



## Note on Behavioral Pricing

It is important for a firm to get its pricing “right.” Consider the impact of product pricing on a firm’s net income. If Coca-Cola could increase its prices by an average of 1%, without affecting consumer demand for its products, it would increase its net income by 6.4%. A price increase of less than 1¢ on a can of cola would translate to an increase in net income of about \$300 million.

Similar 1% price increases, if they did not negatively impact demand, would lead to increases in net income of 16.7% for Fuji Photo, 17.5% for Nestle, and 26% for the Ford Motor Company. In fact, an average price increase of 1% would boost the net income of the typical large U. S. corporation by about 12%.<sup>1</sup>

These examples highlight the potential impact on a firm’s net income of optimally setting product prices — small changes in price can have an enormous impact on income. Before raising (or lowering) prices in an attempt to improve the bottom line, however, a firm must understand and anticipate a consumer’s response to a product price change.

Unfortunately, it appears that many firms lack the necessary understanding of a consumer’s “willingness to pay” to optimally set product prices. When asked whether they were “well-informed” on six of the potential inputs to the product pricing decision, managers at one well-respected U.S.-based multinational responded as follows:<sup>2</sup>

- 84% were well-informed on the variable cost of providing their product.
- 81% were well-informed on the fixed cost of providing their product.
- 75% were well-informed on the price of competitors’ products.
- 61% were well-informed on the value of their product to the customer.
- 34% were well-informed on how consumers would respond to price changes.
- 21% were well-informed on consumers’ willingness to pay at various price levels.

These managers were well-informed on the costs of providing its products and on the price of competitor’s products. They were also well-informed on the value its products delivered to consumers. However, when it came to a consumer’s willingness to pay or to a consumer’s response

<sup>1</sup> From Robert J. Dolan and Hermann Simon’s, *Power Pricing*, The Free Press, New York, NY (1995)

<sup>2</sup> Ibid.

*Assistant Professor John T. Gourville prepared this note as the basis for class discussion rather than to illustrate either effective or ineffective handling of an administrative situation.*

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to potential price changes, these managers were lacking the insight needed to optimally set prices. Experience suggests that this company is not unique in this regard.

## Purpose of this Note

Any firm's ability to optimally set product prices is governed by many factors. Some of these factors are well understood and are routinely incorporated into a firm's pricing decisions. These factors tend to be heavily weighted toward those economic factors that are easily obtained by a firm, including their own variable and fixed costs of production, the market price of competitors' products and the firm's internal assessment of the value that their product delivers to the intended consumer. Not surprisingly, these are the four factors on which the surveyed managers claimed that they were well-informed. We will briefly review these factors in a moment.<sup>3</sup>

However, optimal product pricing also hinges on a consumer's willingness to pay and on a consumer's response to price changes, factors on which the surveyed managers claimed they were poorly informed. In addition, research has shown that a consumer's willingness to pay is often influenced by "psychological" or "behavioral" variables that typically are not considered when setting price. Specifically, consumers often are as concerned with the behavioral question of "how fair a deal am I getting" as they are with the economic question of "how good a deal am I getting."

This note is an attempt to highlight the potential impact of some of these behavioral variables on a consumer's willingness to pay. In the process, it provides a more complete picture of consumer response to pricing and provides some insight for optimal product pricing.

## Value Pricing and the Economic Perspective

The traditional economic approach to product pricing is driven by a small handful of factors, as shown in **Figure A**. One of these factors is the "objective value" the product delivers to the consumer.<sup>4</sup> This is a measure of the benefits that the product delivers to the consumer, regardless of whether the consumer recognizes those benefits. When 61% of managers claim they are well-informed on the value of their product to the consumer, they are most likely referring to this "objective value."

A second factor in the economic approach to pricing is the "perceived value" of the product to a consumer. Perceived value is the value the consumer understands the product to deliver. Sometimes, a product's benefits are readily apparent to the consumer and "perceived value" approaches "objective value" with little effort by the firm. Other times, a product's benefits are less obvious and need to be communicated by the firm to the consumer (e.g., via advertising, personnel selling). In such cases, the "perceived value" of a product typically falls below its "objective value."

The perceived value of a product also can be influenced by the price of competing products or "substitutes." Company A may develop a product that creates great objective value for consumers. Consumers may recognize this value and be willing to pay a high price to obtain the product.

