# Original Paper

# The U.S. Sanitary Pads Market: A Competitive Profile

Y. Datta<sup>1\*</sup>

### Abstract

This is the seventeenth paper that follows the footsteps of sixteen studies that have tried to analyze the competitive profiles of U.S. consumer markets: Men's Shaving Gel, Beer, Shampoo, Shredded/Grated Cheese, Refrigerated Orange Juice, Men's Razor-Blades, Women's Razor-Blades, Toothpaste, Canned Soup, Coffee, Potato Chips, Alkaline AA Battery, Facial Tissue, Toilet Paper, Paper Towel, and Disposable Diapers.

Michael Porter associates high market share with cost leadership strategy, which is based on the idea of competing on a price that is lower than that of the competition.

However, customer-perceived quality—not low cost—should be the underpinning of competitive strategy, because it is far more vital to long-term competitive position and profitability than any other factor. So, a superior alternative is to offer better quality vs. the competition.

In most consumer markets, a business seeking market share leadership should try to serve the middle class by competing in the mid-price segment; and offering quality better than that of the competition: at a price somewhat higher to signify an image of quality, and to ensure that the strategy is both profitable and sustainable in the long run.

Quality, however, is a complex concept, consumers generally find difficult to understand. So, they often use relative price, and a brand's reputation, as a symbol of quality.

The U.S. Sanitary Napkins market had sales of \$881 million in 2008.

This market consists of two segments: Pantiliners and Sanitary Pads, with 2008 sales, respectively, of \$210 million and \$671 million.

However, we have focused our analysis on the Sanitary Pad segment with the pack size 22-36 that had a market share of 37.1%.

Using Hierarchical Cluster Analysis, we tested two hypotheses: (I) That the market leader is likely to compete in the mid-price segment, and that (II) Its unit price is likely to be higher than that of the nearest competition.

However, the data did not support Hypothesis I for both 2008 and 2007 because the market leader "Always Ultra-Thin Maxi Pad with Wings (32 count)" was a member of the premium segment.

Technically, the data for 2008 did not support Hypothesis II, because the runner-up "Always Maxi Pad

<sup>&</sup>lt;sup>1</sup> Professor Emeritus, Northern KY University, Highland Heights, KY 41099, USA

<sup>\*</sup> Y. Datta, Professor Emeritus, Northern KY University, Highland Heights, KY 41099, USA

Ultra-Thin Overnight (28 count" had a unit price of \$6.00, compared to the unit price of \$5.98 for the market leader. Yet, the two prices are so close that we have concluded that the data did not really negate Hypothesis II.

We found that relative price was a strategic variable, as hypothesized.

A pattern is emerging in price-quality segmentation analysis. In ten of the seventeen studies—that exclude Men's and Women's Razor-Blades, Ground Coffee, Toilet Paper, Paper Towels, Disposable Diapers, and Sanitary Pads—the market leader was found to be a member of the mid-price segment, as we have hypothesized.

Also, results in seven markets supported Hypothesis II.

We also discovered four strategic groups in the industry.

#### Keywords

U.S. Sanitary Pads market, market segmentation, cost leadership strategy, price-quality segmentation, market-share leadership, relative price a strategic variable, strategic groups

## 1. Introduction

This is the *seventeenth* paper that follows the footsteps of *sixteen* studies that have tried to analyze the competitive profiles of U.S. consumer markets: Men's Shaving Gel, Beer, Shampoo, Shredded/Grated Cheese, Refrigerated Orange Juice, Men's Razor-Blades, Women's Razor-Blades, Toothpaste, Canned Soup, Coffee, Potato Chips, Alkaline AA Battery, Facial Tissue, Toilet Paper, Paper Towel, and Disposable Diapers (Datta, 2012, 2017, 2018a, 2018b, 2018c, 2019a, 2019b, 2020a, 2020b, 2020c, 2020d, 2021, 2023a, 2023b, 2023c, 2023d).

This research relies on a broader, *integrated* framework of market segmentation which includes *both* the demand *and* supply sides of the competitive equation. This approach is based on the idea that, *starting* with 'product' characteristics is both an *easier* and more *actionable* way of segmenting markets, than the traditional marketing approach that typically begins with the customer or 'people' characteristics (Datta, 1996).

This research is based on the notion that the path to market share leadership does not lie in lower price founded in *cost leadership* strategy, as Michael Porter (1980) suggests. Rather, it is based on the premise—according to the PIMS (Note 1) database research—that it is *customer*-perceived quality that is crucial to long-term competitive position and profitability. So, the answer to market share leadership for a business is to *differentiate* itself by offering quality *better* than that of the nearest competition (Datta, 2010a, 2010b).

To make this idea *operational* requires *two* steps. The *first* is to determine *which* price-quality segment to compete in? Most consumer markets can be divided in *three basic* price-quality segments: *premium*, *mid-price*, and *economy*. These can be extended to *five* by adding two more: *ultra-premium* and *ultra-economy* (Datta, 1996).

The answer lies in serving the *middle* class by competing in the *mid-price* segment. This is the socio-economic segment that represents about 40% of households in America (Datta, 2011). It is also the segment that Procter & Gamble (P&G), the largest multinational corporation, has successfully served in the past (Datta, 2010b).

# 2. The Strategic Importance of Price Positioning

The *second* step for a business seeking market share leadership is to position itself at a price that is *somewhat* higher than that of the nearest competition. This is in accord with P&G's practice based on the idea that although higher quality does deserve a "price premium," it should *not* be excessive (Datta, 2010b). A higher price offers two advantages: (1) It promotes an image of quality, and (2) It ensures that the strategy is both profitable and sustainable in the long run (*ibid*).

As mentioned above, the *middle* class constitutes about 40% of households in America. So, in a *competitive* market one would normally expect more than one major brand competing in the *mid-price* segment.

A classic example of price positioning is provided by General Motors (GM). In 1921 GM rationalized its product line by offering "a car for every purse and purpose"—from Chevrolet to Pontiac, to Oldsmobile, to Buick, to Cadillac. More importantly, GM positioned each car line at the *top* of its segment (Datta, 1996, 2010a).

A more recent and familiar example is the *economy* chain, Motel 6, which has positioned itself as "offering the *lowest* price of any national chain". Another example is the Fairfield Inn. When Marriott introduced this chain, it targeted it at the *economy* segment. And then it positioned Fairfield at the *top* of that segment (Datta, 1996).

### 2.1 Close Link between Quality and Price

As mentioned above, *customer*-perceived quality is the most important factor contributing to the long-term success of a business. However, quality cannot really be separated from price (Datta, 1996). Quality, in general, is an intricate, multi-dimensional concept that is difficult to comprehend. So, consumers often use *relative* price—and a brand's *reputation*—as a symbol of quality (Datta, 1996, 2010b).

