Managing Diversification

In the 1959 annual report to shareholders, T. Spencer Shore assessed the future of Eagle-Picher. Prospects "have never been brighter," he declared, anticipating the company's continued expansion. Not one to offer false hope, Shore reflected in his prediction both personal and corporate pride in Eagle-Picher's accomplishments during the previous ten years. During the 1950s the company underwent fundamental changes unlike the reorganizations and adjustments of past managements. Above all, Eagle-Picher adopted a management philosophy dedicated to long-term growth and stability. Rigorous standards for corporate performance replaced the crisis management approach typical of the company's mining years. Furthermore, although Eagle-Picher remained in the nonferrous metals business, the impact of zinc and lead market fluctuations on profits had been eliminated through diversification.

Eagle-Picher's approach to diversification laid the foundation of the modern corporation. Top management advanced a vision of what the company should become and outlined a method to achieve specific goals. By design, the expansion program pursued during the 1950s played to the company's strengths and advanced ambitious yet attainable objectives. The decision to implement a limited program that viewed acquisitions not as panaceas for growth but as part of a logical structure greatly increased the chances for the long-term success of an acquired business. The focus on producing and marketing
industrial goods exclusively provided a unifying concept that controlled expansion.

Yet the true test of this system would come during the 1960s. Diversification proved to be a double-edged sword, demanding greater vision and effective management strategies to govern disparate operations. The acquisitions during the 1950s represented the first phase of the diversification program. By the end of the decade, changes made to accommodate the acquisitions gave rise to a more formal definition of the company's management philosophy. As the company expanded during the 1960s, top management developed systematic, widely applicable procedures for acquiring and operating its divisions. This was Eagle-Picher's answer to the problems of managing a diversified enterprise.

The prosperity of the 1960s enabled the company to grow from five divisions in 1961 to nineteen divisions by 1971, acquiring ten companies in the process. Sales and profits also increased from $2.6 million on $109 million sales in 1961 to $10 million on $227 million sales in 1971. The company accomplished this growth by using the divisional system to implement standardized controls, for without a reliable management structure Eagle-Picher would have been little more than a holding company. Although the divisional system adapted well to the demands of a growing enterprise, top management made many adjustments to realize its full potential. Previously, it had used the divisions to organize a relatively integrated, vertically diversified company. The relationship of most products to the lead and zinc industries had provided a common thread. As a result, the central office, because it possessed extensive accumulated knowledge of the industry, maintained operational control of the company.

However, as Eagle-Picher diversified, the common thread disappeared and forced the company to adopt a new concept of management. Since the central office could not possess detailed knowledge of diverse operations, it relied instead on an organizational and management philosophy that demanded adherence to fundamental business principles and close financial controls for each division. Since the new common thread was manufacturing for industry, a broader definition of the company's purpose, it required a more systematic approach to management. For if the system did not work, the advantages of diversification would be lost.

Eagle-Picher's management system can be divided into two major
elements: a rigorous acquisition policy based on limited diversification and a flexible method for divisional control. The first element depended on the careful evaluation of prospective acquisitions with respect to the company’s long-term goals. Eagle-Picher intended to solve as many problems of diversification as possible before acquiring a business. If a company fit within the common thread, had capable managers willing to remain with Eagle-Picher, and occupied a solid market position with good potential for growth, it created far fewer problems for the central office. The confidence to acquire different businesses indicated the company’s faith in its abilities to understand new markets and provide assistance when needed.

For the acquired company, ideally a private firm with $10–20 million annual sales, one or more owner-managers, and with a price-earnings ratio below Eagle-Picher’s so as not to dilute per-share earnings, the opportunity to sell out was attractive for a number of reasons. Often the owners were near retirement, as with Chicago Vitreous, and they desired to sell the company for cash or stock in the acquiring firm to redeem years of hard work and personal sacrifice typical of this class of entrepreneur. Because personal considerations most often served as the prime motivator for a merger, the opportunity to cash in their investments of money and time proved extremely appealing.

Moreover, by selling the company, owners could achieve both liquidity and diversification of their personal assets, which often had been tied up exclusively in their company. The opportunity to reduce tax liability also motivated owners to sell to larger firms. An exchange of shares with a publicly traded company, as opposed to a dividend disbursement among owners, afforded the opportunity to sell shares over time, paying capital-gains rates instead of the higher personal income tax rates on a large disbursement.

Apart from personal reasons, owners of small companies also found mergers attractive because such transactions offered a cost-effective means for the company to raise capital for continued growth. Because the cost of accessing public credit markets was prohibitive for small companies, a merger provided a logical alternative, if the acquiring company remained committed to long-term growth. Eagle-Picher’s liberal acquisition policy proved an extremely important incentive and enabled the company to attract many high-quality acquisition candidates. For example, Eagle-Picher was very flexible
in arranging the type of merger transaction, whether exchange of stock, cash purchase, or a mix of the two, in order to accommodate the wishes of the owners of the acquired company.

