

Frito-Lay Company

Cracker Jack

In mid-July 1997, Lynne Peissig, Vice President and General Manager for New Ventures at the Frito-Lay Company, a division of PepsiCo, Inc., assembled the business team responsible for studying the possible acquisition of Cracker Jack from Borden Foods Corporation. Cracker Jack had been owned by Borden since 1964 and was one of the oldest and best-known trademarks in the United States. Borden's intention to sell the Cracker Jack brand and related assets had become public in June 1997. Peissig and the New Ventures Division initiated a study of the Cracker Jack business potential within days of the announcement.

The purpose of the all-day meeting was to (1) consolidate the findings of the business team, (2) outline a plan for how Cracker Jack might be marketed as a Frito-Lay brand, and (3) estimate the "fair market value" of the Cracker Jack business. The valuation would assist senior PepsiCo executives in determining an acquisition price should they decide to submit a bid on the Cracker Jack brand and related assets.

The effort of the business team benefited from the involvement of Frito-Lay brand marketing, sales, distribution, manufacturing, finance, legal, and research and development personnel and PepsiCo merger and acquisition staff working with the New Ventures Division. Peissig was scheduled to deliver a formal presentation and recommendation to senior PepsiCo executives within two weeks. She knew that the marketing issues identified, the plan outline, and the financial valuation by the business team would carry considerable weight in her recommendation to pursue or pass on the business opportunity made possible by the acquisition of the Cracker Jack brand and related assets.

■ FRITO-LAY COMPANY

Frito-Lay Company is a division of PepsiCo, Inc. Frito-Lay recorded an operating profit of \$1.63 billion on net sales of \$9.68 billion in 1996, which represented 31 percent of PepsiCo's net sales and 60 percent of PepsiCo's operating profit. The sales and operating profit compounded annual growth rate for Frito-Lay was 13 percent for the five-year period, 1991 to 1996. Frito-Lay Company is composed of Frito-Lay North America and Frito-Lay International. Frito-Lay North America, consisting of operations in the United States and Canada, recorded 68 percent of company sales and 79 percent of company operating profit in 1996.

The cooperation of the Frito-Lay Company in the preparation of this case is gratefully acknowledged. BAKED LAY'S, BAKED TOSTITOS, CHEE-TOS, DORITOS, FRITOS, FUNYUNS, LAY'S, ROLD GOLD, RUF-FLES, SANTITAS, SUN CHIPS, TOSTITOS, SMARTFOODS, and GRANDMA'S are trademarks used by the Frito-Lay Company. After the acquisition, CRACKER JACK, SAILOR JACK, and BINGO would be trademarks used by the Frito-Lay Company. This case was prepared by Professor Roger A. Kerin, of the Edwin Kaufman, graduate students, as a basis for class discussion and is not designed to illustrate effective or ineffective handling of an administrative situation. Certain company information, including names of Frito-Lay executives, are disguised and not useful for research purposes. Copyright © 1999 by Roger A. Kerin. No part of this case may be reproduced without written permission of the copyright holder.

Company Background

Frito-Lay is a worldwide leader in the manufacturing and marketing of snacks. Well-known company brands include Lay's and Ruffles potato chips, Fritos corn chips, Doritos, Tostitos, and Santitas tortilla chips, Chee-tos cheese-flavored snacks, and Rold Gold pretzels. Other well-known Frito-Lay brands include Sun Chips multigrain snacks and Funyuns onion-flavored snacks. In addition, the company markets a line of dips, salsas, nuts, peanut butter and cheese-filled sandwich crackers, processed beef sticks, Smartfood brand ready-to-eat popcorn, and Grandma's brand cookies.

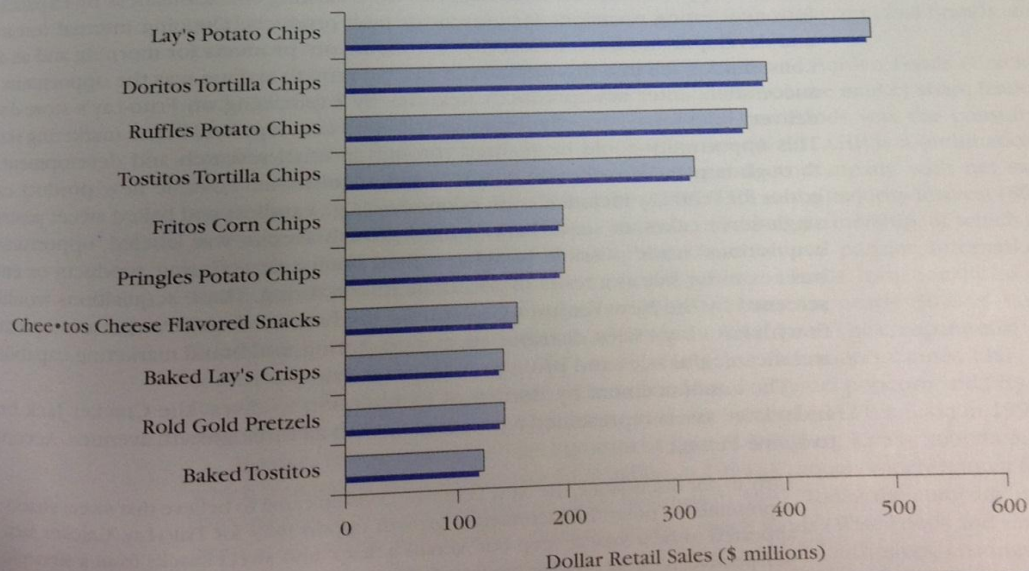
The company is the leading manufacturer of snack chips in the United States, capturing 54 percent of the retail sales in this category in 1996. Nine of Frito-Lay's snack chips are among the top 10 best-selling snack brands in U.S. supermarkets (see Exhibit 1). Doritos tortilla chips and Lay's and Ruffles potato chips each have the distinction of being the only snack chips with over \$1 billion in retail sales in the world.

A major source of volume growth for Frito-Lay in the 1990s was due to the introduction of "better-for-you" low-fat and no-fat snacks. These snacks, including Baked Lay's potato crisps, Baked Tostitos tortilla chips, and Rold Gold pretzels, accounted for 47 percent of Frito-Lay's total pound volume growth in 1995 and 1996, and 40 percent of pound volume growth in 1994. Better-for-you products represented 15 percent of Frito-Lay's total snack volume in 1996, up from 5 percent in 1993.

Frito-Lay's U.S. snack food business spans every aspect of snack food production and distribution, from agriculture to stocking retailer shelves. During 1996 in the United States alone, Frito-Lay used 2.7 billion pounds of potatoes, one billion pounds of corn, and over 15 million pounds of cheese to produce its products. The company has 45 manufacturing plants in 26 states, including the world's largest snack food plant

EXHIBIT 1

Top-Selling Snack Chip Items in U.S. Supermarkets (Retail Sales in \$ millions)



Source: 1996 PepsiCo, Inc., annual report.

in Frankfort, Indiana, and operates more than 1,800 warehouses and distribution facilities. Frito-Lay employs 17,500 salespeople—the largest store-door-delivery sales force in the world—who make 750,000 sales and delivery calls on approximately 350,000 retail store customers each week. Frito-Lay's products receive constant attention from the company's sales force, which ensures constant replenishment of fresh product and proper facings of products on store shelves. Supermarkets and grocery stores accounted for more than 50 percent of Frito-Lay's total U.S. retail sales in 1996, followed by convenience stores (15 percent), mass merchandise/warehouse/club stores (11 percent), vending and food service operators (8 percent), and other retailers and institutions (10 percent).

Frito-Lay consistently ranks among the leading national advertisers in the United States, both in terms of dollars spent and creative execution. The company also uses trade and consumer promotions and sponsors special events, such as the Tostitos Fiesta Bowl postseason collegiate football game.

New Ventures Division

The New Ventures Division at Frito-Lay originated in December 1996 with a well-defined mission:

To drive significant Frito-Lay growth by seeking and creating new business platforms and products which combine the best of Frito-Lay advantages with high-impact consumer food solutions.

According to Casey Joseph, Frito-Lay's Senior Vice President-Worldwide Marketing, the primary purpose of the New Ventures Division was to create meaningful growth outside of Frito-Lay's already successful existing snack businesses, and secondarily augment ongoing internal product development activities.

During the winter of 1997, the New Ventures mission manifested itself as a deliberate approach for identifying and developing sales and profit growth opportunities for Frito-Lay. After considerable discussion, three broad opportunity avenues emerged as possible routes for achieving meaningful future growth. One growth avenue consisted of opportunities for building Frito-Lay's existing snack business by expanding into new eating occasions for current or new products. Ongoing internal research and development efforts to identify "better-for-you" products for morning and all-day consumption fell into this category. A second growth avenue was the opportunity to successfully enter new product categories by capitalizing on Frito-Lay's store-door-delivery sales force strengths, broad distribution coverage, and brand marketing skills. This opportunity could be realized through internal research and development or through targeted distribution alliances and acquisitions. Possible new product categories for Frito-Lay included confectioneries (e.g., candies) and baked sweet pastries, single-serve cakes, or snack bars. A third growth avenue was labeled "opportunistic acquisitions" made possible by related food companies offering products or entire businesses for sale as a result of corporate restructuring. These acquisitions would be screened by the New Ventures Division on the basis of their strategic and operating fit with Frito-Lay's sales, distribution, manufacturing, and brand marketing capabilities and meaningful sales and profit growth potential.

