Case

Goodyear Tire and Rubber Company

In early 1992, Goodyear Tire and Rubber Company executives were reconsidering a proposal made by Sears, Roebuck and Company. Sears management had approached Goodyear about selling the company's popular Eagle brand tire in 1989. The proposal was declined. At the time, Goodyear's top management believed that such an action would undermine the tire sales of company-owned Goodyear Auto Service Centers and franchised Goodyear Tire Dealers, which were the principal retail sources for Goodyear brand tires. However, following a $38 million loss in 1990 and a change in Goodyear top management in 1991, the Sears proposal resurfaced for consideration.

Two factors contributed to the renewed interest in the Sears proposal.[1] First, between 1987 and 1991, Goodyear brand tires recorded a 3.2 percent decline in market share for passenger car replacement tires in the United States. This share decline represented a loss of about 4.9 million tire units. It was believed that the growth of warehouse membership club stores and discount tire retail claims coupled with multibranding among mass merchandisers contributed to the market share erosion (see Exhibit 1). Second, it was believed that nearly 2 million worn-out Goodyear brand tires were being replaced annually at some 850 Sears Auto Centers in the United States. According to a Goodyear executive, the failure to repurchase Goodyear brand tires happened by default "because the remarkable loyalty of Sears customers led them to buy the best tire available from those offered by Sears," which did not include Goodyear brand tires.

The Sears proposal raised several strategic considerations for Goodyear. First, as a matter of distribution policy, Goodyear had not sold the Goodyear tire brand through a mass merchandiser since the 1920s, when it sold tires through Sears. A decision to sell Goodyear brand passenger car tires again through Sears would represent a significant change in distribution policy and could create

[1] "Newsfocus," *Modern Tire Dealer* (March 1992):13.

This case was prepared by Professor Roger A. Kerin, of the Edwin L. Cox School of Business, Southern Methodist University, as a basis for class discussion and is not designed to illustrate effective or ineffective handling of an administrative situation. The case is based on published sources. The author wishes to thank Professor Arthur A. Thompson Jr. of the University of Alabama for kindly granting permission to extract information from his industry note, "Competition in the World Tire Industry, 1992," for use in this case, the Goodyear Tire and Rubber Company for comments on a previous draft of the case and permission to reproduce its advertising copy, and Michelin Tire Corporation for permission to reproduce its advertising copy.

EXHIBIT 1 **U.S. Market Share of Replacement Tire Sales by Type of Retail Outlet, 1982 and 1992**

Type of Retail Outlet	*1982*	*1992**
Traditional multibrand independent dealers	44%	44%
Discount multibrand independent dealers	7	15
Chain stores, department stores	20	14
Tire company stores	10	9
Service stations	11	8
Warehouse clubs	–	6
Other	8	4
	100%	100%

*Estimate.

Source: Goodyear Tire and Rubber Company.

conflict with its franchised dealers. Second, if the Sears proposal was accepted, several product policy questions loomed. Specifically, should the arrangement with Sears include (1) only the Goodyear Eagle brand or (2) all of its Goodyear brands? Relatedly, should Goodyear allow Sears to carry one or more brands exclusively and have its own dealers carry certain brands on an exclusive basis? Goodyear presently has 12 brands of passenger and light-truck tires sold under the Goodyear name, ranging from lower-priced tire brands to a very expensive special high-speed tire for a Corvette that bears the Goodyear name.

THE TIRE INDUSTRY

The tire industry is global in scope, and competitors originate, produce, and market their products worldwide.[2] World tire production in 1991 was approximately 850 million tires, of which 29 percent were produced in North America, 28 percent in Asia, and 23 percent in Western Europe. Ten tire manufacturers account for 75 percent of world wide production. Groupe Michelin, with headquarters in France, is the world's largest producer and markets the Michelin, Uniroyal, and BF Goodrich brands. Goodyear is the second-largest producer, with Goodyear, Kelly-Springfield, Lee, and Douglas being its most well-known brands. Bridgestone Corporation, a Japanese firm, is the third-largest tire producer. Its major brands are Bridgestone and Firestone. These three firms account for almost 60 percent of all tires sold worldwide.