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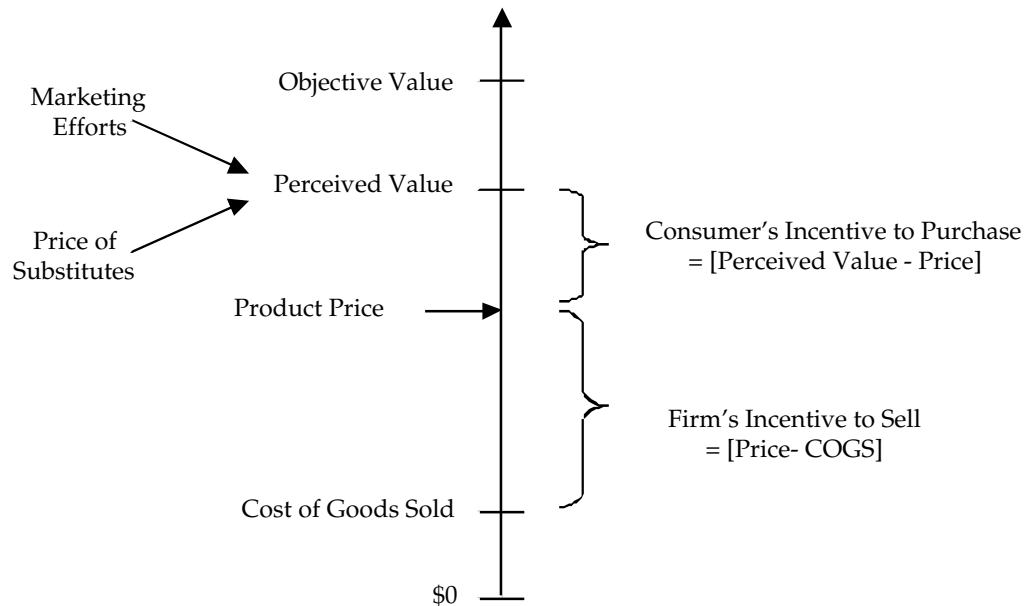
<sup>3</sup> For a more complete discussion of these economic factors, you should refer to Professor Corey's "Note on Pricing" [HBS Note #580-091] or Professor Dolan's "Pricing Policy" note [HBS Note #585-044].

<sup>4</sup> Given consumer heterogeneity, "objective value" and "perceived value" will tend to vary across consumers. For some consumers, these values will be high, for others, they will be low or zero. For simplicity, we will ignore consumer heterogeneity in this note and only consider the "typical" consumer. Nevertheless, the behavioral perspective offered in this note apply equally well to a heterogeneous consumer population.

However, if Company B introduces an identical product at a much lower price, the perceived value of Company A's product would be reduced to the price of Company B's product.

It is important to note that the “perceived value” of a product to a consumer *should* equal the maximum price that consumer is willing to pay for the product. Imagine a consumer who perceives the value of a modem to be \$100. If priced above \$100, the consumer has no incentive to buy the modem. If priced at \$100 or less, however, the consumer always stands to gain from purchasing.

**Figure A** Value Pricing and the Economic Perspective



The last major component to the economic approach to pricing involves the firm's cost of goods sold (i.e., COGS). Just as the consumer requires an incentive to purchase a product, the firm requires an incentive to sell the product. In order to stay in business and make a positive return, a firm must charge a price that covers both its cost of production.<sup>5</sup>

All of these economic factors come together to form the “value pricing” approach to pricing. In optimally pricing a product, a firm is bound at the upper end by the consumers’ “perceived value” for the product. This “perceived value” is influenced by the “objective value” of the product to the consumer, by the firm’s marketing effort to communicate that objective value, and by the price of substitute products. At the same time, the firm is bound on the lower end by its COGS.

By pricing above COGS and below perceived value, the firm has an incentive to sell the product, measured as [price – COGS], and the consumer has an incentive to purchase the product, measured as [perceived value – price]. In value pricing terminology, the firm has “created” value by offering a product that the consumer values at a price greater than the firm’s COGS. In turn, by pricing between perceived value and COGS, the firm has “captured” some of that value for itself and has allowed consumers to capture the remainder.

<sup>5</sup> For simplicity, we will ignore strategic reasons for pricing below cost such as to build share or volume or to temporarily respond to a competitor’s pricing efforts.