The announcement by Borden of its intention to divest the Cracker Jack brand and related assets represented a potential fit with all three growth avenues. According to Lynne Peissig:

Early in our discussions, the New Ventures Division came to believe that sweet snacks represented a potential incremental growth opportunity for Frito-Lay. Cracker Jack appeared to be a logical "step out" versus a "leap" into sweet snacks from a strategic perspective. It could provide the foundation for a sweet snack platform to build a successful business on and complement Frito-Lay's salty snack business. Cracker Jack,

with its strong brand equities, was certainly worth the time and effort to explore as an acquisition.

■ THE READY-TO-EAT CARAMEL POPCORN PRODUCT CATEGORY

The ready-to-eat (RTE) caramel popcorn product category recorded U.S. retail sales of \$192 million in 1996 and \$205 million in 1995. Manufacturer sales of RTE caramel popcorn were \$167.3 million in 1996, down 6.2 percent from 1995. The decline in 1996 category dollar sales followed a steady annual sales increase since 1993. Pound volume in the RTE caramel popcorn category declined from 59.3 million pounds in 1995 to 57 million pounds in 1996, following a steady annual volume growth since 1993. Category sales and volume growth in the 1990s was due primarily to the introduction of new flavors (i.e., butter toffee) and low-fat and no-fat varieties of established brands.

Competitors

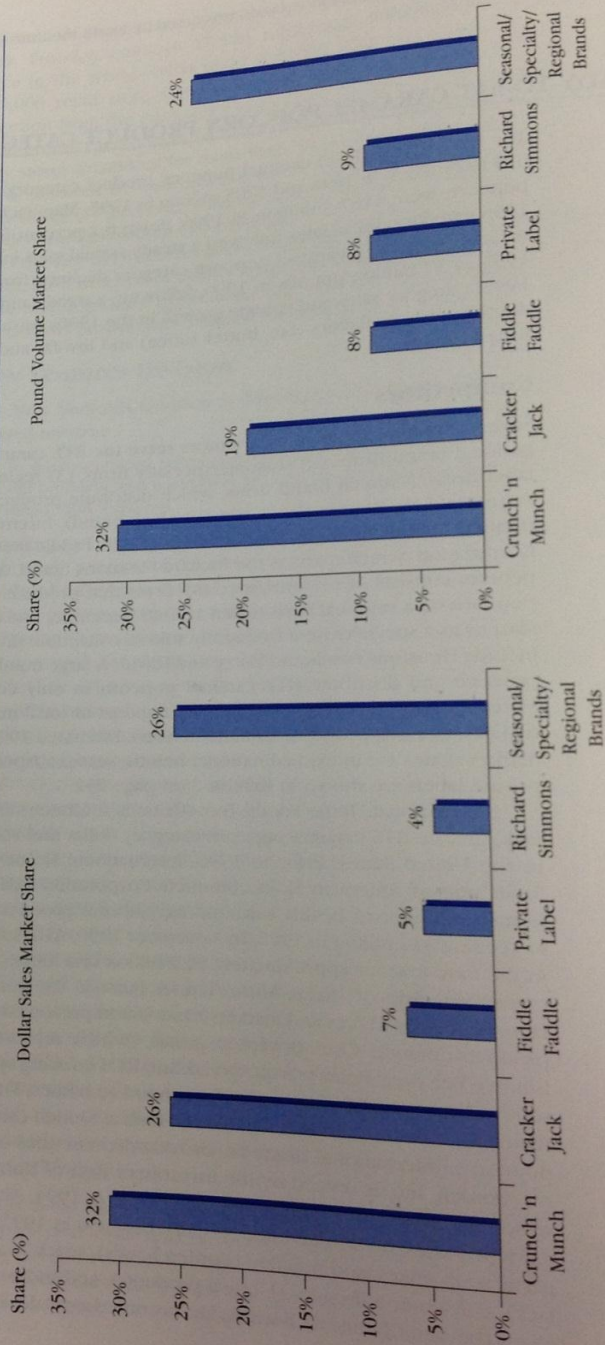
Several different types of competitors serve the RTE caramel popcorn category: (1) national brand firms, (2) seasonal/specialty firms, (3) regional firms, and (4) private label firms. National brand firms, which distribute products throughout the United States, include Borden Foods (Cracker Jack brand), International Home Foods, Inc. (Crunch 'n Munch brand), Lincoln Foods (Fiddle Faddle brand), and SIM-GT Licensing Corporation, which markets the Richard Simmons brand. A second category of competitors consists of seasonal/specialty firms that produce and market their caramel popcorn on a seasonal basis (often around December and the Christmas holiday season) or as a specialty item frequently sold in collectible tins. Seasonal/specialty firms include Houstons Foods and Harry and David. A large number of small, regional firms produce and distribute RTE caramel popcorn in only certain parts of the United States. Private brands are produced by regional or local manufacturers on a contractual basis for major U.S. supermarket chains. Estimated 1996 sales and pound volume market shares for individual national brands, seasonal/specialty/regional brands, and private labels are shown in Exhibit 2 on page 232.

International Home Foods, Inc. (Crunch 'n Munch) and Borden Foods (Cracker Jack) are the RTE caramel popcorn category dollar and volume market share leaders in the United States. Prior to 1996, International Home Foods was the consumer foods unit of American Home Products Corporation (AHP). AHP is a multinational human and animal health care and agricultural products company with net sales exceeding \$14 billion in 1996. In November 1996, AHP sold a majority interest (80%) in the food unit for approximately \$1.2 billion to a limited partnership, of which the investment firm of Hicks, Muse, Tate & Furst is the general partner. International Home Foods produces and markets name-brand preserved foods. Its nationally known products include Chef Boyardee pastas (which represents nearly 30% of sales), Bumble Bee tuna, Polaner fruit spread, and PAM cooking spray. The company also sells southwestern cuisine foods (Ro*Tel canned tomatoes, Dennison's canned chili, and Ranch Style beans) and snack foods (Crunch 'n Munch caramel popcorn and Jiffy Pop popcorn). International Home Foods recorded net sales of \$942.8 million in 1996.

Borden, Inc. is owned by the investment firm of Kohlberg Kravis Roberts & Co., which purchased the company for \$1.9 billion in 1994. Although widely known for its dairy products, Borden divested its dairy business in 1997. Today, the company makes pasta, soup mixes, and bouillon (Borden Foods), snack foods (Wise Foods and Cracker Jack), consumer adhesives (Elmer's products), and industrial adhesives, coatings, and resins (Borden Chemical). Borden, Inc. recorded net sales of about \$5.8 billion in 1996.

EXHIBIT 2

Caramel Corn Category Dollar and Volume Share at Retail: 1996



Source: Company records.

The decision by Borden to divest itself of Cracker Jack and related assets was prompted by a strategic assessment of the company's focus and resources. The company chose to focus on its pasta business and expand into grain-based meals that would require a significant resource investment. As a consequence of this assessment and growth plan, Borden Foods announced that Cracker Jack, along with Borden Brands North America and Borden Brands International, would be sold in 1997.

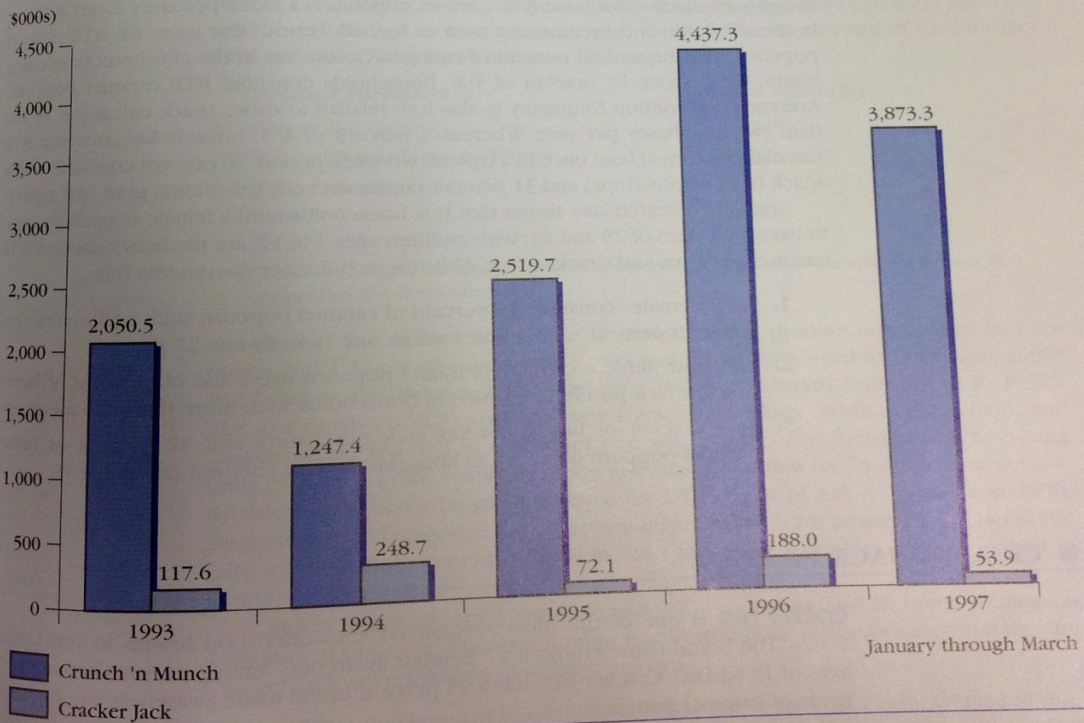
Marketing Practice

RTE caramel popcorn is generally viewed among snack food industry analysts as an "undermarketed" category, when compared with microwave popcorn and most other snack categories. Most brands in the category offer both caramel and butter toffee flavors and feature both regular and low-fat/fat-free varieties in different package sizes. An exception is the Richard Simmons brand, which is sold only as a fat-free product.

