

# MIT Sloan

## Management Review

**David R. Bell & Xavier Drèze**

---

# Changing the Channel: A Better Way To Do Trade Promotions

Please note that gray areas reflect artwork that has been intentionally removed. The substantive content of the article appears as originally published.

REPRINT NUMBER 4324

# Changing the Channel:

## A Better Way To Do Trade Promotions

Manufacturers and retailers have traditionally viewed trade promotions as weapons in a zero-sum game. But when designed correctly, promotions can become tools that build revenues, profits and even trust all along the channel.

**David R. Bell**  
and **Xavier Drèze**

**I**n the cold war between manufacturers and retailers, trade promotions are viewed with great suspicion. Regardless of the terms of a given deal, each party believes the other is trying to get the upper hand. The watchword is trust, but verify.

In theory, trade promotions should benefit everyone involved. The manufacturer offers the retailer a product temporarily at a lower price; in return for selling its goods at a lower unit cost, the manufacturer intends to earn new customers and build the loyalty of current ones. Likewise, the retailer, by selling the product at a discount, should enjoy increased sales during the promotion, while bearing little in the way of extra costs. And consumers, of course, should save money on their purchases. In practice, however, manufacturers and retailers often manipulate the system in a zero-sum game, and consumers are sometimes left out altogether.

It need not be that way. Over the past three years, we've examined the theoretical and practical problems associated with trade promotions, and we are convinced that it is possible to create the right kind of deal — a transparent system that generates mutual trust and, yes, produces the proverbial win-win outcome for both manufacturers and retailers. The key is proper implementation of what is thus far a little understood tool.

As most marketing managers know, the most common form of trade promotion is the “off invoice,” so called because retailers see the savings immediately reflected in their invoices. Retailers frequently abuse these promotions, however. They often purchase much more than they can sell during the official promotion period and then either continue to sell discounted products for far longer than the manufacturer had desired — thus eroding the brand's equity — or re-establish the product's regular price and simply pocket the savings themselves. They frequently also sell some of their discounted excess inventory to other retailers at a smaller discount, a practice known as diverting.

Increasingly, manufacturers, having wised up to these tactics, are testing another approach: the pay-for-performance trade promotion. Pay for performance means that retailers get rewarded according to how much they sell, not how much they buy. Because the promotion results are usually determined by

---

*David R. Bell is an associate professor of marketing at the University of Pennsylvania's Wharton School of Business, and **Xavier Drèze** is a visiting assistant professor of marketing at UCLA's Anderson Graduate School of Management. Contact the authors at [davidb@wharton.upenn.edu](mailto:davidb@wharton.upenn.edu) and [xavier.dreze@anderson.ucla.edu](mailto:xavier.dreze@anderson.ucla.edu).*

examining scanner data, these promotions are called “scan backs.” And yet scan backs so far are unpopular, too. Retailers are accustomed to living off the fat of the off-invoice promotion, and they aren’t about to welcome a change in the status quo in the absence of a persuasive argument to do so. The fact is, although scan-back promotions have been theoretically possible for a couple of decades, they have not been tried often enough to make their merits widely known. The often acrimonious relationship between retailers and manufacturers makes it difficult for each party to assess the alternatives objectively. Suspicion rules, and questions remain unanswered: Will a move to pay for performance hurt retailers? What type of deal should they accept? Will manufacturers be better off? What are the potential pitfalls? How will consumers be affected?

We’ve found some answers to these questions. They come via a relatively simple process that manufacturers can use to design scan backs so that they will be acceptable to retailers. Using a hypothetical case, we show how different scan-back options can be designed to make them as attractive as off-invoice deals; we also explain how one national beverage company made a scan back work in practice. We then offer practical advice to help senior managers overcome obstacles in implementing pay-for-performance deals.

Let’s be clear: Pay-for-performance promotions are not a magic pill that can cure everything amiss between retailers and manufacturers. Nor are they an instant solution; they require careful design and real changes in marketing culture. When implemented correctly, however, they’re an important step in the right direction. They boost manufacturers’ bottom line. They do the same for retailers, while allowing them to concentrate on marketing rather than buying. They can increase trust. And the consumer, who should be at the center of promotional efforts, sees lower prices on trusted brands.