## Adding a Behavioral Component to the Economic Perspective

This “value pricing” framework provides a basic model of how an economically rational consumer *should* respond to a firm’s pricing of a product. A rational consumer *should* purchase a product as long as the “perceived value” of that product is greater than the actual price being charged. In addition, the more one’s perceived value exceeds actual price, the greater should be a consumer’s incentive to buy. This leads to the fairly straight forward claim that:

**The Economic Perspective: Consumers Buy When Perceived Value Exceeds Price**

Consumers should purchase an item whenever the perceived value of that item exceeds its actual price [i.e., whenever  $(\text{Perceived Value} - \text{Actual Price}) > 0$ ].

## Adding a Behavioral Component

To complement this economic perspective, we now add a “behavioral” or “psychological” perspective to product pricing. This perspective captures “how fair a deal” one is getting. To make this point clear, consider the following scenarios first proposed by Professor Richard Thaler.<sup>6</sup>

Scenario #1:

*You are lying on the beach on a hot day. All you have to drink is ice water. For the past hour, you have been thinking about how much you would enjoy a nice cold bottle of your favorite beer. A friend gets up to make a phone call and offers to bring back a bottle of your favorite beer from the only nearby place where beer is sold — a small, run down-grocery store. He says that the beer might be expensive and asks how much you are willing to spend. He says he will not buy the beer if it costs more than the price you state. What price do you tell your friend?*

What is your “perceived value” for a nice cold bottle of your favorite beer brought to you on a hot beach? Once you have decided upon the price you would tell your friend, consider a second scenario, identical to the first, except for the source of the beer, which is underlined.

Scenario #2:

*You are lying on the beach on a hot day. All you have to drink is ice water. For the past hour, you have been thinking about how much you would enjoy a nice cold bottle of your favorite beer. A friend gets up to make a phone call and offers to bring back a bottle of your favorite beer from the only nearby place where beer is sold — a fancy resort hotel. He says that the beer might be expensive and asks how much you are willing to spend. He says he will not buy the beer if it costs more than the price you state. What price do you tell your friend?*

If you are like most people, your responses to these two scenarios differ. When Thaler presented these scenarios to a group of executives in the early 1980s, the median response in the grocery store scenario was \$1.50 and the median response in the fancy resort hotel scenario was \$2.65. Similar results repeatedly have been obtained using Harvard MBAs — albeit, with somewhat higher average prices.

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<sup>6</sup> Scenarios 1 and 2 have been adapted from Richard H. Thaler’s paper, “Mental Accounting and Consumer Choice,” *Marketing Science*, 4, 3 (Summer 1985): p. 199-214.

The interesting question is why? As pointed out by Thaler, for the person consuming the beer on the beach, nothing of importance has changed between the two scenarios. Specifically,

- in both scenarios, the ultimate consumption is identical — the same beer is consumed on the same beach.
- no atmosphere from the fancy resort hotel or the run-down grocery store is being consumed by the beer drinker to justify different prices.
- there is no strategic reason to report a price below one's "perceived value" for the beer [e.g., you cannot haggle over price with hotel or store owner].

As a result, a person's "perceived value" for the beer *should be* identical across the two scenarios. To report otherwise would suggest that a bottle of beer consumed on a beach somehow tastes better or quenches thirst more effectively when purchased from one location than another. In turn, if the "perceived value" of the beer should be identical across the two scenarios, a person's "willingness to pay" also should be identical across the two scenarios.

Yet people's prices do differ and it appears that this difference is due to *expectations* consumers have regarding the price of a bottle of beer at a fancy hotel versus a run-down grocery store. As noted by Thaler, "While paying \$2.50 for a beer is an expected annoyance at the resort hotel, it would be considered an outrageous 'rip-off' in a grocery store."

In the end, it appears that one's "willingness to pay" in these two scenarios is driven not only by the "economic utility" of the transaction [i.e., perceived value – price], but also by the "psychological utility" of the transaction, driven largely by a consumer's perception of "fairness." Over the next several pages, we will look at scenarios that highlight specific drivers of transaction "fairness" and of the "psychological utility" of a transaction.

## Some Behavioral Updates to the Economic Perspective

### 1. The Relative versus Absolute Value of Money

In the economic approach to pricing, all money is equal – e.g., \$10 in one transaction is worth the same as \$10 in another transaction. Research suggests that this may not be the case when it comes to one's willingness to pay, however. Consider the following scenario and think about how you would respond.<sup>7</sup> There are no right or wrong answers. There is only your intuition as to how you would behave if you found yourself in such a scenario.