Only Crunch 'n Munch and Cracker Jack have been recently advertised in consumer media. Crunch 'n Munch leads the category in advertising expenditures, outspending Cracker Jack by a wide margin since 1993 (see Exhibit 3). The last time Cracker Jack spent significant funds for consumer advertising occurred in 1992, when \$2.1 million was spent to launch the brand's butter toffee flavor. Consumer and trade

EXHIBIT 3

Competitive Spending for Consumer Media Advertising: 1993-1997



promotions are often used by national and regional brands. Consumer promotions include in-store and newspaper couponing and product sampling; trade promotions include sales aids and off-invoice allowances for retailers.

Supermarkets and grocery stores and mass merchandise/warehouse/club stores are the principal retail outlets for RTE caramel popcorn. Supermarkets and grocery stores account for an estimated 44.7 percent of category dollar sales. About 42 percent of sales occur in mass merchandise/warehouse/club stores (Target, Kmart, Wal-Mart). Drugstores account for 13 percent of sales. Remaining sales arise from a variety of other retail and food service outlets. In 1996, Crunch 'n Munch had an estimated 31 percent volume share in supermarkets and grocery stores, an 18 percent share in mass merchandise/warehouse/club stores, and a 13 percent share in drugstores. Cracker Jack's market share in these channels was 23 percent, 8 percent, and 11 percent, respectively, according to industry sources.

Retail outlets for RTE caramel popcorn are typically serviced via warehouse delivery systems. With a warehouse system, product is delivered from a manufacturer's plant or distribution center to a retailer's warehouse. The retailer assumes responsibility for distributing the product to its stores and stocking shelves.

Cracker Jack is the premium-priced brand in the RTE caramel popcorn category. Its total brand average price premium relative to Crunch 'n Munch has averaged about 28 percent over the past three years. Private (store) labels are typically the lowest-priced brands. Regional brands are often priced between national brands and private labels. In some areas, regional "gourmet" brands and seasonal/specialty brands are priced at or near national brands.

Caramel Popcorn Consumer

Industry research shows that RTE caramel popcorn is a snack primarily eaten at home in the afternoon and evening as a treat or reward. Four of five users eat RTE caramel popcorn at home, and 80 percent of eating occasions are in the afternoon or evening hours. Only about 12 percent of U.S. households consume RTE caramel popcorn. Average consumption frequency is also low relative to other snack categories at less than two purchases per year. Whereas 2 percent of U.S. households consume RTE caramel popcorn at least once in a typical two-week period, 70 percent consume a salty snack (e.g., potato chips) and 31 percent consume candy (excluding gum and mints).

Industry research also shows that U.S. households with a female household head between the ages of 25 and 44, with children ages 4 to 17, are the heavy users of RTE caramel popcorn and Cracker Jack. This research further documents that:

1. Adult females consume 44 percent of caramel popcorn sold, adult males consume 29 percent, and children under age 18 consume 27 percent.
2. Fifty-four percent of heavy caramel popcorn users and 60 percent of heavy Cracker Jack purchasers reside in households with more than two members.
3. Fifty percent of heavy Cracker Jack purchasers and 42 percent of heavy caramel popcorn users are in households with children under age 18.

■ CRACKER JACK BRAND

Cracker Jack is one of the most recognized consumer food brands in the United States. The brand name enjoys a 97 percent awareness among persons between the ages of 15 and 60. Cracker Jack has a 95 percent brand name awareness among heavy users of caramel popcorn.

Brand Heritage

Cracker Jack is the original caramel popcorn. Invented by F. W. Ruekheim, the confection of popcorn, peanuts, and molasses was first made and sold in 1893 at the World's Fair Columbian Exhibition in Chicago, Illinois. The Cracker Jack name was coined in 1896 when a visiting salesman tasted the product and exclaimed, "That's a cracker jack!"—a nineteenth-century slang phrase meaning, "That's great." In 1899, Cracker Jack was packaged in moisture-proof boxes making possible broadened distribution of the product.

Three developments in the early 1900s had lasting effects on the image of Cracker Jack. In 1908, the brand was immortalized in the song, "Take Me Out to the Ball Game," with its lyric "Buy me some peanuts and Cracker Jack." In 1912, F.W. Ruekheim introduced the prize-in-every-box novelty, featuring magnifying glasses, little books, beads, metal trains and whistles, and baseball cards, among other items. More than 17 billion Cracker Jack toys have been distributed since 1912. A patriotic flair was added to the Cracker Jack box during World War I (1914–1918) with the inclusion of red, white, and blue stripes. A saluting Sailor Jack and his dog, Bingo, were also added to the box and soon became the national Cracker Jack logo. Sailor Jack and Bingo have appeared on Cracker Jack packages with only slight variations since 1918.

Cracker Jack Product Line and Positioning

For 100 years, the Cracker Jack product line consisted only of caramel-coated popcorn and peanuts, using the original recipe developed by F.W. Ruekheim. In 1992, a Butter Toffee flavor was introduced, followed by Nutty Deluxe in 1994, and Cracker Jack Fat Free (in Original and Butter Toffee flavors) in 1995. Approximately 23 percent of Cracker Jack dollar and pound volume sales growth between 1993 and 1995 could be attributed to these product introductions. The breakdown of Cracker Jack 1996 net dollar sales by formulation is shown below:

<i>Product Formulation</i>	<i>Net Dollar Sales (%)</i>
Original/Butter Toffee	63.0%
Original/Butter Toffee Fat Free	26.0
Nutty Deluxe	6.7
Other*	<u>4.3</u>
Total	100.0%

*The other category consists primarily of inventory with limited shelf-life sold to a number of prequalified off-price retailers.

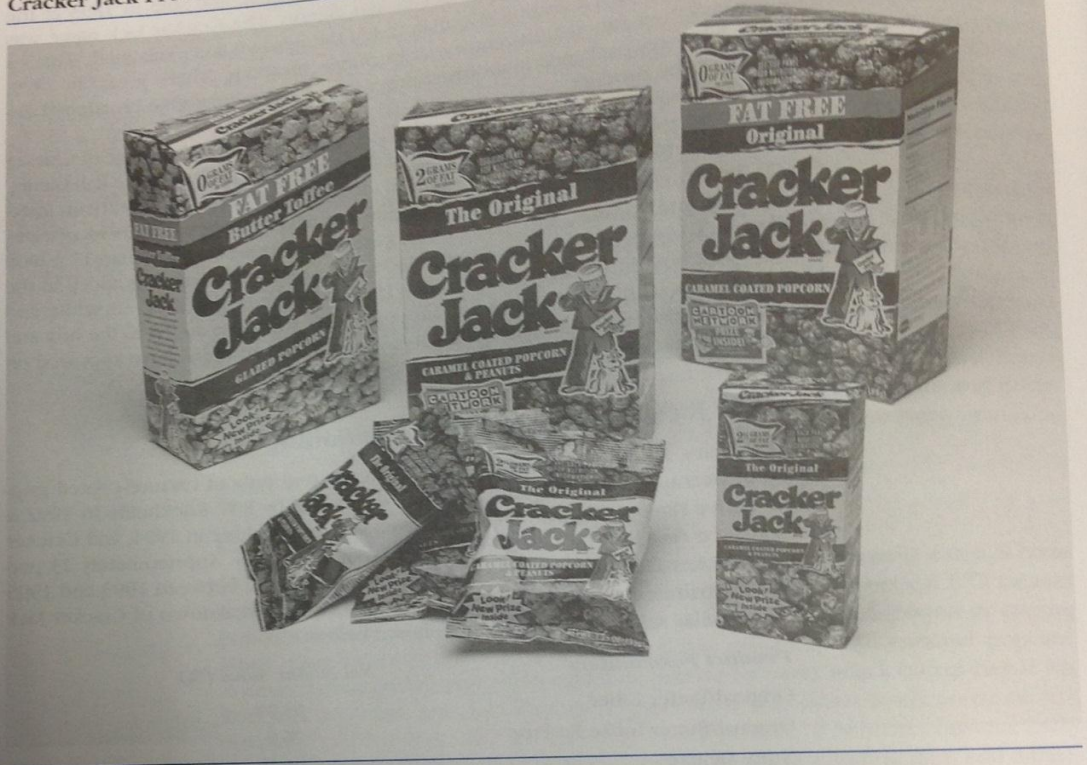
Cracker Jack is sold in a variety of packages. The product is packaged in 1.05-ounce and 1.25-ounce single-serve boxes and bags (introduced in December 1996) and 7-ounce and 8-ounce family-size bags and bags-in-boxes (introduced in 1992). The combinations of flavors, package sizes, and package forms (boxes, bags, and bags-in-boxes) resulted in a product line with 32 separate items or stock-keeping units (SKUs) in 1996. Family-size bags-in-boxes accounted for 75 percent of net dollar sales; single-serve boxes accounted for 25 percent of net dollar sales in 1996. Single-serve and family-size bags represented an insignificant percentage of net dollar sales in 1996. Representative items in the Cracker Jack product line are shown in Exhibit 4 on page 236.

