

Managing retail channel overstock: Markdown money and return policies

ANDY A. TSAY

Inventory strategy is fundamental to retailing, as well as to channel management. How this is handled can mean the difference between competitive advantage and financial disaster.

For their own sake as well as their mutual interest in the health of the overall distribution system, manufacturers and their retail partners share the desire to have enough inventory in place to satisfy customers and realize profits. But neither cares for the overstock that arises whenever demand falls short of expectations, and how to share the resulting costs is often a contentious issue. A number of channel policies have arisen as ways to broker this conflict.

These include *manufacturer return policies* and *markdown money* (a payment made by a manufacturer to a retailer per item that must be discounted for final clearance purposes).

Return policies are often observed when demand is unpredictable and/or the risk of obsolescence is high. Markdown money also has a rich tradition among products facing such environments, including fashion apparel, cosmetics and fragrances, toys, specialty products, certain food categories, and over-the-counter medications.

Return policies are relatively well-studied, with numerous existing works advocating these as a way to improve the efficiency of the channel to the participants' mutual benefit. But none explain the reality that markdown money is sometimes paid to retailers expressly to avoid product returns. For example, Procter & Gamble's 1997 initiative "Streamlined '97" featured the use of markdown money in place of return privileges for discontinued items through its "Discontinued Products Transitions Program."

The objective of this article is to provide a mathematical framework within which these channel practices may be differentiated. This entails relaxing the following two key assumptions that are common to the existing literature of return policies:

- (1) the physical return of product does not incur additional cost, and
- (2) the channel members are equally effective at liquidating overstock.

This framework will enable what appears to be the first analytical study of markdown money.

Our work seeks to address a number of open questions. What circumstances call for the use of one policy instead of the other? How significant is the penalty for using the less appropriate policy? Are these policies examples of retailers imposing their will on weaker manufacturers? To what extent can the manufacturer recover the cost of providing such forms of insurance, for instance through increases in the wholesale price? How do such policies influence the determinants of the end consumer's experience (i.e., the retail price and the inventory made available for sale)? To address these and other important questions, we will present ideas about the management of overstock, introduce and assess existing research by discussing various modeling approaches, and provide new theoretical and numerical results that illuminate these practices and the extent to which they reflect the balance of strategic power in the channel.

This research reveals some surprising findings. For instance, while some recent evidence suggests a shifting of channel power towards retailers, this is not necessarily the root explanation for the existence of either return policies or markdown money. Notably, a theme that recurs throughout our theoretical and numerical investigation is that these policies are not simply the dictates of a powerful retailer. Instead, they can derive from the interests of manufacturers seeking to insure that adequate inventories are held in the channel. And in fact, there may be circumstances under which manufacturers may have a greater desire to implement such policies than their retail partners. Indeed, the Procter & Gamble initiative would be difficult to rationalize otherwise.

Another key insight is that the loss in channel efficiency from the simple act of ignoring handling costs, and consequently implementing a return policy when markdown money might be more appropriate, can be quite significant. The effect is the composite of two factors: (1) handling costs render a return policy logistically more costly, and (2) handling costs depress the retailer's order away from the system-optimal level. When the handling cost

for returns is significant, there is some value to be recovered by properly adjusting the design of the return policy, and even more by using a different channel policy altogether.

In generalizing the existing literature our main conclusions are the following: (i) the proper design of a return policy must take into account any costs of product handling, especially in their influence on the retailer's behavior, (ii) a return policy may be inefficient if it entails liquidating any overstock in an inferior way, (iii) markdown money can coordinate the channel when a return policy cannot, (iv) unawareness of the issues differentiating these policies may result in a substantial loss of system performance, and (v) markdown money policies are not simply the dictates of a powerful retailer, but instead can derive from the interests of a manufacturer seeking to insure that adequate inventories are held in the channel. These findings can serve as the basis of empirical investigation about an important set of issues in the management of distribution channels.