#### Scenario #3:

*You set off to buy a Sony Walkman at what you believe to be the cheapest store in the area. Upon arriving, you find that the Walkman you want costs \$29, a price consistent with your prior expectations. As you are about to make the purchase, a reliable friend tells you that the very same Walkman is selling for \$10 less at a store approximately 10 minutes away. Do you go to the other store to buy the Walkman?*

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<sup>7</sup> Scenarios 3 and 4 have been adapted from Richard H. Thaler's paper, "Toward a Positive Theory of Consumer Choice," *Journal of Economic Behavior and Organization*, 1 (1980), p. 39-60.

What would you do? Do you go to the other store and save \$10 or do you simply go ahead and purchase the Walkman in the first store and pay \$29?

A purely economic approach to this question would be to ask yourself whether 10 minutes of your time is worth \$10. If you decide that 10 minutes of your time is more valuable than \$10, you should forget about the potential savings and purchase the Walkman at the first store for \$29. If, however, you decide that 10 minutes of your time is less valuable than \$10, you should travel to the second store and purchase the desired Walkman there for \$19.

Now consider a second scenario, identical to the first, except for the nature and the price of the product being purchased.

Scenario #4:

*You set off to buy a Sony Camcorder at what you believe to be the cheapest store in the area. Upon arriving, you find that the Camcorder you want costs \$495, a price consistent with your prior expectations. As you are about to make the purchase, a reliable friend tells you that the very same Walkman is selling for \$10 less at a store approximately 10 minutes away. Do you go to the other store to buy the Camcorder?*

From the economic perspective, if you decided to travel to the second store to save \$10 in the first scenario, you also should have decided to travel to the second store to save \$10 in this second scenario. In both scenarios, the tradeoff is \$10 for 10 minutes of your time.

If you are like most people, however, your natural inclination will be to answer “yes” in Scenario #3 and “no” in Scenario #4. After all, \$10 on a \$29 Walkman represents a savings of over 33%, but \$10 on a \$495 Camcorder represents a savings of a measly 2%. While the dollar savings are the same, the psychological value of the savings is far greater in the first scenario than the second. Whereas a \$10 savings on a \$29 Walkman is perceived as a “fair” (and even generous) incentive to travel to the second store, a \$10 savings on a \$495 camcorder is perceived as a rather inadequate incentive to travel to the second store.

These two scenarios raise a curious and important fact about money. Namely, the “psychological utility” of a fixed amount of money (e.g., \$10) is relative. Saving \$10 on a \$29 item will have much greater impact on a consumer’s behavior than saving \$10 on a \$495 item.

This directly carries over to a consumer’s willingness to pay. Imagine two consumers, one of whom is debating whether to pay \$19 for a Walkman that he values at \$29, the other of whom is debating whether to pay \$485 for a camcorder that he values at \$495. While both consumers have the same “economic utility” to enter their respective transactions [i.e., perceived value – price = \$10 in both cases], the first consumer will be more likely to make a purchase than the second due to the higher relative incentive to enter his transaction.

This leads to our first update to the economic perspective:

**Behavioral Update #1: Willingness to Pay is Impacted by Relative Incentives**

In determining his willingness to pay, a consumer will consider both his absolute “economic utility” from the transaction [i.e., perceived value – actual price] and his relative incentive to enter the transaction [i.e., (perceived value – actual price)/(actual price)].

## 2. The Impact of a Salient Reference Price

Expectations about “what a product will cost” also seem to impact a consumer’s “willingness to pay.”<sup>8</sup> Read the following scenario and think about how you would respond. Again, there are no right or wrong answers. Only your intuition matters.

### Scenario #5

*Your favorite sports team has made the playoffs. Its first-round playoff series is a best-of-seven series<sup>9</sup> with Games 1, 2, 5, and 7 played on your team’s home field. General admission tickets had been priced at \$20 during the regular season. The team decided to raise general admission prices to \$40 for these four playoff games. Is this price increase fair or unfair?*

Is it fair for a sports team to raise prices by \$20 between the regular season and the playoffs? Most people who encounter this scenario say “yes.” About two-thirds of Harvard MBAs not only believe it to be “fair,” but would expect such an increase. Arguments in support of this stance include:

- The nature of the product has changed – playoff games are more exciting than regular season games.
- Demand almost certainly will be higher for the playoff games and the team is merely responding to this increase in demand.
- It is common for ticket prices to increase for playoff games.