### 3. Anatomy of Menstruation

According to Stanford Medicine Children's Health (Note 2), when a young woman reaches puberty, she starts to ovulate. This is when a mature egg or ovum is released from one of the ovaries. On average, a young woman in America has her first menstrual period at about age 12.

Menstruation is part of a woman's *cycle* when the lining of the uterus is shed. This happens throughout a woman's *reproductive* life. With each monthly cycle, the uterus prepares itself to nourish a fetus. Increased levels of estrogen and progesterone help thicken its walls (*ibid*).

The menstrual *cycle* lasts from the first day of the last period to the first day of the next period. The average menstrual cycle is about 25-30 days, but it can be as short as 21 days, or longer than 35. It is different from person to person (Note 3).

The menstrual *period*—when *bleeding* starts--can last between 2 and 7 days, but it will most likely last for about 5 days. The bleeding tends to be the heaviest in the *first* 2 days (Note 4).

# 4. A Brief History of Modern Menstrual Products

According to Jennifer Kotler (Ph.D., Harvard University), for most of the human history, *menstruation* has been associated with "<u>taboos and stigma</u>" (2018; underline in the original).

Prior to 1985, the word "period" had *never* been spoken on American television. Nevertheless, in spite of these cultural norms, technological innovation continued to occur (*ibid*).

In Europe and America, *home-made* menstrual *cloths*, made out of flannel or woven fabric, were quite common through most of 1800-1900 (*ibid*).

By the turn of the century, worries about bacterial *infection* from inadequate cleaning of *reusable* sanitary pads between wears, created a new menstrual *hygiene* market. Between 1854 and 1915, *twenty* patents were granted for menstrual products. This included the first menstrual *cups*, that were generally made of aluminum or rubber (*ibid*).

In America, Johnson & Johnson introduced the first disposable menstrual pad Lister Towels in 1896 (Note 5).

In spite of these innovations, moral taboos *persisted* about menstruation, and women were still *hesitant* to be seen buying them. One example is the commercial *failure* of Lister Towels (Kotler, 2018).

### 5. Kotex Launches the First Commercially Successful Sanitary Napkin in 1921

During the First World War, nurses in France noticed that cellulose—made out of *wood pulp*—was much more effective in absorbing blood compared to cloth bandages (Kotler, 2018; Note 5).

This inspired the first *Kotex* sanitary napkin--made from surplus high-absorption war bandages that were manufactured from wood pulp fiber. In 1921 Kimberly Clark launched Kotex in America, that became the *first* successfully mass-marketed sanitary napkin (Kotler, 2018; Note 6).

In 2008 Kotex had a market share of 16% in the Disposable Sanitary Pads market.

# 6. Tampax Secures a Patent for the First Disposable Tampon in 1933

In 1933 Tampax Corp., now owned by P&G, patented Tampax disposable tampons (Kotler, 2018).

Due to *hygienic* concerns about the proximity of sanitary pads to fecal bacteria, the medical community considered tampons a *healthier* alternative. However, many communities were *reluctant* to embrace tampons: because of *moral* concerns about virginity, masturbation, and its potential to rupture the hymen (*ibid*).

#### 7. Continued Innovation in Sanitary Pads

Because of the public's moral concerns about tampons, innovations continued to accelerate in sanitary napkins.

Mary Beatrice Davidson Kenner, an African American woman, was able to get her first patent in 1956. This patent was for the sanitary belt *adhesive* to keep the pad in place (Kotler, 2018).

Although Kenner had invented the sanitary *belt* itself years before, she could *not* afford to file for a patent. The main reason for this was *racism* that she experienced in her quest to get a patent (Note 7).

# 8. Stayfree Sanitary Pads

The Stayfree brand, then owned by Johson & Johnson, introduced the first beltless sanitary pad in 1974 (Note 8).

In 2013 Energizer Holdings, Inc. bought the Stayfree brand in North America from Johnson & Johnson (Note 9).

In 2008, Stayfree had a market share of 15.3% in the Disposable Sanitary Pads market.

# 9. Always Sanitary Pads

Always is a *mega*-brand that is widely known by women around the world. It belongs to the largest multinational corporation, P&G, which was created back in 1837. Always sanitary napkins were *first* introduced in the market in 1983. In 1985 it became a sales *leader* in the sanitary pads market (Note 10). In 2008, Always had a market share of 56.1% in the Disposable Sanitary Pads market.

In 2015, Always Infinity was named *Product of the year* in the feminine care category. Although most pads were made of cotton fluff, "Always Infinity is uniquely designed with *FlexFoam* material that revolutionized comfort and protection. Always Infinity absorbs 10 times its weight while forming a woman's body for amazing comfort" (Note 11).

#### 10. Private Brands

Another *major* player in the U.S. Sanitary Pad market in 2008 was the Private Brands. It is important to clarify what *private* brands are. These are brands made exclusively for individual *retailers*, e.g., a supermarket, or a drug store. Usually, such brands are targeted at the *economy* segment, and, as such, are generally sold at prices *lower* than those of major *mid-price* brands. One reason retailers *like* private brands, is because private brands tend to be more *profitable* than leading name brands that are usually members of the *mid-price* segment (Datta, 2018b, 2018c, 2020b, 2020c, 2021, 2023a, 2023b, 2023c, 2023d).

Nevertheless, in 2008 two Private Brands were members of the *mid-price*, rather than the usual *economy* segment (Table 2). One reason for this is that the market leader Always was a member of the *premium* segment, and that allowed the Private Brands to move *up* the ladder to the *mid-price* segment for these brands (Table 2).

Yet, one of the Private Brands was a member of the *Ultra-economy* segment (Table 2).

In 2008, Private Brands had a market share of 12.2% in the Sanitary Pads market.

### 11. Sanitary Pads vs. Pantyliners

Panty liners are much *thinner* than pads, and are designed to absorb *daily* vaginal discharge, *light* menstrual flow, "spotting," and slight urinary incontinence (Note 12).

On the other hand, Pads are designed to absorb a much *greater* amount of liquid, and keep it away from a woman's skin—which is why they're so effective at preventing leaks and making women feel more comfortable (Note 13).

Since panty liners aren't fashioned to absorb heavy flow, so, ideally, they should be worn *before* or at the *end* of a woman's menstrual cycle, when a woman experiences *vaginal discharge* or *light* bleeding (Note 14).