Cracker Jack positioning over the past 30 years focused on its brand heritage as a traditional fun treat. This positioning manifested itself in the primary message for Cracker Jack advertising as illustrated below:

1. "What do you want when you've gotta have something . . . candy coated popcorn, peanuts and a prize" (1960s)

EXHIBIT 4

Cracker Jack Product Line



2. "When you're really good they call you Cracker Jack," featuring contemporary children excelling in athletics (1970s and early 1980s)
3. "Delicious then, delicious now," featuring a dual child/adult appeal reminding mothers how much they enjoyed Cracker Jack when growing up (mid-1980s)
4. "Only one snack says Cracker Jack," featuring its unique brand heritage (early 1990s). In 1992, the Butter Toffee flavor was introduced and positioned as a unique, all-family, all-occasion snack that provided a delicious-tasting, fun experience.

Cracker Jack's positioning was broadened in mid-1997 to emphasize the "better-for-you" qualities of Cracker Jack Fat Free in both Original and Butter Toffee flavors: "Cracker Jack, the sweet and crunchy fun snack you remember, has surprisingly less fat than you thought." The new positioning was being applied to all forms of brand communication, including packaging, consumer promotion, public relations, and consumer advertising.

Advertising and Promotion

Annual advertising and promotion spending for the Cracker Jack brand, as a percentage of sales, has ranged between 28 and 40 percent since 1993. Trade promotion,

including incentives given retailers to reduce their cost or gain merchandising performance (off-invoice allowances, slotting fees, and market-development funds), represented the principal expense since 1993. Consumer promotion, including in-store and Sunday newspaper coupon insertions and redemption cost, and "other" promotions such as sales aids and samples accounted for the second largest expense item. Consumer advertising represented the smallest expense category. Cracker Jack has not been advertised nationally since 1993. However, as recently as 1980, Cracker Jack was the most advertised sweet snack in the United States, with a \$6 million spending level.

The Cracker Jack toy surprise is another element of the advertising and promotion program. The choice of prizes is based on research among mothers and children to determine appeal. All toys must also pass rigorous safety testing to be considered as Cracker Jack prizes. In addition to long-time favorites, such as miniature baseball cards, Cracker Jack has licensed high-profile children's properties (e.g., Animaniacs, Looney Tunes, Wishbone, Scooby Doo) since 1995 to add value to the toy surprise. This effort has focused on promoting impulse purchases, particularly for Cracker Jack's highest gross margin items—the 1.05-ounce and 1.25-ounce single-serve box and bag.

Sales and Distribution

Cracker Jack sales volume is concentrated in the United States, where 98.9 percent of sales occur. Sales in Canada and a small export business represent the remaining 1.1 percent of volume. In 1996, 52 percent of Cracker Jack sales arose from supermarkets and grocery stores, 31 percent from mass merchandisers, 7 percent from drugstores, 4 percent from warehouse and club stores, and 6 percent from other outlets.

Cracker Jack is sold through a shared Borden sales force that also sells cheese and other Borden grocery brands such as Eagle Brand, Cremora, and ReaLemon. The retail grocery sales force includes 47 people who sell product to supermarkets and grocery stores through 65 independent food brokers. An independent broker organization of 20 people sells product directly to mass merchandise, military, drugstore, and club store customers.

Cracker Jack is shipped from 13 company distribution centers to retail store distribution centers or warehouses and subsequently delivered to retail outlets for stocking on store shelves by retail store personnel. Accordingly, Cracker Jack is typically placed in what is called the "warehouse-delivered snack aisles" of supermarkets and grocery stores versus the "direct-store delivery aisles," which are stocked and merchandised by a manufacturer's sales force and not retail store personnel.

Pricing

Borden Foods has employed a premium pricing strategy for Cracker Jack relative to competing national brands (e.g., Crunch 'n Munch). Cracker Jack prices have risen by an average of 5 to 6 percent per year since 1993. As a consequence, Cracker Jack's average retail price premium relative to Crunch 'n Munch was about 28 percent on a per-ounce basis since 1993. The price premium was expanded in January 1997, when the price for Cracker Jack was increased by 6 percent. However, this price premium margin quickly eroded when the 10- and 5-ounce Crunch 'n Munch packages were downsized to 8- and 4-ounce packages, respectively, without a change in price. The effect of this move was to reduce the Cracker Jack price premium for the 7-ounce and 8-ounce family-size packages to 14 percent.

Manufacturing

Borden Foods manufactures Cracker Jack at its Northbrook, Illinois, facility along with selected Borden Foods soup products. Cracker Jack equipment occupies about 32 percent of the facility's manufacturing space. This space houses 15 production lines,

11 box lines, and 4 bag lines. The production lines operate at approximately 33 percent capacity, and the box and bag lines operate at 85 percent capacity based on a five-day week and two eight-hour shifts per day. Approximately 450,000 to 500,000 packages are produced per day, warehoused at the site, and subsequently shipped to company distribution centers.

A unique feature of the production and packaging process is the Cracker Jack prize insertion activity. Prizes are collated on custom-made equipment designed by the company, and electric eyes are placed within the production lines to ensure that these prizes are inserted in boxes. In 1994, about 85 percent of the company's total capital expenditures was spent to automate the family-size bag-in-box packaging line and change the filling operation from a volumetric cup filler to a more accurate scale system.

Cracker Jack Strategy and Financial Performance: 1993–1996

Exhibit 5 contains Cracker Jack Direct Product Contribution Income Statements for the period 1993 to 1996.¹ Cracker Jack recorded a negative Direct Product Contribution in each of the three previous years (1994 to 1996). Borden's current management attributed this performance to a variety of sources. Beginning in 1992, prior management pursued a volume-based strategy that focused on introducing family-size packages (7- and 8-ounce bags and bags-in-boxes) while reducing emphasis on the smaller box packages (e.g., 1.25-ounce box). This strategy achieved its intended effect. Cracker Jack pound volume in supermarkets and grocery stores, mass merchandisers, warehouse clubs, and drugstores combined increased to 12.4 million pounds in 1993, 13.5 million pounds in 1994, and 16.3 million pounds in 1995. However, the Cracker Jack gross margin percentage suffered due to a smaller margin contribution on large packages, which cannibalized higher margin small packages. In addition, rising material prices in 1994 and 1995 reduced margins since the added costs were not passed on with comparable price increases. Also, the introduction of Nutty Deluxe and Fat Free varieties in 1994 and 1995 was supported by a heavy financial investment in trade promotions. Even though these varieties accounted for almost one-fourth of Cracker Jack dollar and volume sales growth between 1993 and 1995, this growth was not large enough to offset the incremental trade promotion costs.

Direct Product Contribution improved in 1996 due to a number of changes made by current Borden management. For example, trade promotion spending was reduced. The number of Cracker Jack SKUs was reduced from 47 in 1995 to 32 in 1996, which reduced inventory levels and improved the sales mix gross margin. However, Cracker Jack dollar sales declined by 9 percent and unit volume fell to 11.2 million pounds in 1996.

Exhibit 6 on page 240 shows the Cracker Jack balance sheet for the year ended December 31, 1996. In addition to the physical assets shown, other Cracker Jack assets include the trademarks Cracker Jack, the Sailor Jack and Bingo representation, Nutty Deluxe, and "When you're really good they call you Cracker Jack," and certain patents related to the manufacturing of Cracker Jack.

¹Direct Product Contribution Income Statements exclude certain direct and indirect expenses which customarily are allocated to products in accordance with Borden Foods' internal policies. These allocated expense categories, which change from time to time, represent the costs associated with the functional infrastructure of Borden Foods and include certain fixed sales and administrative expenses. In addition, costs related to certain systems, legal expenses, finance/accounting, and human resource/benefit services provided by Borden Foods Corporate headquarters have also been excluded in determining Direct Product Contribution. All financial information contained in these exhibits has been disguised and is not useful for external research purposes.

EXHIBIT 5

Cracker Jack Direct Product Contribution Income Statement: 1993-1996 (\$ in Millions)

	1993	1994	1995	1996
Net trade sales	\$51.4	\$ 51.7	\$ 53.2	\$48.4
Cost of goods sold	26.0	33.8	32.2	27.1
Gross margin	\$25.4	\$ 17.9	\$ 21.0	\$21.3
Distribution expense	\$ 4.6	\$ 6.1	\$ 5.5	\$ 4.4
Trade promotion	11.4	16.0	15.6	8.6
Advertising, consumer, & other promotion	5.9	4.8	5.2	5.0
Variable sales	1.1	1.4	1.3	1.2
A & P management	0.3	0.4	0.8	0.8
Market research	0.3	1.0	2.3	2.5
Technical research	0.1	0.2	0.4	0.6
Direct product contribution ^a	\$ 1.7	(\$ 12.0)	(\$ 10.1)	(\$ 1.8)
Other financial information:				
Depreciation expense	\$ 1.5	\$ 1.6	\$ 1.4	\$ 1.4
Capital expenditures	\$ 1.4	\$ 5.3	\$ 0.8	\$ 0.3
Working capital ^b	\$ 16.4	\$ 12.8	\$ 6.3	\$ 2.3

^a Excludes effects of allocated selling costs, overhead, and other income and expense.

^b Current assets (other than cash) minus current liabilities.

Explanatory Notes for Revenue and Expense Items:

Revenue recognition. Net trade sales are generally recognized when products are shipped. Liabilities are established for estimated returns, allowances, and consumer and trade discounts when revenues are recognized.

Cost of goods sold. Includes all variable costs associated with producing the product, including raw materials, packaging supplies, direct and indirect labor, and plant fixed overhead expenses including a BFC allocation for quality assurance and engineering.

Distribution expense. Expenses associated with moving finished goods from distribution centers to customers and all handling and storage charges of moving goods into, within, and out of third-party warehouses.

