

The Financial Effects of ECR

Frank Dooley, Matthew Mayberry, Christine Wilson, and Kara Lynch

From the earliest stages of Efficient Consumer Response (ECR) to the most recent initiatives (known as Collaborative Planning, Forecasting, and Replenishment or CPFR), some have questioned whether the adoption of supply-chain management strategies has been a profitable investment (Brown and Bukovinsky 2001). For example, the trade press has reported that ECR has failed to achieve the potential \$25-billion cost reduction in trade-promotion dollars. Yet research has found that the adoption of ECR initiatives, especially information-technology solutions, has improved inventory management and shortened order cycles (Stank et al. 1999).

The objective of this study is to determine whether the adoption of ECR has led to improved inventory and financial performance for firms in the food industry. This analysis builds upon the earlier research, in particular that of Brown & Bukovinsky (2001). Previous studies have only considered grocers; the data set in this study includes grocers and food manufacturers. The scope of the analysis was expanded to include the entire food industry to reflect that ECR is an industry-wide supply-chain initiative. In addition, one goal is to determine whether differences exist between the food-manufacturing and the grocery sectors.

Initial analysis was based on a data set of 115 food companies. Data are being collected for an additional 150 food companies. The classification of a firm's ECR strategy follows a two-step process. First, a review of company reports, trade press reports, and organizational lists associated with supply-chain management strategies from websites (e.g., www.cpfr.org or www.vics.org) are being used to identify firms as adopters of ECR or CPFR initiatives. The second step sought to verify the findings of the first step by using the Google

search engine to locate websites by combining the terms "Efficient Consumer Response" or "Collaborative, Planning, Forecasting and Replenishment" with each company name.

Initial results support the proposition that the adoption of an ECR strategy pays off. However, the growth in profit does not appear to come from improved performance for traditional inventory measures (such as inventory turnover, inventory-to-sales, or inventory-to-assets). The driving force behind improved financial measures can be attributed to changes leading to a shorter cash-conversion cycle. Shortening cash cycles involves changes in business processes and lessens the need for external financing, which leads to improved profitability. The adoption of information technologies changes traditional processes for purchase orders, invoices, shipping notices, and funds transfer.

Finally, size matters; ECR is more effective due in part to economies of scale, information technology, and perhaps greater buying power. However, this may lead to more consolidations because not all firms have the capital to invest in these initiatives. The challenge for smaller firms will be determining how to implement ECR practices, because they do lead to stronger financial performance.

Refeerences

Brown, T. A. and D. M. Bukovinsky.2001. "ECR and Grocery Retailing: An Exploratory Financial Statement Analysis." *Journal of Business Logistics* 22(2):77–90.

Stank, T., M. Crum, and M. Arango. 1999. "Benefits of Interfirm Coordination in Food Industry Supply Chains." *Journal of Business Logistics* 20(2):21–41.

The authors are professor, former graduate student, assistant professor, and graduate student, respectively, in the Department of Agricultural Economics, Purdue University, West Lafayette, IN.