#### 12. Breakdown of Menstrual Hygiene Products

*Disposable* menstrual *pads* (89.0%) constitute by far the *largest* segment in the menstrual hygiene market, followed by *cloth* menstrual pads (4.5%), and tampons (4.2%). And only 1.6% used a menstrual cup (Note 15).

# 13. Complexity of Sanitary Pads Market Leads to a Tremendous Variety

Initially, disposable sanitary pads were too expensive for most women, and it took several years before they became popular (Note 5).

The earliest disposable pads generally looked like a *rectangle* made out of a cotton wool or similar fibrous material covered with an absorbent liner. This design was notorious for *slippage*--either forward or back of the intended position (Note 5).

A later innovation was the placement of an *adhesive strip* on the bottom of the pad for attachment to the saddle of the panties. And this became the favorite design for women (Note 5).

Over the last twenty years, the sanitary pads industry has made tremendous strides. "Gone are the days of bulky belts with diaper-like thickness" (Note 5).

As we have shown in Table 1, sanitary pads are quite *complex*, and that has led to a remarkable *variety* in the sanitary pads market.

Table 1. Tremendous Complexity in the Sanitary Pads Market

<b>Intensity of Blood</b>	Thiskness of Dod	Night time Counity	Length for Front-Back	Scented or	
Flow	Thickness of Pad Night-time Securit		Coverage	Unscented	
Daytime (Regular)	Regular	Regular	Regular	Unscented	
Overnight (Heavy)	Ultra-Thin	With Wings	Long	Scented	

#### 13.1 Overnight Sanitary Pads

In an Overnight pad, the back of the pad is usually *longer* than the front. This is for *additional* protection for heavy-flow days, or for overnight. Regular pads usually do not have a longer back end, but they do provide enough protection for a regular flow (Note 16).

### 13.2 Ultra-Thin Sanitary Pads

Thickness doesn't necessarily mean that a pad is more absorbent. Ultra-thin Pads do the same job as extra pads; they're just thinner and more discreet (Note 17).

#### 13.3 Sanitary Pads with Wings

Such a sanitary pad has a unique *wing* shape which creates a *secure* fit, so that a woman can worry less about shifting and bunching at *night*, allowing her to stay comfortable while she sleeps (Note 18).

# 13.4 Long Sanitary Pads

The absorbency of a pad is also determined by its *length*. Longer pads can soak up more menstrual fluid (Note 19). A larger sanitary pad offers more absorbency and protection than a regular pad (Note 12).

For example, Always long and super maxi pads have *more* front-to-back coverage than any other Always pad for the best *overnight* protection (Note 20).

13.5 Unscented vs. Scented Pads

# 14. The U.S. Sanitary Pads Market—Price-Quality Segmentation Profile

This study is based on U.S. retail sales for the U.S. Sanitary Napkins Market for 2008 and 2007 (Note 21). The data includes total dollar and unit sales, no-promotion dollar and unit sales, and promotion dollar and unit sales (Note 22).

For 2008 the total U.S. retail sales of Sanitary Napkins were \$881 million. This market consists of *two* segments: Pantiliners and Sanitary Pads, with 2008 sales, respectively, of \$210 million and \$671 million

However, we have focused our analysis on the Sanitary Pad segment.

14.1 Hierarchical Clustering as the Primary Instrument of Statistical Analysis

We have used cluster analysis as the *primary* statistical tool in this study. As suggested by Ketchen and Shook (1996), we have taken several steps to make this effort as *objective* as possible:

- First, this study is *not* ad-hoc, but is grounded in a *theoretical* framework, as laid out below.
- Second, we are fortunate that we were able to get national U.S. sales data for our study for two years.
- Thus, this data provided a robust vehicle for subjecting cluster consistency and reliability to an additional test.
- Third, we wanted to use two different techniques—KMeans and Hierarchical—to add another layer of cluster consistency and reliability. However, we found Hierarchical cluster

analysis to be *superior* in meeting that test. So, we did *not* consider it necessary to use the KMeans technique.

14.2 Theoretical Foundation for Determining Number of Clusters—and Their Meaning

As already stated, a major purpose of this paper is to identify the market share *leader* and determine the price-quality segment—based on unit *price*—it was competing in.

An important question in performing cluster analysis is to figure out the *number* of clusters based on an *a priori* theory. Most consumer markets can be divided in three *basic* price-quality segments: *premium*, *mid-price*, and *economy*. These three basic segments can be extended to *five*: with the addition of *super-premium* and *ultra-economy* segments (Datta, 1996).

Therefore, *three* represents the *minimum* and *five* the *maximum* number of clusters (Datta, 2012, 2017, 2018a, 2018b, 2018c, 2019a, 2019b, 2020a, 2020b, 2020c, 2020d, 2021, 2023a, 2023b, 2023c, 2023d). An equally crucial issue is to find out what each cluster (e.g., *economy*, *mid-price*, *and premium*) really *means*.

Perhaps a good way to understand what each price-quality segment stands for in *real* life is to look at a socio-economic *lifestyle* profile of America. It reveals *six* classes (Note 23). Each class is associated with a price-quality segment typified by the retail stores where they generally shop: each a symbol of their *lifestyle* (Datta, 2011).

14.3 Guidelines for Cluster Consistency and Reliability

In addition to laying a theoretical foundation for the *number* of clusters, we set up the following guidelines to *enhance* cluster consistency and reliability (Datta, 2012, 2017, 2018a, 2018b, 2018c, 2019a, 2019b, 2020a, 2020b, 2020c, 2020d, 2021, 2023a, 2023b, 2023c, 2023d):

- In general, there should be a *clean break* between *contiguous* clusters.
- The *anchor* clusters—the top and the bottom—should be *robust*. In a cluster-analysis project limited to a range of three to five clusters, a robust cluster is one whose membership remains constant from three- to four-, *or* four- to five-cluster solutions.
- Finally, we followed a step-by-step procedure to determine the optimal solution. First, we start with *three* clusters. Thus, the bottom cluster obviously becomes the *economy* segment, and the top cluster the *premium* segment. Next, we go to *four* clusters, and *tentatively* call them: *economy*, *mid-price*, *premium*, and *super-premium*. Then we go to *five* clusters. If the membership of the *bottom* cluster remains unchanged from what it was in the four-cluster result, it clearly implies that the *ultra-economy* segment does *not* exist. Then, if the membership of the *top* cluster also remains the same from a four- to a five-cluster solution, then the *top* cluster becomes the *super-premium* segment.
- This signifies that even in a five-cluster solution we have only *four* price-quality segments: *economy*, *mid-price*, *premium*, and *super-premium*.
- It means that either the *premium* or the *mid-price* segment consists of *two sub-*segments.