## Seeds of Mistrust

For many companies, the trade deal is closer to being a bitter pill than a miracle drug. In fact, trade promotion is the most expensive, most controversial and least understood marketing tool employed by manufacturers.<sup>1</sup> According to one survey, manufacturers believe that only 16% of all trade deals are ultimately profitable.<sup>2</sup> Retailers, too, feel that such promotions are wasteful; they claim that just 13% of the \$75 billion spent annually on these deals goes to their bottom line (manufacturers counter that the figure is closer to 30%).<sup>3</sup> Some of that money goes to its intended recipient, the consumer; retailers express frustration that the rest is eaten up in inventory costs and administrative expenses. Moreover, two-thirds of retailers believe they are not getting their fair share of trade promotion dollars; they suspect that manufacturers are favoring their competitors.

But while retailers are often merely frustrated by trade promotions, manufacturers generally loathe them in their current form. Durk Jaeger, the former head of Procter & Gamble’s U.S. operations, speaks for roughly 90% of all manufacturers in calling the trade promotion system “impossibly inefficient.”<sup>4</sup> In addition, 85% feel that promotion dollars are not spent effectively, and only 19% think they get good value for their money.<sup>5</sup> Although channel partnerships in recent years have streamlined supply chain management and the transfer of information between manufacturers and retailers, that collaborative spirit has been missing from the practice of trade promotion.<sup>6</sup>

From the manufacturer’s point of view, retailers subvert the intent behind trade promotions primarily by “forward-buying.”

That is, in response to an open-ended trade deal — “Buy as much of our product as you want over the next two weeks at this lower price” — retailers load up on much more than they intend to sell during that period. We’ve mentioned the consequences of this practice: The retailer either pockets savings that were supposed to end up in the consumer’s wallet or continues the promotion to the point where it can erode the brand’s value. Such practices are tremendously frustrating for manufacturers.<sup>7</sup> Yet one can hardly blame retailers; they are simply responding rationally to the incentives provided to them under the terms of the deal. As long as the inventory costs associated with buying excess products are lower than the savings they can obtain by forward-buying discounted goods, they would be foolish not to do it.

Another problem with forward-buying is that it distorts the producer’s understanding of demand. The manufacturer responds to the artificially large orders by overproducing, only to find that retailers and consumers have plenty of product on hand. The broad fluctuations in demand contribute to inefficiencies in the supply chain known as the “bullwhip effect.”<sup>8</sup> Needless to say, manufacturing plants suffer when the size of orders is unpredictable and inconsistent.

Given these problems, why do manufacturers initiate trade deals? They do so for a variety of reasons. They may want to counter the popularity of lower-priced store brands, for example. They may wish to encourage retailers to pass discounts on to consumers who are especially price sensitive.<sup>9</sup> Sometimes they simply have a lot of inventory that they need to pass down the channel. At other times, they may hope to increase brand awareness or get consumers to try their product once — so they’ll come back for more later. All are sensible reasons. The key in this process is shifting the terms of the promotions so that retailers continue to benefit but not at the expense of manufacturers.

## Redesigning the Trade Deal

Manufacturers pin their hopes in this area of marketing on scan backs. The goal is to lift the dead weight from the channel — the retailer costs associated with managing excess inventory as a result of forward-buying and diverting — and to redistribute it in the form of profits for both sides of the deal.

Scan-back promotions have a profound impact on how retailers react to the incentives on the table. Because only the units sold during the promotion lead to payment, retailers have no reason to forward-buy. Similarly, they have no motivation to divert since only the merchandise sold through the retailer’s scanners gets counted under the promotion’s terms. Scan backs also eliminate the temptation to keep running a promotion long after the manufacturer’s discount is available. Once it’s over, it’s over. Finally, because scan backs force retailers to disclose their actual sales fig-

ures to manufacturers, they can help manufacturers monitor retailers’ marketing efforts as well as real levels of consumer demand.