The Original Equipment Tire Market

(2) change tires (1) to a company

The tire industry divides into two end-use markets: (1) the original equipment tire market and (2) the replacement tire market. Original equipment tires are sold by tire manufacturers directly to automobile and truck manufacturers. Original equipment tires represent 25 to 30 percent of tire unit production volume each

[2] Portions of the tire industry overview are based on "Competition in the World Tire Industry, 1992," in Arthur A. Thompson Jr. and A. J. Strickland III, *Strategic Management: Concepts & Cases*, 7th ed. (Homewood, IL, 1993):581–614.

EXHIBIT 2 **Manufacturer Brand U.S. Market Share for Original Equipment Passenger Car Tires**

Original Equipment (OE) Buyer	*Tire Manufacturer (Brand)*						
	Goodyear	*Firestone*	*Michelin*	*Uniroyal Goodrich*	*General Tire*	*Dunlop*	*Bridgestone*
General Motors	33.5%	1.5%	14.5%	32.5%	18.0%	0.0%	0.0%
Ford	26.0	39.0	23.5	0.0	11.5	0.0	0.0
Chrysler	83.0	0.0	0.0	0.0	17.0	0.0	0.0
Mazda	15.0	50.0	0.0	0.0	0.0	0.0	35.0
Honda of U.S.	30.0	0.0	47.0	0.0	0.0	16.0	7.0
Toyota	15.0	40.0	0.0	0.0	3.0	42.0	0.0
Diamond Star	100.0	0.0	0.0	0.0	0.0	0.0	0.0
Nissan	0.0	35.0	22.0	0.0	35.0	8.0	0.0
Nummi (GM-Toyota)	50.0	50.0	0.0	0.0	0.0	0.0	0.0
Volvo	0.0	0.0	100.0	0.0	0.0	0.0	0.0
Saturn	0.0	100.0	0.0	0.0	0.0	0.0	0.0
Isuzu	15.0	35.0	0.0	50.0	0.0	0.0	0.0
Subaru	0.0	0.0	100.0	0.0	0.0	0.0	0.0
Hyundai	35.0	0.0	65.0	0.0	0.0	0.0	0.0
Overall OE market share	38.0%	16.0%	16.0%	14.5%	11.5%	2.75%	1.25%

Source: Modern Tire Dealer, January 1991, p. 27.

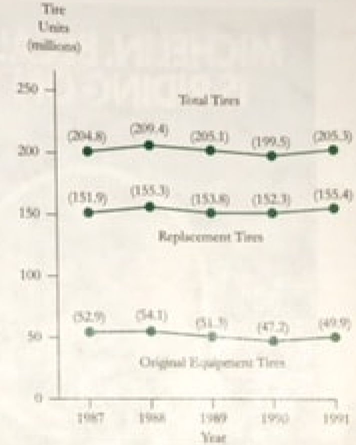
year. Goodyear is the perennial market share leader for original equipment tires, capturing 38 percent of this segment in 1991. Exhibit 2 shows the original equipment tire market shares for major tire suppliers.

Demand for original equipment tires is derived; that is, tire volume is directly related to automobile and truck production. Overall original equipment tire demand is highly price inelastic given the derived demand situation. However, the price elasticity of demand for individual tire manufacturers (brands) was considered highly price elastic, since car and truck manufacturers could easily switch to a competitor's brands. Accordingly, price competition among tire manufacturers was fierce and motor vehicle manufacturers commonly relied upon two sources of tires. For example, General Motors split its tire purchases among Goodyear, Uniroyal/Goodrich, General Tire, Michelin, and Firestone brands in the early 1990s. Even though the original equipment market was less profitable than the replacement tire market, tire manufacturers considered this market strategically important. Tire manufacturers benefited from volume-related scale economics in manufacturing for this market. Furthermore, it was believed that car and truck owners who were satisfied with their original equipment tires would buy the same brand when they replaced them.

The Replacement Tire Market

The replacement tire market accounts for 70 to 75 percent of tires sold annually. Passenger car tires account for 75 percent of annual sales. Primary demand in this market is affected by the average mileage driven per vehicle. Every 100-mile change in the average number of miles traveled per vehicle produces a 1-million-unit change in the unit sales of the replacement market, assuming an average

EXHIBIT 3 **Unit Tire Sales in the United States, 1987–1991**



Source: Modern Tire Dealer, 1993 Facts/Directory.

treadwear life of 25,000 to 30,000 miles per tire.[3] Worldwide unit shipments in this segment have been "flat" due in part to the longer treadlife of new tires. Exhibit 3 shows original equipment and replacement unit sales in the United States for the period 1987 to 1991.