### 14.4 External Evidence to Validate Results of Cluster Analysis

Whenever possible, we have tried to seek *external* evidence to validate the results of cluster analysis. For example, many companies identify on their websites a certain brand(s) as a *premium* or luxury brand. A case in point is that of P&G which says that its plan is to compete in all "price points": *super-premium*, *premium*, and *mid-price*: *except* the *economy* segment (Datta, 2010b).

## 15. Testing Hypotheses

- I—That the market-share leader would be a member of the *mid-price* segment.
- II—That the market-share leader would carry a price tag that is *higher* than that of the nearest competition.

### 16. Results of Hierarchical Cluster Analysis

In Table 2 we present the cluster analysis results for 2008 that involved 29 brands.

In all the seventeen studies we have conducted so far, we have performed cluster analysis on the best-selling pack size (s) to determine the market share leader. However, the great variety in the Sanitary Pads market has led to a lot of fragmentation.

For example, as Table 2 shows, there were *four* major brands in the market with Always leading the pack with 17 entries, followed by Stayfree with 5, Kotex with 4, and Private Brands with 3.

So, if we go with the market share in the *best-selling* pack segment (22-36), the market *leader* turns out to be: "Always Maxi Pad with Wings Ultra-thin Overnight (28 count)" with a market share of 7.9%. However, if we go by the *overall* brand, the market leader clearly is "Always Ultra-Thin Maxi Pad with Wings (32 count)" with a market share of 13.5%, compared to 6.9% of the former.

As such, we have determined that the best solution to this problem is to go by the overall brand share.

For both 2008 and 2007, the results did *not* support Hypothesis I, because the market leader "Always Ultra-Thin Maxi Pad with Wings (32 count)" was a member of the *premium* segment.

Although technically, the data for 2008 did not support Hypothesis II, because the *runner-up* "Always Maxi Pad Ultra--Thin Overnight (28 count)" had a unit price of \$6.00, compared to the unit price of \$5.98 for the market leader. Yet, the two prices are so close that we have concluded that the data did *not* really negate Hypothesis II.

For 2007, the *runner-up* "Stayfree Maxi Pads (24 count)" had a unit price that was *lower* than that of the market leader "Always Ultra-Thin Maxi Pad with Wings (32 count)," as we have hypothesized. However, the former was member of the *economy*. rather than the expected mid-price segment.

### 17. Why the Cluster Analysis Results Did Not Support Hypothesis I?

As we have stated before, for most of the human history, *menstruation* has been associated with *taboos* and *stigma*. More importantly, menstruation is an activity that is so complex that it is synonymous with *femininity* itself. So, it is not surprising that many women are willing to pay *premium* prices for such a

fundamental need.

#### 18. Relative Price a Strategic Variable

Finally, we performed one more test to determine the consistency and reliability of the results of cluster analysis in this study. So, we *ranked* the unit price of each brand for 2008 and 2007 for Sanitary Pads (22-36 count). All *three* measures of *bivariate* correlation—Pearson, and non-parametric measures Kendall's tau\_b, and Spearman's rho—were found to be *significant* at an amazing 0.01 level! We believe these surprising results became possible only, because managements in the Sanitary Pads industry must have been treating *relative* price as a strategic variable, as we have hypothesized.

#### 19. The Role of Promotion

For 2008 the promotional sales of Sanitary Pads averaged 31.4% of total retail sales (Table 3). We performed *bivariate* correlation between total retail sales vs. promotional (PROMO) sales. The results were significant for *all* three measures—Pearson, Kendall, and Spearman—at an amazing 0.01 level. Table 3 presents a measure of the promotional *intensity* for 2008.

In general, one would expect that higher a brand's sales, higher its promotional intensity. However, the data shows that Always, a mega brand, with by far the highest overall market share (56%), has a promotional intensity score of 31%, that is *lower* than the scores of Kotex and Stayfree.

One reason for this seems to be, that Always' market share is so *huge*, that P&G management must have felt that it does *not* have to rely on higher discounts to maintain its *domineering* market position in this market.

The lowest score is 27 which is that of Private Brands. This makes a lot of sense because it was competing in the *mid-price* and *ultra-economy* segments with lower prices to begin with, that did not therefore call for higher discounts.

# 20. A Pattern Emerging in Price-Quality Segmentation Analysis

This is the *seventeenth study* that encompasses analysis of competitive profiles of U.S. consumer markets. In each study we have tested two hypotheses:

- I—That the market leader would be a member of the *mid-price* segment.
- II—That the market leader would carry a price tag that is *higher* than that of the nearest competition.

### 21. Men's and Women's Razor-Blade Markets Did Not Support Hypothesis I

In the Men's Razor-Blade market for 2008, the *market leader* was Gillett Mach 3 in the *premium* segment, and Gillette Fusion, the *runner-up*, was in the *super-premium* segment (Datta, 2019a)

In the Women's Razor-Blade market for 2008, the market leader Gillett Venus, the *market leader*, and Schick Intuition Plus, the *runner-up*, were *both* members of the *premium* segment (Datta, 2019b).

So, what are the factors that these two markets have deviated so much from our theory? (Datta, 2019a, 2019b):

- The technology for making Men's and Women's Razors and Blades has now become quite
  intricate, based as it is on three fields: metallurgy, chemistry, and electronics, which, in turn,
  raises the cost of production,
- Gillette has been pursuing a strategy of *innovation* and constant improvement, offering new features—and benefits—than ever before, which has consequently made it possible for it to charge *premium* prices.
- Gillette's virtual *monopoly* of the industry is another factor, that has enabled it to position itself in the *premium* and *super-premium* segments: rather than the *mid-price* segment.
- Many men—and women--consider shaving an important part of personal grooming, for which they are willing to pay premium prices: because they regard it an "affordable luxury."

# 22. Toilet Paper, Paper Towel, Disposable Diapers, and Sanitary Pads Markets Also Did Not Support Hypothesis I

The results in the Toilet Paper study also did not support Hypothesis I, because *both* Charmin, the market leader, and Cottonelle, the runner-up were members of the *premium* segment (Datta, 2023b).

Toilet activity is quite complex, in which personal *hygiene* plays a critical role. Although a *bidet* is quite popular in Europe, very few people in America use it.

So, in the absence of a substitute, Americans are willing to pay *premium* prices for toilet paper, because it serves an *important* need: an *antidote* to germs and disease (*ibid*).

Similarly, Americans do *not* mind paying *premium* prices for Disposable Diapers as well (Datta, 2023d).

In the words of Peter Drucker, Pampers disposable baby diapers "created customers" and served them better than the competition.