But retailers have no incentive to change the way they engage in trade promotions. Despite their grumblings, off-invoice deals are good deals for them. Forward-buying and diverting generate sizable profits, and preventing retailers from engaging in either would drastically affect their bottom line. It’s that straightforward. Meanwhile, a scan-back offer with the same terms (identical wholesale price, discount and time frame) as an off-invoice deal yields much less revenue and profit. So why would any retailer want to accept a scan-back promotion?<sup>10</sup>

The quick answer is that no retailer ever would. As a result, manufacturers have no choice but to change the terms of the scan back if they are to persuade retailers to accept pay-for-performance deals. They can alter the terms in several ways to accomplish that goal.<sup>11</sup>

To think through the different options, imagine a channel in which a manufacturer sells a good that costs \$3.33 to produce. Sales are made through a single retailer and the underlying demand curve slopes downward (as prices rise, sales decrease). Consumer sensitivity to price changes is represented by a constant price elasticity of demand that we set at  $-3$ . Optimal retail prices are determined by the classical markup rule from microeconomics:  $\text{Price} = (\text{average cost} \times \text{elasticity}) \div (1 + \text{elasticity})$ .<sup>12</sup> Using this rule, the manufacturer sets the wholesale cost at \$5.00, and the retailer sets the retail price at \$7.50. Sales and profits in the absence of any deal are shown in column one of the table “A Comparison of Trade Deals.” Over the course of 10 weeks, retailer revenue is \$888.89, of which \$296.30 is profit; manufacturer revenue is \$592.59, of which \$197.53 is profit.<sup>13</sup>

What happens when the manufacturer offers a trade deal? It all depends on how the deal is structured.

**Identical Deals** Start by considering a promotion in which the terms of the scan back are the same as those for the off-invoice deal. The manufacturer offers the retailer a \$1 trade deal good for one week. In the off-invoice scenario, the retailer would see a \$4 charge on the invoice for each unit of the product it purchases. For reasons beyond the scope of this article, we can calculate that the retailer would rationally forward-buy 4.57 weeks’ worth of the product.<sup>14</sup> The retailer would then run the promotion for 3.45 weeks and set the regular price at \$7.38 and the promoted price at \$6.26. Column two in the table shows that in comparison with no trade deal at all, retailer profits would increase by more than 17%, while manufacturer profits decrease by more than 20%.

Now use the same terms to change the deal to a scan back. The retailer would set regular and promotion prices at \$7.50 and \$6.00 (see column three). Reaping the benefits of the

## A Comparison of Trade Deals

Manufacturers have a variety of different options when it comes to implementing trade deals, from the traditional off-invoice (discounts based on how much product is ordered) to the largely untested scan back (discounts given according to how much product is sold). The table indicates through a hypothetical example how different terms of trade deals yield different revenue and profit figures for manufacturers and retailers. The goal is to design scan-back promotions so that all parties, including consumers, come out ahead.

	1	2	3	4	5	6
	No promotion	Off-invoice deal	Basic scan back	Mimic scan back	Same length (of promotion) scan back	Same depth (of discount) scan back
<b>Cost to retailer</b> (wholesale price per unit)	\$5.00	\$5.00	\$5.00	\$4.92	\$5.00	\$5.00
<b>Manufacturer's trade deal</b>						
Depth of discount		\$1.00	\$1.00	\$0.74	\$1.96	\$1.00
Length of promotion		1 week	1 week	3.45 weeks	1 week	3.04 weeks
Regular price	\$7.50	\$7.38	\$7.50	\$7.38	\$7.50	\$7.50
Average weekly sales, in units	11.85	12.45	11.85	12.45	11.85	11.85
Retailer's promotion length		3.45 weeks	1 week	3.45 weeks	1 week	3.04 weeks
Retailer's promotion price		\$6.26	\$6.00	\$6.26	\$4.55	\$6.00
Average weekly sales, in units		20.34	23.15	20.34	52.93	23.15
Total sales, in units, over 10 weeks	118.52	151.68	129.81	151.68	159.60	152.90
Retailer revenue	\$888.89	\$1,041.06	\$938.89	\$1,041.06	\$1,041.06	\$1,041.06
Retailer profit	\$296.30	\$347.02	\$312.96	\$347.02	\$347.02	\$347.02
Manufacturer revenue	\$592.59	\$661.83	\$625.93	\$674.39	\$694.04	\$694.04
Manufacturer profit	\$197.53	\$156.23	\$193.21	\$168.79	\$162.05	\$184.38

deal for only one week, the retailer would have no incentive to forward-buy. Its revenues and profits would be higher than they would have been in the absence of a deal, but the benefits would be much smaller in comparison with the off-invoice promotion — only about a 5% increase in profits. Given the extra work involved to implement the promotion, it's easy to see why retailers are reluctant to accept such deals, especially given the clear benefits of off-invoice promotions. Although the numbers look quite favorable to the manufacturer, a deal that offers such meager benefits to retailers isn't going to fly.