Now consider a second scenario, similar to the first scenario except for the timing of the \$20 price increase.

### Scenario #6

*Your favorite sports team has made the playoffs. Its first-round playoff series is a best-of-seven series with Games 1, 2, 5, and 7 played on your team’s home field. General admission tickets had been priced at \$20 during the regular season. General admission tickets were also priced at \$20 for Games 1 and 2 of the playoffs. After Game 2, the team decided to raise prices to \$40 for Games 5 and 7. Is this price increase fair or unfair?*

In considering this second scenario, note that from a purely economic perspective, if Games 5 and 7 are worth \$40 in Scenario #5, they should also be worth \$40 in Scenario #6. Therefore, any difference in “fairness” between the two scenarios is not being driven by a change in the “economic utility” of the transaction, as measured by [perceived value – price], but by the “psychological utility” of the transaction.

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<sup>8</sup> In these and subsequent scenarios, individuals are being asked to assess the “fairness” of a firm’s pricing decision. Perceptions of fairness should impact “willingness to pay” in a straightforward fashion. In particular, in the short-term, consumers will be less willing to pay a price they feel is “unfair.” In the long-term, consumers will be less likely to purchase from a firm that makes an unfair pricing decision.

<sup>9</sup> In a best-of-seven series, the teams play games until one team wins four. This guarantees a minimum of four games and a maximum of seven. Often, Games 1, 2, 5, and 7 are played at one team’s location, Games 3, 4 and 6 are played at the other team’s location. Also, for each of Games 5, 6 and 7, tickets often are not sold until it is apparent that each game will be required.

If you are like most individuals, however, you find the price increase in Scenario #6 to be “unfair.” What seems to drive this sense of unfairness is the fact that ticket prices were raised mid-playoffs. Once ticket prices were set for Games 1 and 2, those prices created an expectation for prices for the remainder of the playoffs. By raising prices for Games 5 and 7, this expectation was violated.

These two scenarios highlight the power of a salient “reference price,” a price against which consumers compare other prices to assess both the “goodness” and “fairness” of a given transaction. In Scenario #5, regular season ticket prices were not a salient (nor appropriate) reference price due to the fundamental difference between regular season games and playoff games. In contrast, in Scenario #6, ticket prices for playoff Games 1 and 2 did establish a salient (and seemingly appropriate) reference price for Games 5 and 7. As a result, price changes in Scenario #5 are deemed “fair” while price changes in Scenario #6 are deemed “unfair.”

Interestingly, Scenario #6 was actually played out in the spring of 1997. In a best-of-seven playoff series between basketball’s Miami Heat and New York Knicks, Miami raised ticket prices in the middle of the playoff series. For Games 1 and 2, Miami Heat management had set the prices for various seats at \$20, \$30 and \$40. After Game 2, the Heat raised ticket prices to \$50, \$80 and \$90 for Game 5. Public outrage resulted and Game 5 was one of the very few basketball playoff games that year not to sell out. The extent of the outrage forced Miami Heat management to return prices to \$20, \$30 and \$40 for the final and deciding Game 7.

In more mainstream consumer transactions, how are reference prices formed? The most common basis for a reference price is the previous price paid for a product. If a consumer has been paying \$9.99 for bottle of wine that they have come to enjoy, this \$9.99 price becomes this person’s reference price for the wine. If the consumer subsequently encounters the same bottle of wine at the same store for \$14.99, the price difference will likely be questioned — not because the wine isn’t worth \$14.99 to the consumer, but because the consumer has grown to view \$9.99 as the “fair price.” This concept is captured in our second update to the economic perspective:

**Behavioral Update #2: Willingness to Pay is Impacted by Salient Reference Prices**

In determining her willingness to pay, a consumer will consider her “economic utility” from the transaction [i.e., perceived value – actual price] and the consistency between the actual price and a salient reference price [i.e., actual price – reference price].