Close financial controls over the divisions represented the other key element of Eagle-Picher's management system. In return for operational autonomy the central office demanded standardized forms of financial reporting and budgetary predictions. This was the glue that held far-flung operations together. The system also encouraged entrepreneurial thinking in the divisions by granting operational freedom and guaranteed that corporate standards of performance would be maintained in each business.

Each component of the company's approach to managing diversification attempted to encourage increased profitability within an overall framework based on fundamental goals such as increased earnings-per-share and high return on invested capital. Of course, the system did not develop overnight, nor was it without flaws. Evolving slowly in the late 1950s and 1960s, it was refined as new situations revealed shortcomings. Ideally, Eagle-Picher desired a fluid, adaptive system to accommodate a variety of business situations while retaining the ability to enforce financial controls and disseminate corporate ideals throughout the organization.

The new orientation of the company gave management additional control over its own destiny, yet it also demanded greater responsibility to function within the standards for corporate performance. Any bad decisions, however well-intentioned, would be readily apparent. The acceptance of this responsibility, though, signaled the completion of the long process of transforming Eagle-Picher from a lethargic, single-industry firm into an aggressive growth company.

**A Systematic Approach**

The history of Eagle-Picher in the modern era is largely the account of the application of a distinct management philosophy in diverse business environments. However, the story is neither mundane nor predictable. As the company diversified further during the 1960s, the task of balancing its goals with practical considerations became the primary function of top management. In a world of myriad possibilities, choosing the correct path demanded a confident knowledge of the company's capabilities and objectives.
The development of a program for expansion based on limited diversification within the industrial marketplace gave the company a great advantage over other popular diversifying strategies during the 1960s. Fashioning a very tight system based on specialized products, strict financial controls, divisional autonomy, and a highly selective acquisition program, Eagle-Picher made great progress toward its fundamental goals during the 1960s. Unlike some diversifying companies of the era that acquired businesses merely to increase size, boost share prices, or liquidate acquisitions for cash, Eagle-Picher diversified to increase financial strength through improved earnings-per-share and higher profit margins.

The company also benefited from the flowering of various internal operations during the decade, especially specialty batteries and diatomaceous earth. Although the germanium operations faced an uncertain future, by the end of the 1960s the company had initiated a reorientation of the business into promising markets in the electrooptic industry. The strength of established businesses also controlled the company's acquisition behavior. Top management did not want Eagle-Picher to be known as an acquisitive company, nor did it ever want to be in a position where an acquisition was necessary to increase sales or sustain an image.

Maintaining a conservative position during the "go-go years" of American business ran counter to the experiences of many acquisitive firms. The lust for diversification that simmered during the 1950s exploded with an orgiastic fervor during the 1960s. The word conglomerate made its way into everyday parlance and revived long-standing fears about the concentration of wealth. Although Eagle-Picher from time to time had been labeled a conglomerate, the firm always resisted identification with the trend. Shore defined a conglomerate as "a mess," with little potential for consistent, substantive growth. Similarly skeptical of "high profile" conglomerators such as Royal Little, Jimmy Ling, and Tex Thornton, Shore preferred instead to maintain control over Eagle-Picher's diversification by adhering to its acquisition and management philosophy.¹

Yet the experiences of Eagle-Picher parallel the currents of American business during the 1950s and 1960s. The optimism of the American era, with cheap energy and a stable financial system to encourage and sustain growth, changed the attitudes of American businesspeople concerning the idea of corporate development. No
longer convinced that corporations should expand around a technological core or marketing strength, top executives took a measured leap by asserting their abilities to manage virtually any type of business, whether related to others or not.

The urge to diversify struck many companies for a variety of reasons, and the restrictions placed on traditional methods of expansion led them to embrace this new strategy. The passage in 1950 of the Celler-Kefauver Act, an amendment to section 7 of the Clayton Act of 1913, signaled the beginning of widespread diversification. Celler-Kefauver fortified section 7 and effectively quashed the idea of large horizontal and vertical mergers, although the Justice Department permitted such mergers among large oil companies during the 1960s. A charter for the conglomerate movement, Celler-Kefauver forced expansion-minded companies to look toward diversifying acquisitions as the means to avoid antitrust problems.\(^4\)

However, more than the changing antitrust laws drove Eagle-Picher. The company, like many other firms, sought diversification to compensate for a permanent downturn in its primary business. Acquisitions of new products or technology in different fields represented the best possible investment of corporate resources since the costs of entering markets de novo was prohibitive for a company with limited capital and managerial resources. Further, financial advantages such as liquidity, diversification of investment, and the reduction of tax liability for the owners of acquired firms made the diversifying acquisition a practical strategy.\(^5\)

At Eagle-Picher, diversification by acquisition was an important but not exclusive method to attain corporate goals. The company stressed the value-added concept at every opportunity, whether in a newly acquired or an existing division. The search for greater profit margins on the production of specialized products had been a constant in the company’s history since the Bowlby years. Many of Eagle-Picher’s most successful products illustrated this philosophy. The development of high-purity metals and specialty batteries can be traced from lead and zinc operations. Similarly, a host of additional successful products was developed with the value-added concept as a goal. Bowlby and Shore disseminated this idea, which became a central part of the company’s long-term strategy.

