of shipping was included. For a market basket of goods worth \$15,661.72, a Best Buy consumer could save \$5.29 on their purchases. Therefore, for online products, Wal-Mart is not lower priced, contrary to conventional wisdom. This point is conveyed in **Figure 10**. Not included in this analysis is that Best Buy higher-end products (particularly HDTVs over \$900) may include free hook-up, disposal and other services, which are not offered by Wal-Mart.



In-store price comparisons produced mixed results. As **Figure 11** shows, Best Buy was lower priced in New Haven and Tampa, but higher priced elsewhere. Online and in-store results may differ depending on various factors, including product availability and sales.



Taking the in-store results and adding the value of the market basket across all stores, the average market basket was valued at \$14,070.82 at Wal-Mart and \$14,135.59 at Best Buy. In other words, for every \$100 that you spend at Wal-Mart for electronic goods, consumers save about 46 cents more than shopping at Best Buy. Wal-Mart's slight advantage dwindles, if you (again) consider that Best Buy will provide free delivery, hookup and disposal for HDTVs valued over \$900, and also offer other post-sales services. The graphical difference (shown in **Figure 12**) between Best Buy prices and Wal-Mart prices is small and counter to the perception that Wal-Mart has lower electronic prices. Wal-Mart may have lower prices on other products (groceries and cleaners perhaps), but the analysis of the market basket of consumer electronic goods show that store prices average nearly the same between the two retailers.



Given the fact that Wal-Mart and Best Buy prices are very competitive, consumers need to do their homework, compare models and prices, and look for advertised specials. Separately, Wal-Mart should do more to help consumers get better information on the products it sells by simply improving its shelf labeling. After all, consumers value product quality and access to a more knowledgeable sales staff more than they do price. Improved information could give consumers the data they need to make better and more informed decision, and permit them to

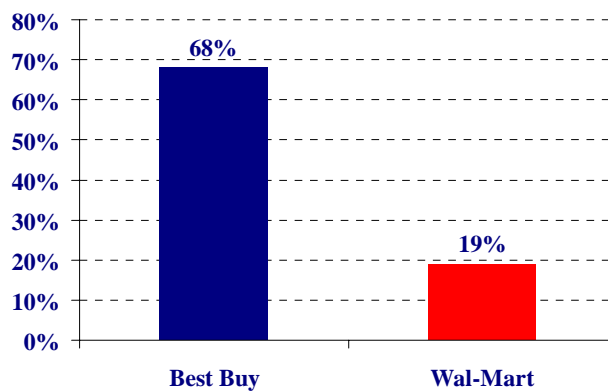
save on their electronics purchases. In turn, better information would heighten competition among these and other electronic retailers, which would yield even greater benefits for electronic consumers.

Summary

This study provides a comprehensive mix of information about consumer perceptions on quality, price and other attributes, as well direct measurement on actual price differences among the top two electronic retailers. The survey research of electronic shoppers finds that consumers believe that product quality, knowledgeable staff, and in-store help are more important than price. However, while consumers rank Best Buy higher than Wal-Mart in having quality products, a knowledgeable staff, in-store help, wider selection, post-sales options, and being better overall (see **Figure 13**), consumers rank Wal-Mart as having lower prices. Yet, based on a price comparison of a market basket of electronic hardware – including digital camcorders and cameras, computing equipment, HDTVs, home theatre, MP3 devises, DVD players and so on – this report finds the in-store and online prices to be nearly the same, particularly when considering post-sales support.

Figure 13: Best Buy vs. Wal-Mart – Overall Ranking for Retail Electronics

When we asked consumers to consider quality, selection, price and other attributes, most picked Best Buy as their overall favorite



The idea that Wal-Mart has lower consumer electronics prices is one based on perception, and not fact. The fact that both companies offer similar prices demonstrates that it is very important for consumers to do their homework first – understand the products, shop around and watch for the weekly sales advertisements – before buying their consumer electronics.