**The Mimic Scan Back** Fortunately, the problem is not insoluble. It's possible to redesign the scan back so that retailers do at least as well as they would with an off-invoice deal. One way of doing that is through what we call the mimic scan back, in which the retailer's average costs of promoted and nonpromoted goods are identical to those it would incur in the off-invoice trade deal; as a result, the prices offered to consumers and the promotion's length will be unchanged, and the retailer will be equally prof-

itable in either case. The manufacturer, on the other hand, will do better because the retailer will avoid forward-buying.

In order for the numbers to work out identically for the retailer under a mimic scan back, the manufacturer has to change three parameters: the regular wholesale price, the length of the deal and the depth (size) of the discount. The key insight is that the length of the promotion must equal the optimal length set by the retailer in an off-invoice deal — in this case, that's 3.45 weeks. Similarly, the wholesale price and the depth of the discount must induce the retailer to set the same prices in both cases so that consumers, in turn, see the same prices as they would during an off-invoice deal and thus behave identically in each situation. To get to those prices (regular price of \$7.38 and discounted price of \$6.26 in column four), the manufacturer must set the wholesale price at \$4.92 and the discount at \$0.74 per unit. With those terms, the retailer will make as much as it would have in the off-invoice scenario, but the manufacturer will do better. The retailer still makes a profit of \$347.02, but manufacturer profits go up to \$168.79 from \$156.23.<sup>15</sup>

**Scan-Back Variations** While the mimic redesign makes the scan back sufficiently attractive to the retailer, the manufacturer may be reluctant to change all three parameters. For example, the manufacturer may be concerned that relatively long promotions erode brand equity. In our hypothetical case, the company could view a promotion lasting 3.45 weeks as undesirable. Fortunately, a different deal can be put on the table that will still allow both parties to benefit (see column five). By increasing the size of the discount from \$1.00 to \$1.96, the manufacturer can keep the wholesale price constant and the deal length at one week. Retailer revenue and profits (again, using our assumptions about pricing behavior) would then be as high as they would have been following an off-invoice promotion, and manufacturer numbers improve as well. Although the improvement may seem inconsequential, the total benefits would be significant if many retailers were targeted. In addition, the manufacturer would benefit from lower administrative costs and from getting a better read on consumer demand.

Other manufacturers may balk at offering a deep discount or changing their basic wholesale prices. In that case, as column six in the table indicates, it is not difficult to adjust the length of the promotion so that it meets the retailer's criteria while also benefiting the manufacturer. The sole criterion, again, is that the scan-back deal must leave the retailer as well off as it would have been as the result of an off-invoice promotion.

That the manufacturer can redesign the scan-back deal to make both parties better off is perhaps not that surprising. The interesting twist is that the redesign will always require the manufacturer to offer a deal that is better than the off-invoice promotion. To be acceptable to retailers, the scan back must offer some combination of a lower regular wholesale price, a longer deal and a deeper discount.

## Does It Really Work?

It's always healthy to be skeptical of purely hypothetical data. But we have evidence that the scan back works. A national-brand beverage manufacturer recently implemented both off-invoice and scan-back trade deals in a yearlong field test.<sup>16</sup> The study was conducted in cooperation with retailers in four regions of the United States (Northeast, Southeast, and two parts of California). The four retailers had in the past engaged in successful cooperative marketing efforts with the manufacturer and were savvy enough to recognize the potential in pay-for-performance deals.

Each retailer received up to four scan-back and four off-invoice deals at different times over the year. The scan-back promotions were offered at the regular wholesale price for the same length of time as the off invoice. In order to make the two deals

equally attractive to the retailers, the scan back included a deeper discount than the off invoice. In addition, the first round of tests included only the most popular SKUs so that the retailers would get the maximum bang from each promotional buck.