Another reason, according to P&G, is the rising cost of *pulp*--a raw material used to make Disposable Diapers--and higher transportation and freight costs (*ibid*).

In the Paper Towel market, the *market leader*, Bounty was a member of the *super-premium* segment. In the seventeen studies discussed here, *not* a single market leader was able to claim an association with the *super-premium* segment (Datta, 2023c)!

So, what made this extraordinary result possible?

As stated before, P&G *revolutionized* the industry with a 2-ply paper towel, Bounty, that was not only *soft* and *strong*, but was *unmatched* in being *quick* and *absorbent* on spills.

Whereas most paper towel makers were marketing *strength* or *softness*, P&G discovered that consumers generally *preferred* something else: *absorbency*: for which 39% of American customers paid *super-premium* prices for Bounty paper towel in 2008 (Datta, 2023c).

And that is why P&G uses the slogan "The Quicker Picker Upper" in its advertisements for Bounty

(ibid).

Similarly, *menstruation* is an activity that is so complex that it is synonymous with *femininity* itself, as we have stated earlier. So, it is not surprising that many women are willing to pay *premium* prices for such a fundamental need.

### 23. Results in Ten Markets Support Hypothesis I

In *ten* of the seventeen studies—that *exclude* Men's and Women's Razor-Blades, Ground Coffee, Toilet Paper, Paper Towel, Disposable Diapers, and Sanitary Pads—the market leader was found to be a member of the *mid-price* segment, as we have hypothesized. Those market leaders are:

(1) Edge Men's Shaving Gel, (2) Bud Light Lager Beer, (3) Pantene Shampoo, (4) Kraft Grated/Shredded Cheese, (5) Tropicana Refrigerated Orange Juice, (6) Crest Toothpaste, (7) Campbell Chicken Broth, and Campbell Chicken Noodle Soup, (8) Lay's Potato Chips, (9) Energizer Alkaline AA Battery, and (10) Kleenex Facial Tissue.

One important exception to these results is the *Ground Coffee* market. The *market leader*, Folgers, and the *runner-up* Maxwell House, were *both* members of the *economy* segment, although Folgers' unit price was *higher* than that of Maxwell House, as we have hypothesized (Datta, 2020c).

This is truly an *astonishing* result! In all the sixteen studies mentioned above, *not* a single market leader competed in the *economy* segment.

This implies that both Folgers and Maxwell House were following the *cost leadership* strategy based on *lower* price, rather than better quality, and treated coffee as a *commodity* to gain market share. So, it is not unreasonable to conjecture that such a strategy is not likely to have been very profitable (Datta, 2020c).

### 24. Results in Seven Markets Support Hypothesis II

In three of the ten markets mentioned above, the results did not support Hypothesis II.

In the Chicken Noodle Soup market, the *runner-up* Progresso, was a member of the *premium* segment. Similarly, in the Facial Tissue market, the *runner-up* Puffs, was a member of the *premium* segment. But this was because of Puffs' demonstrably *higher* quality (Datta, 2023a).

In the Shampoo market, the *runner-up*, Head & Shoulders was a member of the *mid-price*. Yet, its price was *higher* than that of the *market leader*, Pantene. However, this result did *not* negate Hypothesis II, because it was due to the fact that the former was a *specialty* shampoo, which always sells at a *higher* price (Datta, 2018a).

Nevertheless, in these *seven* markets the *runner-up* brands, like the market leaders, were members of the *mid-price* segment with a price tag that was *lower* than that of the market leader.

#### 25. Strategic Groups in the U.S. Disposable Sanitary Pads Market, 2008

We found four strategic groups in this market. Their 2008 brand market shares are as follows:

- 1. Procter & Gamble—Market Leader
  - Always—56.1%
- 2. Kimberly Clark
  - Kotex-16%
- 3. Energizer Holdings, Inc.
  - Stayfree—15.3%
- 4. Private Brands—12.2%

# 25.1 Procter & Gamble (P&G) Corporation

P&G is the largest multinational corporation, which was created back in 1837.

For 2022 P&G has reported net sales of \$80.2 Billion (Note 24).

### 25.2 Kimberly Clark Corporation

Kimberly Clark is an American multinational corporation that produces mostly personal-care *paper-based* consumer products: among others, facial tissue, feminine hygiene products, toilet tissues, and disposable diapers (Note 11).

In 2022 it celebrated its 150<sup>th</sup> anniversary (Note 26).

25.3 The Energizer Holdings, Inc.

Energizer Holdings, Inc. is an American company and one of the world's largest manufacturers of batteries, that it produces under the brand names: Energizer, Ray-O-Vac, Varta, and Eveready (Note 27).

For 2021, the company reported sales of \$3,022 million (Note 28).

#### 26. Conclusion

The path to market share leadership does *not* lie in *cost leadership* strategy: a path that is grounded in a *price that is lower* than that of the competition, as Michael Porter has suggested. Rather, a business in pursuit of market-share leadership should try to serve the *middle* class by competing in the *mid-price* segment; and offering quality *superior* to that of the competition: at a somewhat *higher* price to connote an image of quality, and to ensure that the strategy is both profitable and sustainable in the long run.

The middle class is the socio-economic segment that represents about 40% of households in America.

Quality, however, is a complex concept that consumers generally find difficult to understand. So, they often employ *relative* price and a brand's *reputation* as a symbol of quality.

For 2008 the total U.S. retail sales of the Sanitary Pads market were \$671 million (Table 2). By far the *most* popular size was the 22-36 pack, which constituted 37.1% of total sales. So, we have focused cluster analysis on this size.

We tested two hypotheses. (I) That the market-share leader, would be a member of the *mid-price* segment,

and (II) That the market-share leader would carry a price tag that is *higher* than that of the nearest competition.

For both 2008 and 2007, the results did not support Hypothesis I. This is because the market leader, "Always Ultra-Thin Maxi Pad with Wings (32 count)" was a member of the *premium* segment.

We also found that *relative* price was a strategic variable, as we have hypothesized.

A *pattern* is emerging in price-quality segmentation analysis. In *ten* of the seventeen studies—that exclude Men's and Women's Razor-Blades, Ground Coffee, Toilet Paper, Paper Towel, Disposable Diapers, and Sanitary Pads—the results *supported* Hypothesis I: that the *market leader* was going to be to be a member of the *mid-price* segment.

Also, results in *seven* markets supported Hypothesis II: that the *runner-up* was also going to be a member of the *mid-price* segment, and that its price was going to be *lower* than that of the market leader.

Finally, we discovered four strategic groups in the industry.