Tire manufacturers produce a large variety of grades and lines of tires for the replacement tire market under both manufacturers' brand names and private labels. Branded replacement tires are made to the tiremaker's own specifications. Some private-label tires supplied to wholesale distributors and large chain retailers are made to the buyer's specifications rather than to the manufacturer's standards.

The major tire producers often used network TV campaigns to promote their brands, introduce new types of tires, and pull customers to their retail dealer outlets. Their network TV ad budgets commonly ran from $10 to $30 million, and their budgets for cooperative ads with dealers were from $20 to $100 million. Print media were also used extensively. As an illustration, a Michelin print ad featuring the slogan "Michelin. Because So Much Is Riding on Your Tires" is shown in Exhibit 4 on page 622. Several tire companies also sponsored auto racing events to promote the performance capabilities of their tires.

Goodyear is the perennial market-share leader in the U.S. replacement tire market. The company holds a leadership position in the passenger car, light-truck, and highway truck product categories (see Exhibit 5 on page 622).

[3] "Competition in the World Tire Industry, 1992," 587.

EXHIBIT 4 **Michelin Print Advertisement**

EXHIBIT 5 **Estimated U.S. Market Shares of the Top 10 Brands in the Replacement Tire Market, 1991**

Passenger Car Tires		*Light-Truck Tires*		*Highway-Truck Tires*	
Brand	*Share*	*Brand*	*Share*	*Brand*	*Share*
Goodyear	15.0%	Goodyear	11.0%	Goodyear	23.0%
Michelin	8.5	BF Goodrich	10.0	Michelin	15.0
Firestone	7.5	Firestone	5.0	Bridgestone	11.0
Sears	5.5	Michelin	6.0	General Tire	7.0
General	4.5	Cooper/Falls	5.0	Firestone	6.0
BF Goodrich	3.5	Kelly-Springfield	5.0	Kelly-Springfield	6.0
Bridgestone	3.5	Armstrong	4.0	Dunlop	6.0
Cooper	3.5	General Tire	4.0	Yokohama	5.0
Kelly-Springfield	3.0	Bridgestone	3.0	Cooper	4.0
Multi-Mile	3.0	Dunlop	2.0	Toyo	3.0
Others	42.5%	Others	44.0	Others	14.0
	100.0%		100.0%		100.0%

Source: Modern Tire Dealer, January 1991, p. 27; *Market Data Book*, 1991; *Tire Business*, January 1992, p. 13.

EXHIBIT 6 **Estimated Number of Retail Points of Sale for Major Tire Brands in the United States, 1991**

Tire Brand (Parent Company)	*Number of Retail Points of Sale*
Armstrong (Pirelli)	978
Bridgestone (Bridgestone Corp.)	5,960
Cooper (Cooper Tire and Rubber)	1,518
Dunlop (Sumitomo)	2,046
Firestone (Bridgestone Corp.)	4,208
General (Continental A.G.)	2,107
Goodrich (Groupe Michelin)	4,215
Goodyear (Goodyear Tire and Rubber)	7,964
Kelly-Springfield (Goodyear Tire and Rubber)	2,421
Michelin (Groupe Michelin)	7,159
Pirelli (Pirelli Group)	2,133
Uniroyal (Groupe Michelin)	2,321

14,000

Source: Market Data Book, 1991; *Tire Business,* January 1992, p. 14.

Retail Distribution Major brand-name tire manufacturers capitalized on their reputation and experience as producers of original equipment tires by building strong wholesale and retail dealer relationships and networks through which to sell their brand-name replacement tires to vehicle owners. The tire industry uses "retail points of sale" to gauge the retail coverage of tire manufacturers and their brands. Goodyear brand tires have the broadest retail coverage with almost 8,000 "retail points of sale," most of which are company-owned Goodyear Auto Service Centers or franchised Goodyear Tire Store dealers with multiple locations. Groupe Michelin is estimated to have almost 14,000 "points of sale" for its three major brands—Michelin, Goodrich, and Uniroyal. The number of "retail points of sale" for major tire brands is shown in Exhibit 6.