The results revealed the clear advantages of the scan back. A detailed statistical analysis of the flow of shipments from manufacturer to retailer showed that retailers loaded up when offered an off-invoice deal but did not do so when offered a scan back. Not surprisingly, the year-end figures on units shipped and units sold also presented strong evidence of diverting, likely in response to the off-invoice deals. The Southeast and one California retailer both sold many more units than they ordered during the year (15% and 335% more, respectively; in raw numbers, about 8,000 and 20,000 more cases sold than ordered). The other California retailer sold much less than it ordered (20% fewer cases, or about 60,000 cases). Only the Northeast retailer sold about as much as it ordered.

When using scan-back deals, however, the beverage company found greater pass-through of discounts to consumers, limited (if any) forward-buying and more stable retailer demand. For most off-invoice deals, pass-through to the consumer is usually between 20% and 30%. In this case, about 75% of the total spent on the various deals ended up in consumers' pockets. Even with that percentage of the deal going to consumers, both the beverage company and the retailers enjoyed more direct and indirect benefits using scan backs in place of off-invoice promotions.

The field experiment revealed that scan-back deals generate more sales and marketing support from retailers. During the scan-back promotions in this instance, a higher percentage of the beverage volume was sold using such marketing tactics as end-of-aisle displays, newspaper advertising and weekly flyers. Another important benefit to both parties is that under pay-for-performance deals, it is easier to calculate prices and pass-through rates.<sup>17</sup> Scan backs eliminate the purchasing distortions inherent in off-invoice deals that prevent manufacturers from assessing pass-through rates. The data coming out of pay-for-performance promotions are greatly simplified and make it easier to assess a given deal's effectiveness.

Finally, by encouraging retailers to focus on marketing rather than purchasing, scan backs help align retailers with what should be their core function in the channel. Retailers shift some of their attention from the manufacturer to the ultimate driver of the category, the consumer.

Today the beverage company is continuing to use both off-invoice and scan-back promotions, but it is gradually shifting in favor of the latter. The main barrier to greater implementation — in this situation and in others like it — is retailer allegiance to the status quo of off-invoice deals.

---

## To make scan backs a regular part of the marketing landscape, manufacturers and retailers must learn to trust each other more.

---

We've shown how pay-for-performance promotions can be made acceptable to both sides. There are, however, obstacles to implementation that go beyond a consideration of the numbers. To make scan backs a regular part of the marketing landscape, manufacturers and retailers must learn to trust each other more, and retailers must recognize how their organizational culture and infrastructure perpetuate the status quo. These barriers can be overcome only by introducing a mix of technological and human changes.

### Using an Auditor

Like it or not, retailers and manufacturers need each other in order to achieve superior performance. If scan backs are to gain increased acceptance, retailers will need more than a numerical argument to reassure them that they will be as well off as they would be under the terms of off-invoice deals. They also need to be able to trust that they will be reimbursed in a timely manner for items that are sold during the promotion; at present, they may rightly fear that payment will be held up until the two parties agree on what the data say about how many units were sold. At the same time, manufacturers must be able to trust that they are paying only for those items that are actually sold during the promotion period.

A classic example of how this trust is violated is the so-called "scam down," in which the retailer manipulates the number of sales during the scan-back period.<sup>18</sup> We encountered one case in which a retailer repeatedly ran the same item through the scanner in order to inflate the number of sales. In the worst-case scenario, the manufacturer gives an off-invoice deal to one retailer who then forward-buys and diverts to a second retailer; that retailer then sells the same merchandise during a scan-back period — thus the manufacturer ends up giving the discount twice.