Variable sales. Commission or other payments to brokers associated with volume.

A & P management. Costs associated with business unit marketing personnel.

Market research. Syndicated consumer information, taste tests, package tests, focus groups, and other market research.

Advertising costs. Production costs of future media advertising are expensed on the first airdate or print-release date of the advertising. All other advertising is expensed as incurred.

Trade promotion. All incentives to the trade related to tactics to reduce price or gain merchandising performance. Included are off-invoice allowances, slotting, and market development funds.

Consumer promotion. Promotion expenses targeted at consumers including coupon insertion and redemption and consumer refunds/premiums in return for certain purchase level requirements.

Other promotion. Includes sales aids, samples, packaging development, and racks.

Technical research. Costs associated with product or process research and development.

Note: All financial information in this exhibit has been disguised and is not useful for external research purposes.

Cracker Jack Strategy and Financial Projections: 1997-2001

The financial performance of Cracker Jack through 1995 prompted a change in strategy in 1996. The new Cracker Jack strategy arose from a general strategic review of the entire Borden Foods Corporation begun in 1995. The strategy, adopted in 1996, had three objectives: (1) revitalize the base business, (2) improve operating efficiencies,

EXHIBIT 6

Cracker Jack Balance Sheet: December 31, 1996 (\$ in Millions)

Assets	—
Cash and marketable securities	\$ 2.0
Net trade receivables*	4.2
Inventories	0.2
Other current assets	12.2
Other long-term assets and intangibles	15.4
Net property, plant, and equipment	<u>\$34.0</u>
Total assets	\$ 3.1
Liabilities and equity	1.1
Trade and drafts payable*	2.2
Other current liabilities	0.3
General insurance	2.5
Pension liability	<u>\$ 9.2</u>
Nonpension postemployment benefits	<u>\$24.8</u>
Total liabilities	\$24.8
Owner's investment	

*Net trade receivables, trade and drafts payable, and certain other current liabilities are not being sold and are presented for informational purposes only.

Note: All financial information in this exhibit has been disguised and is not useful for external research purposes.

and (3) extend the Cracker Jack trademark. These objectives would be realized by (1) expanded distribution within retail snack and food service marketing channels, (2) developing new packaging and flavors, (3) impactful product positioning, (4) enhanced gross margins via sustained price leadership, and (5) additional resources being allotted to consumer advertising.

Initial efforts in 1996 were designed to arrest the losses incurred in 1994 and 1995. The elimination of unprofitable trade promotions, the pruning of Cracker Jack SKUs from 47 to 32, and a higher gross margin resulted in a sizable improvement in the 1996 Direct Product Contribution. In late 1996 and early 1997, other actions were taken consistent with the new Cracker Jack strategy:

1. In December 1996, a single-serve (1.05- and 1.25-ounce) bag was introduced, primarily for distribution through vending machines and to Sam's Warehouse Clubs.
2. A 6 percent price increase was implemented in January 1997.
3. A new positioning that emphasized the low-fat content of Cracker Jack was initiated in mid-1997. This positioning—"Cracker Jack, the sweet and crunchy fun snack you remember, has surprisingly less fat than you thought"—highlighted the low-fat content of Original Cracker Jack (2.5 grams of fat per 1.25-ounce serving) and Cracker Jack Fat Free (0 grams of fat per serving).

Cracker Jack management believed that broadened distribution was the most important element of the new strategy. In December 1996, efforts were made to develop the vending machine business with the new single-serve bag using specialty distributors. Vending sales were projected to be almost \$2 million in 1997. However, Cracker Jack management was of the view that the brand needed a totally new sales and delivery infrastructure to grow sales and product profitability. Specifically, the

shared Borden sales force and broker/distributor network currently in use should be replaced by a direct-store-delivery (DSD) sales force. It was believed that a DSD sales force could provide product placement in grocery DSD snack aisles, which is the highest-velocity snack aisle in supermarkets. Limited, controlled store tests commissioned by Cracker Jack management indicated that placement in DSD snack aisles could initially boost dollar retail sales by as much as 38 percent. However, a DSD sales force is more resource intensive than Borden's present sales and distribution network. Borden Foods management was neither prepared to make the investments required nor equipped to handle a DSD sales force for Cracker Jack given the resource demands of other business opportunities.

Exhibit 7 details projected Direct Product Contribution Income Statements prepared by Cracker Jack management for the period 1997 to 2001. The projections reflect the new strategy initiatives adopted by Borden's management and the integration of Cracker Jack into a national manufacturing, distribution, and sales infrastructure of a potential acquirer with an existing snack-related business.

The projection assumes significant revenue increases resulting from distribution expansion, primarily into grocery DSD, vending, and food service sales. It is also assumed that the acquirer would be willing and able to (1) fund trade promotions and consumer advertising to bolster sales of existing products and extend the product line and (2) raise prices. The projections also include capital expenditures, notably in 1999, that will be required to support the volume projections.

The Direct Product Contribution Income Statement projected for 1997 reflects Cracker Jack management's estimate of year-end results without a DSD sales force. Projected 1998 revenues demonstrate the estimated impact of a fully operational DSD sales force. These estimates focus exclusively on domestic opportunities for Cracker Jack and do not include potential export sales growth.

EXHIBIT 7

**Cracker Jack Projected Direct Product Contribution Income Statements:
1997-2001 (\$ in Millions)**

	1997	1998	1999	2000	2001
Net trade sales	\$50.5	\$78.5	\$191.4	\$209.1	\$258.9
Cost of goods sold	27.3	37.4	97.5	108.3	127.8
Gross margin	\$23.2	\$41.1	\$ 93.9	\$100.8	\$131.1
Distribution expense	\$ 4.4	\$ 4.6	\$ 9.7	\$ 11.0	\$ 13.0
Trade promotion	6.2	10.2	23.8	22.3	23.9
Advertising, consumer, & other promotion	5.3	11.3	19.9	20.1	24.8
Variable sales	1.4	2.4	3.6	3.9	4.6
A & P management	0.9	0.4	0.4	0.4	0.6
Market research	1.0	1.6	2.6	3.0	3.4
Technical research	0.7	0.8	1.8	2.1	2.6
Direct product contribution^a	\$ 3.3	\$ 9.8	\$ 32.1	\$ 38.0	\$ 58.2
Other financial information:					
Depreciation expense	\$ 1.4	\$ 1.9	\$ 3.7	\$ 4.2	\$ 4.7
Capital expenditures	\$ 0.4	\$ 4.0	\$ 19.3	\$ 4.3	\$ 6.4
Working capital ^b	\$ 3.0	\$ 5.0	\$ 13.2	\$ 14.4	\$ 18.0

^a Excludes effects of allocated selling costs, overhead, and other income and expense.

^b Current assets (other than cash) minus current liabilities.

Note: All financial information in this exhibit has been disguised and is not useful for external research purposes.

■ PROJECT BINGO

The New Ventures team met in June 1997 to decide whether or not to explore the Cracker Jack acquisition. Following a review of financial and operating data supplied by Borden in its Offering Memorandum, the decision was made to examine Cracker Jack as an acquisition. The effort was code-named "Project Bingo."

Project Bingo consisted of commissions studies, internal company reviews, and cross-functional team analyses and evaluations orchestrated by Lynne Peissig. The target completion date was July 15, 1997, with a presentation and recommendation to Frito-Lay senior management scheduled for August 1, 1997. A nonbinding open bid for Cracker Jack and its related assets from prospective buyers was due August 6, 1997. The top bidders would be invited to Northbrook, Illinois, for a plant visit and a Borden management presentation. A binding letter of intent and bid would be submitted by interested parties toward the end of September 1997. Peissig believed that bids for Cracker Jack would be submitted by a number of investment firms and consumer foods companies, including General Mills, Nabisco, and Procter & Gamble.

The data-gathering effort was substantially complete by mid-July 1997. Preliminary analyses had been conducted in four areas: (1) brand management, (2) sales and distribution, (3) manufacturing and product assurance, and (4) finance and administration.

Brand Management

The consensus opinion among the New Ventures team was that brand management considerations would drive Project Bingo. Two studies were commissioned, including (1) a brand awareness, image, equity, and usage study; and (2) a simulated test market.

Brand Awareness, Image, Equity, and Usage Study An independent research firm that specialized in ongoing brand-tracking studies for consumer goods companies submitted its report to Project Bingo's brand marketing team in late June 1997. The principal findings are summarized below:

1. The Cracker Jack name registers virtually universal awareness. However, Cracker Jack Fat Free, Butter Toffee, and Nutty Deluxe exhibit consumer awareness levels below 50 percent.
2. The Cracker Jack name evokes distinct imagery and icons in consumers' minds. These include the product form itself (caramel, popcorn, peanuts), the prize/toy in the box, the boy/sailor and dog on the box, and taste/texture. Overall, Cracker Jack was perceived to be:
 - Traditional and old-fashioned in a way that evokes fond memories of growing up (but not very contemporary, and less contemporary than Crunch 'n Munch).
 - Popular with kids more than teens, adults, or the family.
 - More of a personal snack than a snack for sharing.
 - A good treat, but not necessarily extendible across eating occasions.
 - Fairly unique, particularly compared to other RTE caramel popcorn.
 - Not at all "better for you" compared to many other snacks.
 - Not as available for purchase, nor as easy to find in the stores as other RTE caramel popcorn.
 - Lacking a good variety of flavors/types.
3. Cracker Jack has a respectable brand equity due largely to its heritage and generally favorable image foundation. It is a recognized brand with a positive reputation that appears to have lost momentum (popularity) in recent years.