### 3. The Impact of a Firm’s Cost of Goods Sold

Scenarios #5 and #6 show that a salient reference price can impact a consumer’s perception of fairness (and, by extension, her willingness to pay). Another factor that impacts a consumer’s perception of “fairness” is a firm’s cost of goods sold, as indicated by the following two scenarios.<sup>10</sup>

Scenario #7:

*A grocery store has no peanut butter in stock, but is about to receive a new shipment. Prior to delivery, the owner finds out that the wholesale price of peanut butter has increased 20% and will affect this new shipment. The owner decides to increase the price of the new peanut butter by 20%. Is this retailer’s actions fair or unfair?*

<sup>10</sup> These two scenarios are adapted from Kahneman, Knetsch and Thaler, “Fairness as a Constraint on Profit Seeking: Entitlements in the Market,” *American Economic Review* 76, 4 (1986): p. 728-741.



With little argument, most consumers find this retailer's actions to be entirely "fair." After all, the retailer is only passing along a wholesale price increase to the consumer. The retailer has not caused the price increase and is not benefiting from it. Contrast that with the following scenario:

Scenario #8:

*A grocery store has a one week supply of peanut butter in stock and is due to receive a new shipment in the near future. Prior to delivery, the owner finds out that the wholesale price of peanut butter has increased 20% and will affect the new shipment. The owner decides to immediately increase the shelf price on his current stock of peanut butter by 20%. Is this retailer's actions fair or unfair?*

In thinking about these two scenarios, let us again consider the purely economic perspective. In particular, one's "perceived value" for peanut butter should not differ between the two scenarios – the peanut butter is the same in both scenarios. In addition, the price being charged for the peanut butter has increased 20% in both cases. Therefore, any sense of "fairness" is not being driven by the "economic utility" of the transaction [i.e., perceived value – actual price], but by the "psychological utility" of the transaction.

Nonetheless, most consumers find the retailer's actions "unfair" in Scenario #8. Why? The typical argument is that this retailer is only entitled to pass on a cost increase on a product that has been subject to that increase. In Scenario #8, by raising the price of the in-stock peanut butter that has not been subject to the wholesale price increase, the retailer is "taking advantage of the consumer."

In addition to the magnitude of their own incentive to purchase, these two scenarios suggest that consumers are concerned with the magnitude of the firm's incentive to sell [i.e., actual price – cost of goods sold]. In particular, consumers do not want to be taken advantage of and desire a fair division of value between themselves and the firm that makes a product. As a result, they are willing to label a price increase "unfair" when that price increase is coupled with little or no change in the cost of goods sold. This concept is captured in our third update to the economic perspective.

**Behavioral Update #3: Willingness to Pay is Impacted by Cost of Goods Sold**

In determining his willingness to pay, a consumer will consider his own "economic utility" from the transaction [i.e., perceived value – actual price] and that of the firm [i.e., actual price – cost of goods sold].

#### 4. The Nature of the Product Being Sold

To this point, it has been shown that factors such as a salient reference price or a known cost of goods sold can impact perceptions of transaction fairness. How do these perceptions of fairness vary by the type of product being sold? Consider the following scenario:

Scenario #9

*In 1996, baseball's Seattle Mariners made it to the American League playoffs. During the season, general admission to a Mariners game cost \$15. For the playoffs, the Mariners raised the price of general admission tickets to \$20. Is this fair or unfair?*

Most individuals who encounter this scenario feel that this price increase is fair and justified, for many of the same reasons that a ticket price increase in Scenario #5 was fair and justified. In particular, the underlying conditions have changed (playoffs vs. regular season) and consumer



This framework suggests that an economically rational consumer *should* decide whether to buy a product solely on the economic utility of the transaction — i.e., by comparing perceived value to product price. In reality, consumers incorporate a host of psychological or behavioral factors into their decision making. These factors include the relative size of the incentive to purchase, the consistency between actual price and expected price, and the difference between product price and the firm's cost of goods sold. These behavioral factors influence perceptions of transaction "fairness" and tend to reduce a consumer's willingness to pay relative to a purely economic perspective.

Armed with these insights, however, how can a firm more effectively manage perceptions of transaction fairness and anticipate a consumer's willingness to pay for its products. Two strategies are recommended.

### Strategy #1: Actively Manage Price Expectations

A consumer usually enters a transaction with some expectation about the price of a product. As evidenced by the scenarios presented in this note, these expectations can have systematic and significant effects on that consumer's willingness to pay for the product. Unfortunately, firms often do very little to understand and/or manage these expectations.