To help build trust into the relationship, manufacturers and retailers should consider implementing pay-for-performance deals with the help of a neutral auditor. An auditor can facilitate the execution of the trade deal by informing all the retailers involved of the terms and timing of the promotion (a feat of coordination many manufacturers would be glad to outsource) and by verifying sales. Well-established auditors can

also promptly pay retailers for the discounts earned and later collect from the manufacturer. Seasoned auditors will also have the ability to cope with retailers of different sizes and locations, with many different products and degrees of technological sophistication. Auditors should offer a menu of options from which the retailer can choose. For example, a retailer without a scanner system should still be able to participate in scan-back deals by leaving a different kind of audit trail. Thus instead of reviewing easily verifiable electronic data, auditors may have to check shipment invoices manually. Since checking such data can be time-consuming and lead to figures that are not completely accurate, stores that do not have scanners may receive, say, 70 cents on the dollar for the trade promotion.<sup>19</sup> Auditors must also have the ability to support deals that depend on the retailer hitting sales targets or providing specific marketing support (or both). A retailer meeting the manufacturer's sales target may receive a lump-sum payment for doing so; another retailer that runs concurrent displays may receive credits that can be cashed in later. Pay-for-performance menus that cover a range of possibilities offer considerable flexibility to both parties.

If the manufacturer decides to use an auditor, it should involve retailers in the selection process rather than just present them with a *fait accompli*. Before making the decision, both parties should look for evidence of the auditor's ability to compute cost-volume projections, to cover all classes of trade, to follow up with retailers to make sure they understand the promotion's terms, to provide status reports on participation, to pay within one week of the expiration of the scan-back deal and to provide reports and billing summaries, preferably at the level of the SKU and individual retailer. In short, the auditor should do a lot more than simply verify sales and make payments.

As honest brokers, auditors also help retailers by making it clear that the playing field is level. In the traditional off-invoice game, the manufacturer and the retailer negotiate directly, and powerful retailers can often squeeze more out of the manufacturer than weaker companies can. When proposing a scan back, however, the manufacturer can use an auditor to make a general announcement to several retailers that basically says to each one, "You pick the promotional weeks that are best for

you and decide how you want to market the product, and we will make sure you are paid promptly and in direct proportion to your performance.” When the playing field is leveled in this way, only those retailers that are savvy, well-run marketers will realize the maximum benefits of trade promotions. There is nothing to be gained by gaming the system.

### **Changing Organizational Culture**

Auditors can’t fix every problem associated with trade promotions. Over time, retailers have built entire departments and infrastructures aimed at efficient product buying. Companies reward individual managers for making profitable “buys,” and they invest large amounts of capital in extra warehouse space and trucking operations. Given these facts, it’s clear that it will take time before retailers are ready to alter their compensation structures and operations so that they emphasize selling rather than buying.

Manufacturers have their own problems to solve. They’ve become mired in administrative tasks resulting from complicated negotiations with multiple retailers, and because of uncertainty over pass-through rates — which ultimately drive sales — they haven’t approached trade promotions with the necessary degree of effort and sophistication. Moreover, they are stuck in a prisoner’s dilemma in which one manufacturer is afraid to drop off-invoice deals because a competitor will continue to run them and take away business as a result (even though the manufacturers would be able to force the retailers to change if they both made the switch).

In a truly market-driven organization, retail managers would be rewarded for verifiable promotional performance, not for the amount of product purchased. Likewise, manufacturers need to establish performance metrics for managers that are related to product movement and profitability, not simply sales to retailers.

Collaborative partnerships take time to develop, and are best started by small efforts to build credibility and mutual understanding.<sup>20</sup> One practical early step is to encourage experimentation. Companies could follow the beverage manufacturer’s example: Choose a limited number of SKUs and run both off-invoice and scan-back deals at the same time in markets that have historically shown similar levels of sales volume and consumer response. Alternatively, choose one retailer to implement both deal types consecutively. If such initial efforts are successful, there is almost no limit to the scope and level of complexity of experiments that can be constructed. The most important element of such experimentation is that it requires the key parties to talk about what they hope to

accomplish with a particular trade deal. Afterward, they should cooperate to analyze the results of the experiment, possibly in consultation with an auditor who has data from a range of experiments.

Changes in organizational culture and incentive plans can also be supported by tangible marketing initiatives. For example, retail managers should have their compensation more closely aligned with brand and category performance rather than the profits made from smart buying decisions. This approach could also be extended to incorporate customer satisfaction metrics in which manufacturers contribute an evaluation of the quality of the retailer-manufacturer relationship. Although that suggestion may sound radical, several companies have in fact incorporated such “softer” measures into sales force compensation plans.<sup>21</sup>

Finally, it’s useful to keep in mind that while software solutions for merchandising-response analysis are important, they are not nearly as critical as the attitudinal and organizational changes required to view trade promotion in a new light. Unless both manufacturers and retailers can develop closer relationships and begin to understand their respective roles in the channel better, scan backs will be no more successful than off-invoice deals in promoting efficient trade that benefits the consumer.