4. Only 7.1 percent of U.S. households consume Cracker Jack. These households consume less than one pound of Cracker Jack annually. Exhibit 8 on page 244 shows the major reasons why consumers do not buy Cracker Jack more often.

The study results were viewed favorably by the brand marketing team. According to one team member, "Cracker Jack is a trademark living off residual heritage with untapped opportunity."

Simulated Test Market Preliminary results from the simulated test market (STM) also proved "encouraging," according to a brand marketing team member. Unlike the brand awareness, image, equity, and usage study, the STM was commissioned to obtain an initial assessment of Cracker Jack's commercial potential.

The STM, conducted by another marketing research firm, consisted of four steps. First, consumers between the ages of 12 and 64, who had purchased a sweet or salty snack during the past three months, were recruited at shopping malls in 16 U.S. cities and escorted to a nearby research facility. These consumers were then exposed to an advertisement for Cracker Jack (see Exhibit 9 on page 245). Following this exposure, consumers proceeded to a mock store setup where Cracker Jack was available for sale along with competing RTE caramel popcorn brands. Consumers were given money and could purchase whatever brands they wished, keeping any money left over. Finally, consumers who bought Cracker Jack were given two complimentary packages of Cracker Jack to take home. These consumers were called after a 2- to 3-week time period, asked a series of questions about the product, and offered a chance to repeat purchase the brand.

Diagnostic information was also gathered as part of the Cracker Jack STM. Consumer attitudes toward the brand (likes and dislikes) and usage intentions were obtained. These data were incorporated into computer simulation models that also included elements of the brand's intended marketing plan. The STM output included estimates of household brand trial and repeat rates, purchase amounts and frequency, product cannibalism, and first-year sales volume estimates.²

Fifteen different marketing plan options were tested in the Cracker Jack STM. Planned distribution coverage was set at levels comparable for Frito-Lay potato, corn, and tortilla chips. Two different store locations were tested: placement in the salty snack aisle versus the alternative snack aisle of stores. The present retail price of \$1.69 for an 8-ounce box was tested, but the package type was varied to compare the 8-ounce box with a 7-ounce flex bag. Also, a \$1.99 retail price was tested with an 8-ounce flex bag. Finally, three advertising and promotion expenditure levels (\$15 million, \$22 million, and \$32 million) were simulated.

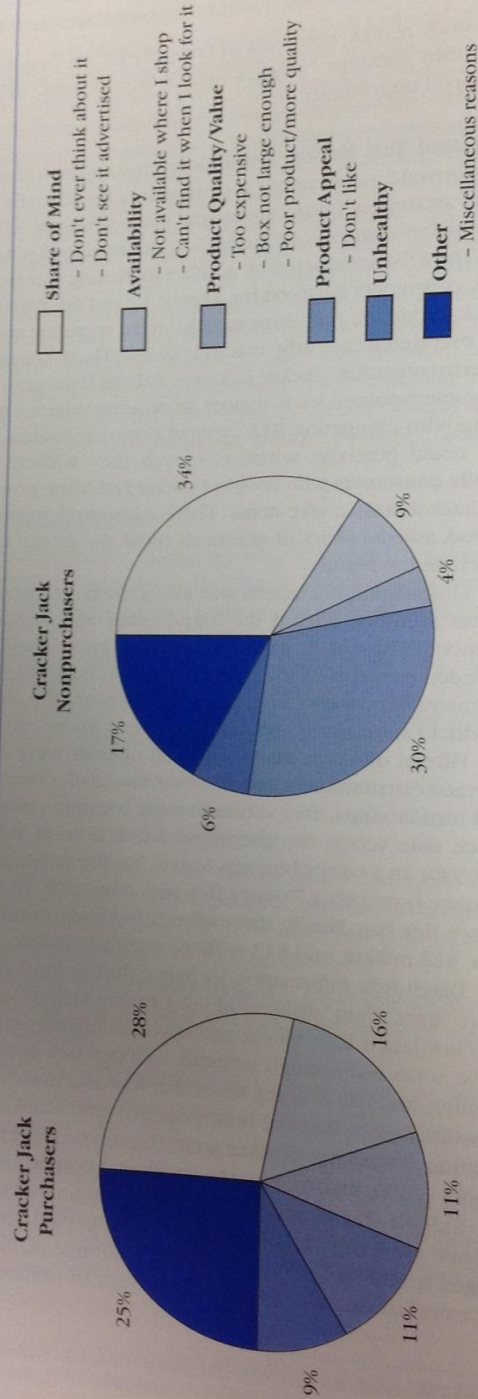
Diagnostic information gathered during the STM indicated that consumers had more "likes" than "dislikes" about Cracker Jack. Consumers gave favorable ratings to Cracker Jack's taste/texture and texture/consistency. However, most consumers said there were not enough peanuts. Cracker Jack scored highly as an afternoon, early evening, and late evening snack, but low as a morning treat. Almost one-half (46%) of consumers said that the nuts, popcorn, and snack mix aisle was the preferred store location for buying Cracker Jack. The next most preferred store aisle was with salty snacks (24%), followed by the candy and cookie aisles and the checkout counter.

Exhibit 10 (on page 246) shows preliminary first-year pound and net sales dollar volume estimates for each of the marketing plan options. First-year net sales estimates ranged from \$46.6 million to \$124.4 million at manufacturer prices. Estimates of product cannibalism indicated that 22 percent of Cracker Jack pound volume would come

² For an extended description of STMs, see K. Clancy, R. Shulman, and M. Wolf, *Simulated Test Marketing: Technology for Launching Successful New Products* (New York: Lexington Books, 1994).

EXHIBIT 8

Most Important Reasons for Not Buying Cracker Jack More Often



Source: Company records.

EXHIBIT 9

Cracker Jack Simulated Test Market Advertisement

WHAT MAKES THE MAGIC OF **Cracker Jack**[®]

BRAND

Is it:

The Sweet Crunchy Popcorn?

The Salty Peanuts?

Or

The Mystery Prize?

Cracker Jack, now easier to find
at your favorite store in both
Family-Size Bags and Single-Serve Bags.

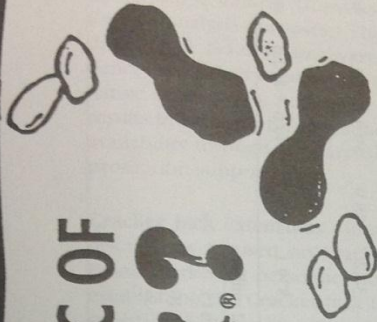


EXHIBIT 10

Cracker Jack Simulated Test Market First-Year Volume Projections

Marketing Plan Elements	Preliminary Marketing Plan Options					
	Salty Snack Aisle			Alternative Snack Aisle		
Distribution/Product Placement	8-oz. Bag-in-Box @ \$1.69	7-oz. Flex Bag @ \$1.69	8-oz. Flex Bag @ \$1.99	8-oz. Bag-in-Box @ \$1.69	7-oz. Flex Bag @ \$1.69	
Package form and retail (consumer) price	\$15	\$22	\$32	\$15	\$22	\$32
Advertising and promotion (\$ million) ^a	\$32	\$15	\$22	\$32	\$15	\$22
First-Year Volume Projections ^b						
Pound volume (millions)	24.3	34.0	40.7	22.6	31.6	37.8
Dollar sales volume (millions) @ manufacturer price to retailer (mfr. net sales)	\$59.6	\$83.4	\$99.0	\$55.1	\$77.1	\$92.5
Advertising and Promotion Breakdown:	At \$15 million		At \$22 million		At \$32 million	
Consumer Advertising	\$0		\$10		\$15	
Consumer Promotion	8		5		10	
Trade Promotion	7		7		7	
				\$50.4	\$79.1	\$95.7
				\$46.6	\$72.6	\$88.6

^aVolume forecasts are subject to a ± 15% accuracy range.

^bNote: All financial information in this exhibit has been disguised and is not useful for external research purposes.

from other Frito-Lay snack chip brands when the advertising and promotion expenditure was \$32 million.³(*Case writer note*: Footnote 3 contains important information for case analysis purposes.) This percentage was 7 percent at the \$15 million expenditure level. No estimates were made for the \$22 million expenditure level. The incidence of product cannibalism did not vary by store location (salty snack versus alternative snack aisle). According to a New Ventures team member, "These preliminary results indicate that Cracker Jack has considerable upside potential given broadened availability through our extensive sales and distribution network and advertising and promotion support."

Cracker Jack Extensions In subsequent meetings with the brand marketing team, discussions focused on Cracker Jack extension possibilities beyond the first year. Brand marketing personnel believed that attention in the first year should focus on establishing the Cracker Jack base business given a new sales and distribution infrastructure. However, brand and flavor extensions should be pursued in the second and third year of Cracker Jack marketing as a Frito-Lay brand.

Several brand marketing team members advocated a brand extension in the second year. Specifically, they proposed that a Cracker Jack snack bar be introduced. Cereal marketers had experienced considerable success with these bars following the trend toward "grab-and-go" eating. For example, Kellogg's Rice Krispies Treats snack bar recorded over \$100 million in supermarket retail sales over the past two years. Quaker Oats recently extended its oatmeal cereal with the launch of Fruit & Oatmeal Cereal bars supported by \$20 million in trade promotion and consumer advertising. Brand marketing team members speculated that a Cracker Jack snack bar could generate \$50 to \$100 million in incremental manufacturer net sales in the second year if supported by a \$10 million trade and consumer advertising and promotion program. It was believed that incremental snack bar sales would be somewhat dependent on first-year sales; that is, higher first-year sales would result in higher incremental snack bar sales.