Table 2. Hierarchical Cluster Analysis: The U.S. Sanitary Pads Market, 2008

PQ Segment	Sanitary Pads( 29)	Upr.	Clusctr.	MSh%	MSh%	Sales\$M	Sales\$M
				22-36 ct.	Brand	22-36 ct.	Brands
Super-Premium	ALWAYS CLEAN MAXI PAD/WINGS UT 32 COUNT	\$7.56	\$7.40	1.6%	1.2%	\$3.98	\$8.31
	ALWAYS CLEAN L SP MX PD/WGS UT 28 COUNT	\$7.50		1.6%	1.1%	\$3.87	\$7.21
	ALWAYS CLEAN MX PD/WG UT OVRNT 24 COUNT	\$7.14		0.9%	0.6%	\$2.32	\$4.33
Premium	ALWAYS LONG SP MAXI PAD/WINGS 32 COUNT	\$6.05	\$5.94	5.2%	3.9%	\$13.02	\$25.93
	ALWAYS FRESH MAXI PAD/WINGS UT 24 COUNT	\$6.05		2.7%	3.1%	\$6.81	\$20.56
	ALWAYS MAXI PAD/WGS OVERNIGHT 28 COUNT	\$6.04		7.3%	5.1%	\$18.10	\$34.53
	ALWAYS MAXI PAD OVERNIGHT 28 COUNT	\$6.03		4.3%	1.7%	\$10.83	\$11.63
	ALWAYS MX PD/WG ULTR THN OVRNT 28 COUNT	Φ.C. 0.0		7.00/	<i>(</i> 00/	¢10.74	¢46.27
	(Runner-Up)	\$6.00		7.9%	6.9%	\$19.64	\$46.27
	ALWAYS FRESH MAXI PAD/WINGS 24 COUNT	\$6.00		2.1%	0.8%	\$5.34	\$5.34
	ALWAYS ULTRA THIN MX PD/WINGS 32 COUNT (Mkt			7.49/	12 50/	<b>#10.22</b>	¢00.05
	Leader)	\$5.98		7.4%	13.5%	\$18.33	\$90.95
	ALWAYS FRESH L SP MX PD/WGS UT 28 COUNT	\$5.98		2.7%	1.9%	\$6.71	\$12.96
	ALWAYS ULTR THIN SLR MX PD/WGS 36 COUNT	\$5.96		3.1%	1.7%	\$7.76	\$11.55
	ALWAYS FRESH L SP MX PD/WGS 28 COUNT	\$5.95		1.1%	0.6%	\$2.79	\$4.25
	ALWAYS MAXI PAD WITH WINGS 24 COUNT	\$5.93		3.7%	4.3%	\$9.31	\$28.72
	KOTEX MAXI PAD OVERNITES 28 COUNT	\$5.88		4.5%	2.7%	\$11.25	\$18.40
	STAYFREE PLUS MAXI PADS 28 COUNT	\$5.69		1.6%	1.9%	\$3.90	\$12.43
	STAYFREE ULTRA THIN PLUS MX PD 32 COUNT	\$5.61		4.5%	4.8%	\$11.29	\$32.23

Total All Brands							\$671.6
						37.1%	90.8%
	Total			100.0%	90.8%	\$248.95	\$609.58
Ultra-conomy	PRIVATE BRANDS MAXI PADS 24 COUNT	\$2.46	\$2.46	8.0%	4.2%	\$19.92	\$28.19
	KOTEX MAXI PADS 24 COUNT	\$3.10		4.1%	4.0%	\$10.09	\$26.92
	KOTEX FREEDOM MAXI PAD THINS 24 COUNT	\$3.11		0.5%	0.2%	\$1.35	\$1.35
	STAYFREE ULTRA THIN MAXI PAD 22 COUNT	\$3.11		1.1%	0.5%	\$2.64	\$3.08
	KOTEX ULTRA THIN MAXI PAD 22 COUNT	\$3.15		3.3%	4.9%	\$8.31	\$32.93
	STAYFREE MAXI PADS 24 COUNT	\$3.20		9.5%	6.1%	\$23.75	\$41.17
	ALWAYS FRESH MAXI PAD 22 COUNT	\$3.42		1.4%	0.8%	\$3.37	\$5.35
	ALWAYS MAXI PADS 24 COUNT	\$3.47		3.2%	3.3%	\$8.01	\$22.23
	ALWAYS ULTRA THIN MAXI PAD 22 COUNT	\$3.53		1.9%	2.5%	\$4.69	\$16.74
Economy	STAYFREE DRY MAX PLUS MX PD UT 24 COUNT	\$3.64	\$3.30	0.7%	0.8%	\$1.81	\$5.14
	COUNT	\$4.15		1.5%	3.5%	\$3.76	\$23.44
	PRIVATE BRANDS PLUS MAXI PAD ULTR THIN 32	¢4.15		1.50/	2.50	¢2.76	¢22.44
Mid-Price	PRIVATE BRANDS PLUS MAXI PAD 28 COUNT	\$4.39	\$4.27	2.4%	4.1%	\$5.99	\$27.44

Table 3. Percentage of Promotional Sales to Total Sales: U.S. Sanitary Pads Market, 2008 Brands with 2008 Sales over \$5 Million (22-36 count)

Sanitary Pad Brand Name	PQ Segment	Promo%	Av. Promo Intensity	Brand MkSh%
KOTEX MAXI PADS 24 COUNT	Economy	44.0%		4.1%
KOTEX ULTRA THIN MAXI PAD 22 COUNT	Economy	38.6%		4.9%
KOTEX MAXI PAD OVERNITES 28 COUNT	Premium	28.7%		2.7%
Total KOTEX		36.7%	Moderate	
STAYFREE MAXI PADS 24 COUNT	Economy	33.4%		6.1%
STAYFREE ULTRA THIN PLUS MX PD 32 COUNT	Premium	31.4%		4.8%
Total STAYFREE		32.7%	Moderate	
ALWAYS ULTRA THIN MX PD/WINGS 32 COUNT	Premium	33.3%		13.5
ALWAYS MAXI PAD WITH WINGS 24 COUNT	Premium	32.8%		4.3%
ALWAYS LONG SP MAXI PAD/WINGS 32 COUNT	Premium	32.3%		3.9%
ALWAYS MAXI PADS 24 COUNT	Economy	31.2%		3.3%
ALWAYS MX PD/WG ULTR THN OVRNT 28 COUNT	Premium	31.2%		6.9%
ALWAYS FRESH MAXI PAD/WINGS UltThin 24 COUNT	Premium	30.0%		3.1%
ALWAYS FRESH MAXI PAD/WINGS 24 COUNT	Premium	29.9%		0.8%
ALWAYS MAXI PAD/WGS OVERNIGHT 28 COUNT	Premium	29.7%		5.1%
ALWAYS MAXI PAD OVERNIGHT 28 COUNT	Premium	28.6%		1.7%