### **Seeking Peace — and Profits**

Relations between manufacturers and retailers may never be chummy, but they don’t have to be hostile. After all, both sides have the same goal in mind: to sell as many products as they can to customers.

The implementation of pay-for-performance trade promotions can help achieve that goal. As we have shown, correctly designed trade promotion schemes have the potential to produce many important benefits for all parties. Manufacturers can have better assurances that their dollars will reach consumers. Retailers do not need to worry that pay-for-performance is a rod for their backs — indeed, it can help them dramatically cut costs and reorient their activities toward what should be their core competencies, selling and marketing. That will ultimately benefit consumers as the savings are passed down the retail channel.

Companies that embark on this route can rest assured that it has sound conceptual underpinnings, but they must recognize and preempt the potential pitfalls. They must be willing to experiment, collect data and, perhaps most important, cooperate to deliver value to consumers.



## ACKNOWLEDGMENTS

Special thanks to Bob Gibson, CEO of Scanner Applications Inc., for facilitating access to the data used in this study, and to Israel Rodriguez and John Ferramosca of Edgewood Consulting Group. George S. Day, Geoffrey T. Boisi Professor at the Wharton School, also provided many helpful insights.

## REFERENCES

1. K. Partch, "The Trade Promotion Quagmire," *Supermarket Business* 53 (June 1998): 130 (an Andersen Consulting — now Accenture — report summary). For a comprehensive review of issues affecting manufacturer-retailer relationships, see K. Ailawadi, "The Retail Power-Performance Conundrum: What Have We Learned?" *Journal of Retailing*, in press.
2. R. Blattberg and S. Neslin, "Sales Promotions Concepts, Methods and Strategies" (New Jersey: Prentice Hall, 1990).
3. D. Wellam, "Not-So-Free Trade," *Supermarket Business* 53 (June 1998): 22-24.
4. For more information on actions taken by Procter & Gamble, see J. Neff, "New P&G Program Alters Trade Promotion Efforts," *Advertising Age*, March 24, 1997, 6; K. Thomas, "P&G Scales Back Promotions," *Incentive* 171 (April 1997): 15; "Procter's Gamble," *The Economist*, July 25, 1992, 61-62.
5. "The Prisoner's Dilemma — Retailer View: Not Getting Their Fair Share," and "The Prisoner's Dilemma — Manufacturer View: No Value for Their Dollars," *Progressive Grocer* 74 (May 1995): 99-101; B. Spethmann, "Trade Promotion Redefined," *Brandweek* 36 (March 13, 1995): 25-32; and R. Eisman, "Survey Finds Suppliers and Retailers at Odds," *Incentive* 169 (August 1995): 12.
6. R. Buzzell and G. Ortmeyer, "Channel Partnerships Streamline Distribution," *Sloan Management Review* 36 (spring 1995): 85-96.
7. In addition, trade promotions impose a severe administrative burden on manufacturers, occupying 25% and 30% of salespersons' and brand managers' time, respectively. See R. Buzzell, J. Quelch and W. Salmon, "The Costly Bargain of Trade Promotion," *Harvard Business Review* 68 (March-April 1990): 141-149.
8. H. Lee, V. Padmanabhan and S. Whang, "Information Distortion in a Supply Chain: The Bullwhip Effect," *Management Science* 43 (April 1997): 546-558; and H. Lee, V. Padmanabhan and S. Whang, "The Bullwhip Effect in Supply Chains," *Sloan Management Review* 38 (spring 1997): 93-102.
9. For a more detailed analysis of these issues, see R. Lal, "Manufacturer Trade Deals and Retail Price Promotions," *Journal of Marketing Research* 27 (November 1990): 428-444; R. Blattberg, D. Eppen and J. Lieberman, "A Theoretical and Empirical Evaluation of Price Deals for Consumer Nondurables," *Journal of Marketing* 45 (winter 1981): 116-129; E. Gerstner and J. Hess, "A Theory of Channel Price Promotions," *American Economic Review* 81 (September 1991): 872-886; E. Gerstner and J. Hess, "Pull Promotions and Channel Coordination," *Marketing Science* 14 (winter 1995): 43-60; and R. Lal, J. Little and J. Villas-Boas, "A Theory of Forward-Buying, Merchandising and Trade Deals," *Marketing Science* 15 (spring 1996): 21-37.