A flavor extension, added to the current caramel and butter toffee flavors, might be introduced in the third year, according to brand marketing team members. A specific flavor had not been proposed, but likely candidates were chocolate and peanut butter. The snack bar and flavor extension might produce an incremental dollar sales boost of 5 to 10 percent over the second-year sales volume if supported by a \$5 to \$10 million trade and consumer advertising and promotion program.

Sales and Distribution

Frito-Lay sales and distribution personnel were consulted soon after the Cracker Jack acquisition opportunity became public. Their initial reaction was positive, noting that Cracker Jack would fit the existing Frito-Lay sales and distribution infrastructure.

Sales and distribution personnel raised two issues related to the acquisition. First, the number of Cracker Jack SKUs (32) seemed large. The typical Frito-Lay brand had five to ten SKUs and the number of Cracker Jack SKUs could present a challenge in getting retailer shelf and display space. Second, the estimated cost of a direct-store-delivery (DSD) like that employed by Frito-Lay appeared to be understated. According to industry analysts, the selling and distribution cost of a DSD sales force selling comparable products was understated by a factor of one-half when stated as a percent of net sales.

³Frito-Lay does not divulge profitability data on individual products and product lines. However, for case analysis and class discussion purposes, Frito-Lay snack chip brands can be assumed to have a gross profit of \$1.05 per pound.

Manufacturing and Product Assurance

Frito-Lay manufacturing and product assurance personnel were also favorably disposed toward the Cracker Jack acquisition. Like sales and distribution personnel, they expressed concerns about the number of Cracker Jack SKUs and the added complexity caused by this large number from a production perspective.

Without actually inspecting the Cracker Jack plant, manufacturing and product assurance personnel could not assess the condition of the facility and Cracker Jack production, box, and bag lines. However, they believed that it was highly unlikely that Frito-Lay would buy the Northbrook, Illinois, facility. The production, box, and bag lines might be purchased depending on their condition and relocated to an existing Frito-Lay manufacturing plant along with peanut and prize-insertion equipment. The ongoing capital expenditures projected by Borden management seemed appropriate if this were done.

Manufacturing personnel also said it was unlikely that Frito-Lay would need to make the substantial new plant and equipment capital expenditures indicated in Borden management's projection for 1999 (see Exhibit 7). Rather, Frito-Lay had a long-standing and successful relationship with an independent supplier that produced caramel popcorn, among other savory and salty snack products, and also had the manufacturing capacity to produce the equivalent of \$100 million in sales. Space was available at existing Frito-Lay manufacturing facilities to install additional production, box, and bag lines if Cracker Jack sales exceeded \$100 million. These lines could be added incrementally for a minimal capital investment. Each \$10 million capital investment for production and lines was estimated to provide capacity to manufacture the equivalent of \$50 million in sales. The equipment itself would be most likely depreciated over 15 years using the straight-line method.

A senior Frito-Lay manufacturing executive also believed that the Cracker Jack cost of goods sold could be 10 percent less than Borden management's projections. This cost reduction could be realized by simplifying the Cracker Jack product line and building the flex bag volume relative to Cracker Jack sold in boxes and bags-in-boxes.

Finance and Administration

Lynne Peissig engaged Frito-Lay planning personnel and PepsiCo merger and acquisition specialists to begin a valuation analysis of the Cracker Jack business in June 1997. By mid-July, a variety of data had been gathered pertaining to recent acquisitions in the consumer foods industry. According to Diane Tousley, the New Ventures division finance director, the transaction prices for these types of acquisitions represented one to three times net revenues and 10 to 12 times after-tax earnings of the acquired companies. The higher multiples were associated with businesses that had strong brand names or trademarks, established distribution channels and trade relations, and a positive earnings history.

Tousley acknowledged that these data needed to be supplemented with a more rigorous financial appraisal, including a discounted cash flow valuation for Cracker Jack (see Appendix: Note on Valuing a Business at the end of this case). She noted that Frito-Lay commonly applied a risk-adjusted discount rate to calculate the present value of after-tax future cash flows when performing a discounted cash flow analysis for new investments. (Note: According to the PepsiCo, Inc. annual report, 1997, p. 29, the effective 1997 PepsiCo, Inc. corporate income tax rate for continuing operations was 35.4 percent.) Depending on the level of the risk, the discount rate ranged from 12 to 18 percent with an average risk-adjusted discount rate of 15 percent. New Ventures team members agreed that an investment in Cracker Jack represented an "average risk" for Frito-Lay.

Revenue forecasts associated with marketing Cracker Jack as a Frito-Lay brand had not been finalized as of July 15, 1997. However, Peissig believed that the prelim-

inary first-year sales projections provided by the STM and incremental dollar sales estimates resulting from brand and flavor extensions in the second and third year offered a starting point for making revenue forecasts. She also thought Cracker Jack dollar sales growth would likely stabilize at a rate of 2 or 3 percent in the fourth and fifth year following modest price and pound volume increases. Peissig added: "I suspect that considerable discussion will focus on Cracker Jack revenue projections when the business team is assembled."

Peissig also expected an animated discussion related to the Cracker Jack trade promotion and consumer advertising budget. She believed three years of focused brand development efforts supported by promotion and advertising spending would be necessary to rebuild and grow the business. After that, the Cracker Jack business might be sustained with an annual promotion and advertising budget representing about 4 to 8 percent of manufacturer net sales. Other costs would also be incurred by Cracker Jack. For example, Tousley estimated that initial and ongoing general and administrative costs associated with the marketing of Cracker Jack as a Frito-Lay brand would range from 4 to 7 percent of manufacturer net sales. These costs included product and process research and development, marketing research, and brand management and administrative salaries and fringe benefits.

Finally, Peissig believed that her presentation to senior PepsiCo executives should include consideration of the Cracker Jack acquisition relative to the internal development and commercialization of a new consumer food brand. According to industry sources, the financial investment to internally develop and launch a new brand (trademark) in a consumer food category was \$75 to \$100 million, including the cost of product research and development, test marketing, and a national introduction. The time interval from concept development to full-scale commercialization ranged from two to three years. The likelihood of a new product success was roughly one in ten.

■ APPENDIX: NOTE ON VALUING A BUSINESS

Estimating a company's fair market value is a necessary first step in determining the purchase price for an acquisition. Fair market value is the cash, or cash-equivalent, price at which an asset would trade between a willing buyer and seller, with each in command of all information necessary to value the asset and neither under any pressure to trade.

Valuation experts have developed a variety of valuation techniques to assist in establishing a company's fair market value, although this value often may not represent the final transaction price. In practice, a transaction price involves consideration of a variety of factors that may vary depending on the characteristics of the company to be acquired and the objectives of the buyer and seller. For example, obtaining valuable trade names, taking control of another entity, or acquiring an increased market share for a particular product may affect the final purchase price. Still, determination of a transaction or purchase price or a reasonable price range generally involves quantitative techniques. This appendix briefly describes the discounted cash flow (DCF) technique that is used by investment bankers, research analysts, and valuation experts to estimate a company's fair market value. It is assumed that the reader is familiar with the vocabulary and mechanics of present value and discounted cash flow analysis.⁴

⁴For background reading on the time value of money, present value analysis, and discounted cash flow, see the most recent edition of S. Ross, R. Westerfield, and B. Jordan, *Fundamentals of Corporate Finance* (Burr Ridge, IL: Irwin McGraw-Hill) or R. Higgins, *Analysis for Financial Management* (Burr Ridge, IL: Irwin McGraw-Hill).

The Discounted Cash Flow Technique

The DCF valuation approach is the most frequently used fair market valuation technique. It provides a "going concern" value, which is the value indicated by the future commercial possibilities of a business. Using this technique, fair market value is calculated by the summation of the present value of projected cash flows for a determined period plus the present value of the residual or terminal value at the end of the projection period for a business. Typically, a 5- to 10-year projection period of after-tax operating cash flows, with various terminal or residual value estimates, will be discounted back to the present by the risk-adjusted, weighted-average cost of capital for the acquiring company. The cash flows are derived from the projected income statements and working and fixed capital expenditure plans. This calculation produces a result that represents the fair market value to both debt and equity holders. To arrive at the (owner's) equity value, the outstanding debt at the time of the acquisition is subtracted from the total capital value.

Four key areas must be assessed for accuracy and appropriateness when using the DCF technique. These include the (1) assumptions underlying the projection of cash flows, (2) length of the projection period, (3) residual or terminal value at the end of the projection period, and (4) appropriate discount rate.

Financial Projection Assumptions and Projection Period Five factors form the basis for basic financial projections: (1) historical sales growth; (2) business plans of the company to be acquired; (3) prevailing relevant business conditions including growth expectations and trends in light of competitive positioning, general market growth, and price pressure; (4) anticipated needs for working capital and fixed asset expenditures; and (5) historical and expected levels and trends of operating profitability. Each factor affects the estimation of projected cash flows for the business to be acquired.

Determining the length of the projection period is a matter of judgment. As a general rule, it is expected that at the end of the projection period, the operations of a business should be at a normal and sustainable operating level in order to more easily estimate a terminal or residual value (discussed next). Unusual circumstances, such as an excessive sales growth factor, an increase or decrease in operating profit margins, or an improvement in the accounts receivable or inventory levels, should no longer exist by the end of the projection period. For companies projecting normal sales growth rates and profitability margins, a 5- to 10-year projection period is usually employed.