Total PRIVATE BRANDS			Low	
PRIVATE BRANDS PLUS MAXI PAD 28 COUNT	Mid-Price	21.2%		4.1%
PRIVATE BRANDS MAXI PADS 24 COUNT	Ultra-Economy	28.1%		4.2%
Total ALWAYS		30.8%	Moderate	
ALWAYS ULTR THIN SLR MX PD/WGS 36 COUNT	Premium	27.3%		3.1%
ALWAYS FRESH L SP MX PD/WGS UltThin 28 COUNT	Premium	27.9%		1.9%

**Overall Promotional Intensity** 

31.4%

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#### **Notes**

- Note 1. Profit Impact of Market Strategies.
- Note 2. Menstrual Cycle: An Overview (stanfordchildrens.org)

Note 3.

https://www.google.com/search?q=how+long+is+the+menstrual+cycle+on+average&sca\_esv=314668 383935225c&sca\_upv=1&rlz=1C1RXQR\_enUS1053US1053&sxsrf=AM9HkKlM\_-TsCwGT6ziMHY IvvfpTz-mGTA%3A1700339624715&ei=qB9ZZcilK76TwbkP2PepgAc&oq=how+long+is+the+menst rual+cycle&gs\_lp=Egxnd3Mtd2l6LXNlcnAiH2hvdyBsb25nIGlzIHRoZSBtZW5zdHJ1YWwgY3ljbG UqAggBMgUQABiABDIFEAAYgAQyBRAAGIAEMgUQABiABDIGEAAYFhgeMgYQABgWGB4 yBhAAGBYYHjIGEAAYFhgeMgYQABgWGB4yBhAAGBYYHkjy1QFQmQ1Y\_roBcAN4AZABA 5gBfaAB7CyqAQUyMC4zNbgBAcgBAPgBAagCFMICChAAGEcY1gQYsAPCAgQQIxgnwgIHEC MY6gIYJ8ICFBAAGIAEGOMEGOkEGOoCGLQC2AEBwgIWEAAYAxiPARjlAhjqAhi0AhiMA9g

BAsICFhAuGAMYjwEY5QIY6gIYtAIYjAPYAQLCAgoQIxiABBiKBRgnwgIREAAYgAQYigUYsQ MYgwEYkQLCAgsQLhiABBiKBRiRAsICERAuGIAEGLEDGIMBGMcBGNEDwgIKEC4YgAQYi gUYQ8ICCxAAGIAEGLEDGIMBwgIREC4YgAQYigUYxwEY0QMYkQLCAg4QABiABBiKBRix AxiDAcICFBAuGIAEGIoFGLEDGIMBGMcBGNEDwgIIEAAYgAQYsQPCAgsQABiABBiKBRiR AsICChAAGIAEGIoFGEPCAgQQABgDwgIHEAAYgAQYCsICChAAGIAEGBQYhwLCAgsQABi ABBiKBRiGA8ICCBAAGBYYHhgPwgIHEAAYgAQYDcICCBAAGAgYHhgN4gMEGAAgQYgG AZAGCLoGBggBEAEYAboGBggCEAEYCw&sclient=gws-wiz-serp

Note 4.

https://www.google.com/search?q=how+long+does+menstrual+blood+flow+last&rlz=1C1RXQR\_enU S1053US1053&oq=how+long+does+menstrual+blood+flow+last&gs\_lcrp=EgZjaHJvbWUyBggAEE UYOTIHCAEQIRigATIKCAIQIRgWGB0YHjIKCAMQIRgWGB0YHjIKCAQQIRgWGB0YHtIBCjI 4NTc5ajBqMTWoAgCwAgA&sourceid=chrome&ie=UTF-8

Note 5.

 $https://femme international.org/the-history-of-the-sanitary-pad/\#: \sim: text=The \%\,20 first \%\,20 pads \%\,20 were \%\,20 made, 1\,88\,8\%\,20\%\,E\,2\%\,80\%\,93\%\,20 called \%\,20 the \%\,20 Southball \%\,20 pad$ 

Note 6.

 $https://en.wikipedia.org/wiki/Kotex\#:\sim:text=In\%20 the\%20 United\%20 States\%2 C\%20 Kotex, product\%20 Oname\%20 with\%20 alternate\%20 spelling$ 

Note 7.

 $https://lemelson.mit.edu/resources/mary-beatrice-davidson-kenner\#: \sim : text=In\% 201951\% 2C\% 20 Kenner\% 20 Married\% 20 James, pads\% 20 and\% 20 tampons\% 20 Were\% 20 invented$ 

Note 8. njconsumer.co.za/our-brands/stayfree

Note 9. https://en.wikipedia.org/wiki/Stayfree

Note 10.

 $https://1000 logos.net/always-logo/\#: \sim: text= The \%20 history \%20 of \%20 Always \%20 brand, products \%20 in \%20 the \%20 critical \%20 days$ 

Note 11.

https://news.pg.com/news-releases/news-details/2015/Always-Infinity-Named-2015-Product-of-the-Ye ar-in-Feminine-Care-Category-and-Provides-Free-Product-Sample-to-Girls-Women-across-the-Nation/default.aspx#:~:text=Always%20Infinity%2C%20the%20biggest%20innovation,in%20the%20feminine%20care%20category

Note 12. https://en.wikipedia.org/wiki/Menstrual\_pad

Note 13.

https://www.google.com/search?sca\_esv=52599f4a821c1242&sca\_upv=1&rlz=1C1RXQR\_enUS1053 US1053&sxsrf=AM9HkKnihQG2QgUIpicHdrBZBw3mbBJrFg:1700833069089&q=what%27s+the+d ifference+between+pads+and+pantyliners&nfpr=1&sa=X&ved=2ahUKEwi70Z734NyCAxWyRjABHf 6tB58QvgUoAXoECAgQAw&biw=1187&bih=766&dpr=2

#### Note 14.

https://www.google.com/search?q=when+can+a+woman+safely+wear+a+pantyliner&rlz=1C1RXQR\_enUS1053US1053&oq=when+can+a+woman+safely+wear+a+pantyliner&gs\_lcrp=EgZjaHJvbWUyB ggAEEUYOTIHCAEQIRigATIHCAIQIRigATIHCAMQIRigAdIBCjMzNDU0ajBqMTWoAgCwAgA &sourceid=chrome&ie=UTF-8