Retail Marketing[4] Independent tire dealers usually carried the brands of several different major manufacturers and a discount-priced private-label brand so as to give replacement buyers a full assortment of qualities, brands, and price ranges to choose from. Service stations affiliated with Exxon, Chevron, and Amoco marketed Atlas brand tires produced by Firestone (Bridgestone). Other service stations, especially those that emphasized tire sales, stocked one or two manufacturers' brand tires and a private-label brand. Retail tire outlets that were owned or franchised by the manufacturers (that is, Goodyear Tire Stores and Firestone Auto Master Care Centers) carried only the manufacturer's name brands and perhaps a private-label or lesser-known, discount-priced line made by the manufacturer. Department stores and the major retail chains such as Montgomery Ward and Sears, Roebuck and Company occasionally carried manufacturers' brand tires but usually marketed only their own private-label brands.

Manufacturers found it advantageous to have a broad product line to appeal to most buyer segments to provide tires suitable for many different types of vehicles driven under a variety of road and weather conditions. When vehicle

[4] This material is extracted from "Competition in the World Tire Industry, 1992," 588-591.

owners went to a tire dealer to shop for replacement tires, they had a variety of tread designs, tread widths, tread durabilities, performance characteristics, and price categories to choose from. Car and light-truck owners were often confused by the number of choices they had; few buyers were really knowledgeable about tires. Many buyers ended up choosing a tire on the basis of price, while others followed the recommendation of the local dealer whom they regularly patronized. The retail prices of replacement tires ranged from retreaded (or recapped) tires selling for under $20 to $35 each to top-of-the-line tires going for $125 to $175 each. Tire dealers ran frequent price promotion ads in the local newspapers, making it easy for price-sensitive buyers to watch for sales and buy at off-list prices. In recent years, consumers had become more price conscious and less brand loyal (thus eroding the importance of securing replacement sales through original equipment sales to vehicle manufacturers). However, it was often difficult for car owners to comparison shop on the basis of tire quality and tread durability because of the proliferation of brands, lines, grades, and performance features. Manufacturers had resisted the development of standardized specifications for replacement tires, and there was a general lack of common terminology in describing tire grades and construction features.

In most communities, the retail tire market was intensely competitive. Retailers advertised extensively in newspapers, on outdoor billboards, and occasionally on local TV to establish and maintain their market shares. Price was the dominant competitive appeal. Many dealers featured and pushed their private-label "off-brand" tires because they could obtain higher margins on them than they could selling the name-brand tires of major manufacturers. Dealer-sponsored private-label tires accounted for 15 to 20 percent of total replacement tire sales in the United States in 1991. Surveys showed dealers were able to influence a car owner's choice of replacement tires, both as to brand and type of tire. Most replacement car tire buyers did not have strong tire brand preferences, making it fairly easy for tire salespeople to switch customers to tire brands and grades with the highest dealer margins. Normal dealer margins on replacement tires were in the 35 to 40 percent range, but many dealers shaved margins to win incremental sales.

Retailer Profitability Since the mid-1970s, tire retailers' profit margins had been under competitive pressure, partly because of stagnant growth in tire sales and partly because of declining retail prices since 1980. To bolster profitability, tire dealers had expanded into auto repair services (engine tune-ups, shock-absorber and muffler replacement, and brake repair), retreading, and automobile accessories. Some tire retailers were experimenting with becoming "total car care centers." Auto service work was very attractive because gross profit margins were bigger than the margins earned on replacement tire sales. A recent survey of independent tire dealers indicated that 38.2 percent of their sales and 45.8 percent of their earnings came from automobile service.[3]

GOODYEAR TIRE AND RUBBER COMPANY

Goodyear Tire and Rubber Company, headquartered in Akron, Ohio, was founded in 1898 by Frank and Charles Seiberling. The company began as a supplier of bicycle and carriage tires, but soon targeted the fledgling automotive industry. The introduction of the Quick Detachable tire and the Universal Rim

[3] "Dealer Attitude Survey Concerning Automotive Service," *Modern Tire Dealer* (Spring 1992):1.

(1903) helped make Goodyear the world's largest tire manufacturer by 1916, the same year the company introduced the pneumatic truck tire. Goodyear held the distinction as the world leader in tire production until November 1990, when Groupe Michelin acquired the Uniroyal Goodrich Tire Company (then the second largest U.S. tire manufacturer) for a purchase price of $1.5 billion.

Goodyear's principal business is the development, manufacture, distribution, and sale of tires throughout the world. Tires and tire tubes represented 83 percent of Goodyear's corporate sales of $10.9 billion in 1991. Corporate-wide earnings in 1991 were $96.6 million. In addition to Goodyear brand tires, the company owns the Kelly-Springfield Tire Company, Lee Tire and Rubber Company, and Delta Tire. The company also manufactures private-label tires.