Instead, firms should actively manage the reference prices and comparisons that consumers employ when assessing product prices. In particular, a firm should look to:

- **Establish credible reference prices.** A firm should look to establish a benchmark price for its products whenever possible. Common tools for doing this include the use of a credible "suggested retail price" or "list price." Through the clear posting and reliance upon list prices, the automobile industry has done a good job of managing the benchmark price against which consumers evaluate the fairness of the final price paid.
- **Manage product price trends.** The single most influential reference price that consumers employ when assessing the fairness of a product price is the previous price paid for that product. As a result, it is far easier to lower prices that are too high than to raise prices that are too low.
- **Encourage favorable comparisons.** Consumers naturally compare the prices of products within and across product categories. In anticipation of this reliance upon comparisons, a firm could suggest comparisons for consumers to consider. For instance, to combat the perception of excessively high prices for its cereals, Kellogg might be well-advised to compare the daily cost of its cereals (about 30¢) to the cost of other breakfast alternatives, such as the cost of a donut or bagel (50¢ or more).
- **Avoid unfavorable comparison through product differentiation.** When compact discs first appeared in the music market, they suffered from price comparisons to vinyl records. At \$15, CDs were about twice the price of the alternative they were replacing. It was only after convincing consumers that such comparisons were inappropriate, due to vast improvements in sound quality and scratch resistance, that consumers accepted the higher CD prices as fair and reasonable.

### Strategy #2: Actively Manage Perceptions of Cost of Goods Sold

As Scenarios #7 and #8 suggest, consumers are sensitive to a firm's cost of goods sold. As a general rule, consumers are reluctant to pay for products they perceive to be overpriced relative to cost.

This consideration of COGS is especially problematic for firms that operate under high fixed and low variable costs. For example, Microsoft charges hundreds of dollars for its software, yet can churn out incremental copies of that software at the cost of a floppy disk. Many consumers view this as “unfair” and, as a result, have few qualms about using pirated software. In a similar vein, some consumer label drug companies as “greedy” when those companies charge \$40 or \$50 for a single dose of a branded drug when comparable generics cost a fraction of the price.

Such thinking on the part of the consumer fails to appreciate the fully-loaded cost of product delivery. In the case of Microsoft, the incremental cost of producing another copy of Windows pales in comparison to the cost of developing and supporting that application. And in the case of the drug company, many years and many millions of dollars may have gone into the research and development needed to bring that drug to market. These examples highlight the need for firms to manage the consumers’ perceptions of cost of goods sold. This can be accomplished in several ways.

- **Focus attention of fully-loaded cost of goods sold.** For firms in high fixed cost/low variable cost industries, it is difficult to justify high product prices based on the incremental cost of production. Rather, the firm can focus consumer attention on the fully-loaded cost of production. For instance, if drug companies and software developers effectively communicated the high cost of product development and product support to consumers, they may successfully combat impressions of pricing “unfairly.”
- **Bundle products to obscure cost of goods sold.** Some firms sell products where costs are readily apparent to the consumer (e.g., personal computer retailers). Other firms choose to bundle those very same products with additional goods or services so as to obscure the true cost of goods sold. For example, rather than sell computer components, value-added resellers sell turn-key systems. And rather than sell tickets to sporting events, travel agents sell vacation packages that include airfare, hotel and game tickets. By bundling products, a firm can make its costs less transparent to consumers.
- **Focus attention of consumer value.** A final means by which firms can look to minimize the impact of cost of goods sold is by focusing attention on the consumer’s incentive to purchase. In the end, a consumer benefits whenever perceived value is greater than product price, regardless of the firm’s cost of goods sold. As such, through effective product positioning and communication of value, a firm can minimize the impact of COGS by maximizing attention to the net benefit of purchase to the consumer.

## Summary

This note began with the statement, “It is important for a firm to get its pricing ‘right.’” Yet, “getting prices right” is a complex process that few firms seem well-equipped to manage. While firms have a relatively good grasp of the readily available economic inputs to the pricing decision (e.g., cost of goods sold, price of substitutes), most lack the behavioral inputs needed to fully understand and anticipate a consumers response to a pricing change. In particular, few firms anticipate the behavioral implications of transaction “fairness,” as perceived by the consumer. This note does not attempt to offer a comprehensive behavioral perspective to pricing. Rather, it is meant to raise awareness that behavioral factors exist and that these factors are important if a firm expects to “get its pricing right.”