Estimating the Terminal or Residual Value The value of a business at the end of the projection period is often the least analyzed element of a valuation. However, it can represent a significant portion of the company's entire fair market value. The proper method for estimating the terminal or residual value depends on the financial projection factors described earlier and the length of the projection period in addition to the specifics of the business. A trade-off exists between the degree of reliability inherent within the two factors (DCFs during the projection period and the terminal value) used to calculate an ultimate fair market value. A shorter projection period places greater importance on the ability to develop a meaningful terminal or residual value estimate. A longer projection period places less reliance on the estimated terminal value but makes the annual cash flow assumptions more important.

The two most frequently used approaches for estimating a terminal value are the income capitalization and the multiple techniques. Both techniques estimate the future value of the business at the end of the projection period. This future value is then discounted back to determine the present value.

The income capitalization technique method adjusts either after-tax earnings or cash flow from the final year of the projection period by the discount rate. This tech-

nique assumes that after-tax earnings will either be constant or increasing at a constant rate from the last year of the projection period and that the proper risk-adjusted weighted-average cost of capital is the discount rate. The multiple approach applies some multiplier to either after-tax earnings or cash flow from the last year of the projection period. The resulting terminal value is then discounted to its present value using the discount rate from the final year of the projection period. The multiples are developed from publicly traded comparable companies or recent merger and acquisition transactions. A point to remember about the income capitalization and multiple approaches is that the calculated terminal value is dependent on the assumptions underlying the projection period. For example, aggressive sales growth rates will overstate after-tax earnings or cash flow for the last year of the projection period, which will in turn overstate the terminal value. Similarly, multiples may be distorted because of extrinsic influences on recent merger and acquisitions transactions and the fact that two companies are rarely alike.

Discount Rate The proper discount rate is one of the most significant elements in a DCF. Because the present value changes inversely with changes in the discount rate, it is critical to the valuation to properly assess the inherent risk and thus the required yield of the business to be acquired.

The Capital Asset Pricing Model (CAPM) is generally accepted by the financial community as a means for estimating an investor's yield requirement and hence a company's cost of equity capital. Essentially, the CAPM states that the required cost of equity is equal to the cost of risk-free debt plus some additional risk premium relating to the company. A detailed discussion of CAPM can be found in most finance textbooks. The required rates of return on equity and debt are then weighted in order to arrive at the weighted-average cost of capital. The weighted-average cost of capital for *Fortune* 500 consumer goods companies averages around 10 to 12 percent.

■ DISCOUNTED CASH FLOW TECHNIQUE ILLUSTRATION

Exhibit A-1 provides a simple illustration of the DCF computation for valuing a business. The upper portion of the illustration contains a five-year *pro forma* income statement, including projected business revenues, cost of goods sold, operating expenses, and earnings (net income) before interest and taxes. Also indicated is the provision for corporate income tax and after-tax earnings.

Cash Flow Calculation The bottom portion of Exhibit A-1 details the cash flow calculation. The projected cash flows are obtained by adjusting the *pro forma* income statement for noncash items and changes in balance sheet items affecting cash.⁵ This is shown by first adding depreciation expense (a noncash cost) for each year to after-tax earnings. After-tax earnings plus depreciation represents the annual cash flow from operations for a business.

The cash flow from operations then needs to be adjusted to reflect cash outflows. This is done by subtracting the estimated year-to-year *increase* in working capital (current assets minus current liabilities) and planned capital expenditures for each year from the estimated cash flow from operations. Increases to working capital in this illustration suggest that current assets, such as inventories and accounts receivables, net of current liabilities (e.g., accounts payable), increase each year at a constant amount of \$100,000 given the constant (10%) annual revenue growth rate over the projection period shown in Exhibit A-1. The dollar amount for capital expenditures reflect annual cash investments in plant and equipment. In summary, after-tax

⁵For simplicity, deferred taxes and amortization of goodwill are omitted from this example.

EXHIBIT A-1

Business Valuation Discounted Cash Flow Illustration (\$000s)

	Year 1	Year 2	Year 3	Year 4	Year 5	Residual Value	Fair Market Value
Revenues (10% growth)	\$10,000	\$11,000	\$12,100	\$13,310	\$14,641		
Cost of goods sold (40% of revenues)	4,000	4,400	4,840	5,324	5,856		
Gross profit (60% of revenues)	6,000	6,600	7,260	7,986	8,785		
Operating expenses (20% of revenues)	2,000	2,200	2,420	2,662	2,928		
Earnings before interest and taxes (EBIT) (40% of revenues)	4,000	4,400	4,840	5,324	5,856		
Income tax provision on EBIT (40% of EBIT)	1,600	1,760	1,936	2,130	2,343		
After-tax earnings before interest and taxes on interest (24% of revenues)	\$ 2,400	\$ 2,640	\$ 2,904	\$ 3,194	\$ 3,514		
Add noncash items, including depreciation expense	700	850	1,050	1,300	1,600		
Funds provided	\$ 3,100	\$ 3,490	\$ 3,954	\$ 4,494	\$ 5,114		
Subtract:							
Increases to working capital	(100)	(100)	(100)	(100)	(100)		
Capital expenditures	(500)	(750)	(1,000)	(1,250)	(1,500)		
Total cash flows exclusive of interest (net of tax)	\$ 2,500	\$ 2,640	\$ 2,854	\$ 3,144	\$ 3,514	\$45,682 ^a	
Present value factor at 15%	0.87	0.756	0.658	0.572	0.497	0.497	
Present value	\$ 2,174	\$ 1,996	\$ 1,877	\$ 1,798	\$ 1,747	\$22,704	
Total present value of cash flows							\$ 9,592
Present value of residual							22,704
Fair market capital value for the firm							\$32,296

^aResidual value using an after-tax earnings (cash flow) multiple. After-tax earnings (cash flow) from Year 5 times the multiple selected of twelve ($\$3,514 \times 12$).

earnings plus noncash expenses (e.g., depreciation) minus projected increases to working capital and annual capital expenditures result in a projected total annual cash flow for a business.

Present Value of Projected Cash Flows and Residual or Terminal Value As described earlier, the fair market value of a business is calculated by the summation of the present value of projected cash flows for a determined period plus the present value of the residual or terminal value at the end of the projection period. Exhibit A-1 shows the present value calculation using a 15 percent discount rate (other discount rates are shown in Exhibit A-2). The discount rate reflects the acquiring company's weighted-average cost of capital, plus any amount to be added for special risks entailed in the acquisition; hence, the frequently used term *risk-adjusted discount rate*. The summed, or cumulative, present value of projected cash flows over the 5-year projection period is \$9,592,000, shown in Exhibit A-1.

EXHIBIT A - 2

Present Value of \$1.00 Discounted at Discount Rate *K*, for *N* Years

Period (<i>N</i>)	Discount Rate (<i>K</i>)						
	12%	13%	14%	15%	16%	17%	18%
1	0.893	0.885	0.877	0.870	0.862	0.855	0.847
2	0.797	0.783	0.769	0.756	0.743	0.731	0.718
3	0.712	0.693	0.675	0.658	0.641	0.624	0.609
4	0.636	0.613	0.592	0.572	0.552	0.534	0.515
5	0.567	0.543	0.519	0.497	0.476	0.456	0.437

As mentioned earlier, the residual or terminal value at the end of a projection period often represents a significant portion of the fair market value of a business. This is apparent in Exhibit A-1, which illustrates the multiple approach for estimating the residual or terminal value. In this illustration, an after-tax earnings (cash flow) multiple (12) is used, which is then discounted to its present value using the discount rate from the final year of the projection period. This results in a residual value of \$22,704,000. The sum of the cumulative present value of projected cash flows (\$9,592,000) and the present value of the residual or terminal value is the estimated fair market value shown as \$32,296,000 in Exhibit A-1.

Alternatively, the income capitalization approach can be used. This approach adjusts either after-tax earnings or cash flow from the final year of the projection period by the discount rate. It can be assumed that after-tax earnings or cash flow will be either constant or increasing at a constant rate from the last year of the projection period.

The income capitalization approach for estimating a residual or terminal value can be applied given information contained in Exhibit A-1. Assuming that after-tax earnings (or cash flow) in Year 5 remain constant at \$3,514,000 and a 15 percent discount rate applies, then the present worth of the residual value is \$11,643,053 ($[\$3,514,000 / .15] \times 0.497$). When added to the present value of projected cash flows, the estimated fair market value is \$21,235,053 (\$9,592,000 + \$11,643,053). Alternatively, if a 10 percent annual growth in after-tax earnings (or cash flow) is expected in the future as was apparent in Exhibit A-1 projections, then the present value of a perpetually growing after-tax earnings (cash flow) stream can be estimated. This is done using the formula, $E/K - g$, where E represents after-tax earnings (cash flow) in the last year of the projection period, K is the discount rate, and g is the growth rate in perpetuity. Applying this formula, the estimated residual value is \$70,280,000 ($[\$3,514,000 / (.15 - .10)]$). The present value of this amount is \$34,929,160 ($0.497 \times \$70,280,000$). By adding the present value of the terminal value to the present value of projected cash flows, the estimated fair market value is \$44,521,160.

Summary

The estimation of fair market value requires both a qualitative and quantitative appraisal of the future commercial possibilities of a business as a going concern. As demonstrated in this note, the determination of fair market value is by no means a simple matter and will often yield different dollar figures given different assumptions. The DCF valuation approach featured in this note, while conceptually correct, often requires a heavy dose of judgment in its application. Fair market value of a business lies in the eyes of the beholder, whether he or she is the buyer or the seller.