Owned

Goodyear controls 20 to 25 percent of the world's tire manufacturing capacity and about 37 percent of U.S. tire-making capacity. Sales outside the United States accounted for about 42 percent of company revenues.

Market Presence

Approximately 60 percent of Goodyear worldwide sales were in the tire replacement market and 40 percent were to the original equipment market. The Goodyear brand is the market share leader in North America and in Latin America and number two throughout Asia outside Japan (behind Bridgestone). The Goodyear brand is third in market share in Europe behind Michelin and Pirelli. Goodyear is second to Groupe Michelin (Michelin, Uniroyal-Goodrich) in terms of worldwide market share for auto, truck, and farm tires (see Exhibit 7). The company operates 44 tire products plants in 28 countries and seven rubber plantations.

Tire Product Line and Pricing

Goodyear produces tires for virtually every type of vehicle. It has the broadest line of tire products of any tire manufacturer. The broad market brand names sold under the Goodyear umbrella include the Arriva, Corsa, Eagle, Invicta, Tiempo, Decathlon, Regatta, S4S, T-Metric, Wrangler (light-truck tire), and Aquatred. The Aquatred brand was the most recent introduction and featured a new tread design that prevented hydroplaning (see Exhibit 8 on page 626). Sales of this brand were expected to reach 1 million units in 1992 based on initial sales figures.

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The Goodyear name is one of the best known brand names in the world. Goodyear brand tires have been traditionally positioned and priced as premium

EXHIBIT 7 Worldwide Market Shares of Tire Makers, 1990

Tire Manufacturer (Brands)	*Market Share*
Michelin/Uniroyal-Goodrich	21.5%
Goodyear	20.0
Bridgestone/Firestone	17.0
Continental/General	7.5
Pirelli/Armstong	7.0
Sumitomo/Dunlop	7.0
Others	20.0
	100.0%

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Source: Goodyear Tire and Rubber Company, 1991 annual report, p. 5.

EXHIBIT 8 **Aquatred Print Advertisement**

Source: Courtesy of the Goodyear Tire and Rubber Company.

EXHIBIT 9

Goodyear Brand Passenger Car Tires (Including Minimum Assigned Grades for Treadwear, Traction, and Temperature)

ability to stop

Brand	*Treadwear*[a]			
	Rim Diameter 13"	*All Others*	*Traction*[b]	*Temperature*[c]
Aquatred	320	340	A	B
Arriva	260	310	A	B
Corsa GT	280	280	A	B
Decathlon	220	240	B	C
Eagle GA	280	300	A	B
Eagle GA (HNIZ)	280	300	A	A
Eagle GS-C	–	220	A	A
Eagle GS-D	–	180	A	A
Eagle GT (H)	–	200	A	A
Eagle GT II	–	320	A	B
Eagle GT + 4	–	240	A	B
Eagle GT + 4 (HNIZ)	–	240	A	A
Eagle ST IV	280	300	A	B
Eagle VL	–	220	A	A
Eagle VR	–	220	A	A
Eagle ZR	–	220	A	A
Invicta	–	280	A	B
Invicta GA	–	280	A	B
Invicta GA (HN)	–	280	A	A
Invicta GA (L)	–	300	A	B
Invicta GA (L) (HN)	–	220	A	A
Invicta GFE	280	300	A	B
Invicta GL	260	280	A	B
Invicta GL (H)	–	280	A	A
Invicta GLR	260	280	A	B
Invicta GS	320	340	A	B
Regatta	300	320	A	B
S4S	240	280	A	B
Tiempo	240	280	A	B
T-Metric	240	240	B	C

Note: The U.S. Department of Transportation (DOT) requires tire manufacturers to state the size, load and pressure, treadwear, traction, and temperature on their tires. This information is provided by manufacturers based on their own tests and not provided by the DOT. Treadwear, traction, and temperature are all useful quality indicators and appear on the tire sidewall.

[a]Treadwear: This is an index based on how quickly the tire tread wears under conditions specified by the U.S. government, relative to a "standard tire." The index does not specify how long a tire tread will last on a car because driving conditions vary. However, a tire with a treadwear index of 200 should wear about twice as long as a tire with an index of 100 under similar conditions.

[b]Traction: This is a measure of a tire's ability to stop on wet pavement under specific conditions. Grades range from A (highest) to C (lowest).