10. R. Blattberg, R. Briesch and E. Fox, "How Promotions Work," *Marketing Science* 14 (summer 1995): 130. The full article presents a comprehensive summary of key findings on promotional effectiveness.
11. For a more detailed mathematical review of the options than is presented in this article, see X. Drèze and D. Bell, "Creating Win-Win Trade Promotions: Theory and Empirical Analysis of Scan-Back Trade Deals," *Marketing Science*, in press.
12. For a more in-depth discussion of the optimal pricing rule in this setting, see J. Bulow and P. Pfleiderer, "A Note on the Effect of Cost Changes on Prices," *Journal of Political Economy* 91 (February 1983): 182-185; and R. Tyagi, "A Characterization of Retailer Response to Manufacturer Trade Deals," *Journal of Marketing Research* 36 (November 1999): 510-516.
13. While the technical details are omitted for ease of exposition, this example can be worked through in Microsoft Excel using the solver function. Details are available from the authors upon request.
14. The mathematics involved in computing the forward-buy are beyond the scope of this paper. The details are provided in X. Drèze and D. Bell, in press.
15. For ease of exposition, we focus on the case in which the retailer is made indifferent and the manufacturer is strictly better off. It is a simple matter to extend the analysis to the case in which both parties are better off.
16. For other empirical studies of trade promotion effectiveness, see M. Abraham and L. Lodish, "Promoter: An Automated Promotion Evaluation System," *Marketing Science* 6 (spring 1987): 101-123; R. Walters, "An Empirical Investigation into Retailer Response to Manufacturer Trade Promotions," *Journal of Retailing* 65 (summer 1989): 253-272; and S. Neslin, S. Powell and L. Schneider-Stone, "The Effects of Retailer and Consumer Response on Optimal Manufacturer Advertising and Trade Promotion Strategies," *Management Science* 41 (May 1995): 749-766.
17. J. Silva-Risso, R. Bucklin and D. Morrison, "A Decision Support System for Planning Manufacturers' Sales Promotion Calendars," *Marketing Science* 18 (fall 1999): 274-300.
18. K. Ailawadi, P. Farris and E. Shames, "Trade Promotion: Essential to Selling Through Resellers," *Sloan Management Review* 41 (fall 1999): 83-92.
19. Authors' personal communication with Scanner Applications' management team.
20. A guide to getting started is given in G. Day, chap. 9 in "The Market Driven Organization" (New York: Free Press, 1999).
21. For an excellent discussion of the theoretical and practical value of such measures, see J. Hauser, D. Simester and B. Wernerfelt, "Customer Satisfaction Incentives," *Marketing Science* 13 (fall 1994): 327-350.

Reprint 4324

Copyright © Massachusetts Institute of Technology, 2002. All rights reserved.

# **MIT Sloan** Management Review

## **Reprints/Back Issues**

Electronic copies of SMR articles can be purchased on our website:

[www.mit-smr.com](http://www.mit-smr.com)

To order bulk copies of SMR reprints, or to request a free copy of our reprint index, contact:

MIT Sloan  
Management Review

Reprints

E60-100

77 Massachusetts Avenue  
Cambridge MA 02139-4307

Telephone: 617-253-7170

Toll-free in US or

Canada: 877-727-7170

Fax: 617-258-9739

E-mail: [smr@mit.edu](mailto:smr@mit.edu)

## **Copyright Permission**

To reproduce or transmit one or more SMR articles by electronic or mechanical means (including photocopying or archiving in any information storage or retrieval system) requires written permission.

To request permission to copy articles, contact:

P. Fitzpatrick,

Permissions Manager

Telephone: 617-258-7485

Fax: 617-258-9739

E-mail: [pfitzpat@mit.edu](mailto:pfitzpat@mit.edu)