#### Note 15.

https://www.google.com/search?q=google%3A+what+percentage+of+women+use+tampons+and+what+percentage+maxi+pads&rlz=1C1RXQR\_enUS1053US1053&oq=&gs\_lcrp=EgZjaHJvbWUqCQgAECMYJxjqAjIJCAAQIxgnGOoCMgkIARAjGCcY6gIyCQgCECMYJxjqAjIJCAMQIxgnGOoCMgkIBBAjGCcY6gIyCQgFECMYJxjqAjIJCAYQIxgnGOoCMgkIBxAjGCcY6gLSAQk0MjY3ajBqMTWoAgiwAgE&sourceid=chrome&ie=UTF-8

#### Note 16.

https://www.google.com/search?q=difference+between+overnight+pads+and+regular+pads&sca\_esv=ae9e724bbb004512&sca\_upv=1&rlz=1C1RXQR\_enUS1053US1053&sxsrf=AM9HkKmsLBPfkBXxA1QzyyL\_lBpY59SMyw%3A1700999808945&ei=gDJjZa-sOduAkvQPkZG0mA0&oq=+overnight+vs+regular+sanitary+pads&gs\_lp=Egxnd3Mtd2l6LXNlcnAilyBvdmVybmlnaHQgdnMgcmVndWxhciBzYW5pdGFyeSBwYWRzKgIIATIIEAAYgAQYogQyCBAAGIAEGKIEMggQABiABBiiBEj1zgJQ7qwBWPepAnAAeAOQAQCYAfcCoAHSEaoBCDguMTAuMC4xuAEByAEA-AEBwgIEEAAYR8ICBBAjGCfCAgcQIxiwAhgnwgIKECMYgAQYigUYJ8ICBhAAGAcYHsICCBAAGAcYHhgPwgIGEAAYCBgewgILEAAYgAQYigUYhgPCAgYQABgeGA\_CAgYQABgFGB7CAggQABgFGB4YD8ICCBAAGB4YDRgPwgIIEAAYBRgeGA3CAgoQABgFGB4YDRgPwgIIEAAYCBgeGA3CAgQQIRgK4gMEGAAgQYgGAZAGCA&sclient=gws-wiz-serp

#### Note 17.

https://www.google.com/search?q=Google%3A+advantages+of+Ultra+thin+sanitary+pads&sca\_esv=a e9e724bbb004512&sca\_upv=1&rlz=1C1RXQR\_enUS1053US1053&sxsrf=AM9HkKno0xl2VhefuGZ 3lNTpSQfydGDJiw%3A1701000824506&ei=eDZjZc7EHuiywt0Pwe-lsAM&ved=0ahUKEwjO4KDv 0eGCAxVombAFHcF3CTYQ4dUDCBA&uact=5&oq=Google%3A+advantages+of+Ultra+thin+sanita ry+pads&gs\_lp=Egxnd3Mtd2l6LXNlcnAiLkdvb2dsZTogYWR2YW50YWdlcyBvZiBVbHRyYSB0aG luIHNhbml0YXJ5IHBhZHMyBRAhGKABMgUQIRirAkjU7wFQizNYjNABcAB4AZABAJgBhgGg AaUNqgEEMTQuNbgBA8gBAPgBAcICBBAAGEfCAggQABiABBiiBOIDBBgAIEGIBgGQBgg&s client=gws-wiz-serp

#### Note 18.

 $https://www.google.com/search?q=Google%3A+what+are+wings+for+in+maxi+pads\&sca\_esv=02b49\\9497c90f702\&sca\_upv=1\&rlz=1C1RXQR\_enUS1053US1053\&sxsrf=AM9HkKnCuk8k\_em9PJ8L8-a\\3KxgF2LSX0A%3A1700395115702\&ei=a\_hZZfm-KsCMwbkP09uxkAc\&ved=0ahUKEwi5oOW2gdCCAxVARjABHdNtDHIQ4dUDCBA&oq=Google%3A+what+are+wings+for+in+maxi+pads&gs\_lp=Egxnd3Mtd2l6LXNlcnAiJ0dvb2dsZTogd2hhdCBhcmUgd2luZ3MgZm9yIGluIG1heGkgcGFkczIIEAA$ 

 $YgAQYogQyCBAAGIAEGKIEMggQABiABBiiBDIIEAAYgAQYogRI7HtQ3BNYuEZwAXgBkAE\\ AmAGGAaABuQaqAQMzLjW4AQzIAQD4AQHCAgoQABhHGNYEGLADwgIHECMYsAIYJ-ID\\ BBgAIEGIBgGQBgg\&sclient=gws-wiz-serp$ 

Note 19. What is the difference between regular and long pads? - Google Search Note 20.

https://www.google.com/search?q=Google%3A+what+are+long+maxi+pads+for&rlz=1C1RXQR\_enU S1053US1053&oq=Google&gs\_lcrp=EgZjaHJvbWUqCAgAEEUYJxg7MggIABBFGCcYOzIICAEQ RRgnGDsyBggCEEUYOzIGCAMQRRg5MgYIBBBFGDsyGAgFEC4YQxiDARjHARixAxjRAxiAB BiKBTISCAYQABgUGIMBGIcCGLEDGIAEMhIIBxAAGEMYgwEYsQMYgAQYigUyDwgIEAAY QxixAxiABBiKBTIPCAkQABhDGLEDGIAEGIoF0gEKMTI5MTFqMGoxNagCALACAA&sourcei d=chrome&ie=UTF-8

Note 21. This data is from food stores with sales of over \$2 million, and drug stores over \$1 million; it also includes discount stores, such as Target and K-Mart, but *excludes* Wal-Mart as well as warehouse clubs, e.g., Sam's Club, Costco, and BJ's. It also does not include the "dollar" stores, such as Dollar General, and others.

Note 22. For those stores for which, during a week, there were feature ads, coupon ads, display, or temporary price decrease of at least 5%.

Note 23. The six classes are: "The Poor", "The Near Poor", "Traditional Middle Class", "The Upper-Middle Class", "The Very Rich/The Rich", and "The Mega Rich—Masters of the Universe".

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Note 24. https://us.pg.com/annualreport2022/

Note 25. KMB 2022 FORM 10K (kimberly-clark.com)

Note 26.

https://investor.kimberly-clark.com/news-releases/news-release-details/kimberly-clark-celebrates-150-y ears-purpose-led-innovation

Note 27. Energizer - Wikipedia

Note 28.

https://filecache.investorroom.com/mr5ir\_energizerholdings/381/2021%20EHI%20Annual%20Report%20and%20Proxy.pdf