[c]Temperature: This is a measure of a tire's resistance to heat buildup under simulated high-speed driving. Grades range from A (highest) to C (lowest).

Source: "How to 'Read' a Tire," *Consumer Reports* (February 1992): 78.

quality brands. Nevertheless, the company has recently introduced mid-priced tire brands. These include the Decathlon and T-Metric brands with lower tread-wear and traction performance characteristics than its other brands (see Exhibit 9 on page 627).

Kelly-Springfield Tire Company and Lee Tire and Rubber Company, two Goodyear subsidiaries, also sell some 16 tire brands and engage in private-label manufacturing. For example, Walmart sells the Douglas brand made by the Kelly-Springfield unit.

Goodyear Advertising and Distribution

Goodyear is one of the leading national advertisers in the United States. The company also has maintained a high profile in auto racing to emphasize the high-performance capabilities of its tires and the company's commitment to product innovation. The Goodyear name is prominently featured on the company's well-known blimps frequently seen at special events in communities throughout the United States. The company's advertising slogan, "The best tires in the world have Goodyear written all over them," communicates the Goodyear positioning as a high-quality, worldwide tire manufacturer and marketer.

Goodyear distributes its tire products through almost 8,000 retail points of sale in the United States and some 25,000 retail outlets worldwide. The company operates about 1,000 company-owned Goodyear Auto Service Centers and sells through 2,500 franchised Goodyear Tire Dealers in the United States, many of which are multisite operators. These retail outlets account for a major portion of Goodyear brand annual tire sales. In addition, the company sells its tires through some multibrand dealers. As of early 1992, the company did not typically sell Goodyear brand tires through discount multibrand dealers, mass-merchandise chain stores, or warehouse clubs.[6]

STRATEGIC CONSIDERATIONS IN BROADENING DISTRIBUTION

Interest in reconsidering Sears Auto Centers for selling Goodyear brand tires meant that Goodyear executives would have to revisit the company's long-standing distribution policy. Furthermore, a product policy question relating to which brands might be sold through Sears had to be considered. Decisions on these policy issues were further complicated by Goodyear Tire dealer franchisee reaction to broadened distribution and estimates of incremental sales possible through expanded distribution.

An immediate reaction was forthcoming from franchised Goodyear tire dealers who heard about the Sears proposal. According to comments appearing in the *Wall Street Journal*, one dealer said, "We went with them through thick and thin, and now they're going to drown us."[7] Other dealers indicated they would add private-label brands to their product line. One dealer said: "We [will] sell what we think will give the customer the best value, and that's not necessarily Goodyear." While it was clear that some franchise dealers were critical of

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[6] Goodyear brand tires could sometimes be purchased at discount multibrand dealers because of "diverting." Diverting is the practice whereby a manufacturer's authorized distributors/dealers sell the manufacturer's products to unauthorized distributors/dealers who, in turn, distribute the manufacturer's products to customers. This practice is common for many consumer products. See W. Bishop Jr., "Trade Buying Squeezes Marketers," *Marketing Communications* (May 1988):52–53.

[7] "Independent Goodyear Dealers Rebel," *Wall Street Journal* (July 8, 1992):B2.

broadened distribution of any kind, the pervasiveness of this view was unknown. Furthermore, it was not readily apparent how many dealers would actually carry competitive brands.

Tire industry analysts expected Sears to benefit from carrying Goodyear brand tires. According to market share estimates made by *Modern Tire Dealer*, an industry trade publication, Sears' share of the U.S. replacement passenger car tire market had declined from 6.5 percent in 1989 to 5.5 percent in 1991.[8] Goodyear brand tires would certainly enhance the company's product mix and draw tire buyers who were already Sears customers. The extent of the draw, however, would depend on how many or which Goodyear brands were sold through Sears Auto Centers.

Cannibalization of company-owned Goodyear Auto Service Center and franchised Goodyear Tire Dealers tire sales also meant that Goodyear executives had to consider the incremental replacement passenger car tire sales from broadened distribution. In other words, even though distribution through Sears could increase sales of Goodyear brand tires from the manufacturer's perspective, the danger would be that company-owned and franchised Goodyear Tire Dealers might incur a loss in unit sales. This could be particularly evident in communities where Sears had a strong market presence.

[8] Statistics reported in *Modern Tire Dealer* (January 1991): 27; "Tire Makers Are Traveling Bumpy Road as Car Sales Fall, Foreign Firms Expand," *Wall Street Journal* (October 19, 1990):B1.