By 1960, Eagle-Picher had agreed on the basic concepts and goals behind its acquisition and management systems. As the decade pro-
gressed and the company added new divisions, the virtues and drawbacks of the system became readily apparent. Top management faced the continuing task of balancing the company’s operations to meet prevailing and future market conditions. The adoption of a systematic approach to management and growth in the 1950s stands as a watershed in Eagle-Picher’s history. During the following years the company learned how to implement the system in a variety of situations. Tested by internal and external adversity, Eagle-Picher retained its faith in the fundamental values of its acquisition and management philosophies.

The company faced a puzzling economic climate in 1960. Industrial productivity remained strong throughout the year, yet profit margins and net income of key industrial companies declined sharply from the previous year. For the first time in the postwar period industry experienced a profit squeeze. Low inflation, rising wages and salaries, and reduced demand led to lower profit margins since prices for industrial products remained the same. Described as “profitless prosperity,” it forced Eagle-Picher to cut costs, improve production and marketing efficiency, and limit wage and salary increases to gains in productivity.

The company’s net profits reflected the economic pressures, falling from $4.6 million in 1959 to $3.8 million in 1960. However, in early 1961 Shore observed that “there is no cause for long-term concern . . . we already see a slight improvement in some areas.” Although the American economy showed signs of recovery by mid-1961, Eagle-Picher’s business did not recover until 1962. “Despite its inauspicious beginning our optimism regarding the decade ahead remains unchanged,” Shore noted, citing the company’s continuing commitment to diversification, improved plant facilities, and product development.7

The diversity of the firm strengthened its ability to make significant new investments in modern manufacturing facilities. Despite the economic uncertainties of the first two years of the decade, Eagle-Picher made significant additions to its productive capacity from 1960 to 1964. In 1960 the Ohio Rubber and Chicago Vitreous divisions completed new plants. The Chicago Vitreous facility, located at Paris, Illinois, manufactured structural steel panels used in the construction of porcelain-enamedleed gasoline service stations. Part of the division’s Lusterlite operations, the market had grown steadily
since the late 1950s and showed great promise. Increased demand for Lusterlite’s pre-engineered porcelain-enamedel service stations and a large contract from the American Oil Company prompted Chicago Vitreous to integrate its production process.\textsuperscript{8} The completion of the new plant promised more efficient and profitable production. Furthermore, in an attempt to improve its Canadian market position, Chicago Vitreous constructed a frit plant in Ingersoll, Ontario, in 1963. Although the division had developed a good frit business in Canada, tariffs and foreign exchange rates forced the price of its product over 35 percent higher than the products of Canadian competitors. The plant eliminated import duties and enabled Chicago Vitreous to increase profits and market share.\textsuperscript{9}

Eagle-Picher also approved a new plant for Ohio Rubber in Fort Smith, Arkansas. Division management had lobbied for the construction of a plant to produce automobile floor mats, molded goods, and semipneumatic tires. After a long search for a suitable location, Ohio Rubber officials chose Fort Smith for its geographic proximity to the Southwest, available labor force, and concessions from local government. Completed in early 1961, the $3.3 million plant began production in May.\textsuperscript{10}

Eagle-Picher’s growing commitment to specialty electronic products for the defense and aerospace industries, and the desire to serve the general electronics industry as well, became a significant part of its business strategy. The Commercial Electronic department of the Chemicals and Metals division opened two new plants in 1963, one at Socorro, New Mexico, to manufacture precision machine parts for the electronics industry, and the other at Sunnyvale, California, to design and manufacture electronic instruments.\textsuperscript{11}

Yet specialty battery systems built under government contracts at the Joplin plant remained the company’s most glamorous and profitable business in the electronics field. The Couples department was a prime example of the type of business Eagle-Picher wanted to pursue. As Shore observed, “the Company adopted a policy in all divisions of placing greater emphasis on producing and selling products requiring ‘know how,’ relatively large capital investment and specialized service. Such products, of necessity, usually return better profit margins.”\textsuperscript{12} Eagle-Picher’s specialty batteries were the most powerful and compact electrochemical energy sources available to the defense and aerospace industries. To maintain its reputation for
quality and reliability, Couples implemented a "zero defects" program at all electronics plants. As part of the nationwide campaign initiated by the Martin Marietta Corporation and the federal government to encourage industrial responsibility and quality products, Eagle-Picher formed zero defects committees composed of employees from all levels within a plant. The committees asked everyone to sign pledge cards in support of zero defects and conducted educational programs designed "to encourage employees to strive for perfection in their daily production task." \(^{13}\)

This commitment signaled the value of quality manufacture in the high-technology fields of the defense and aerospace plants across the nation. Nowhere was this more apparent than in production for the space program. With the reputation of the free world at stake, the government encouraged industry to rally around the flag and adopt a host of quality assurance programs. Eagle-Picher’s employees enthusiastically participated, for the call conformed to the firm’s basic tenets. In March 1962 the United States Signal Corps recognized Eagle-Picher for quality defense manufacture with the presentation of the Reduced Inspection Quality Assurance Plan (RIQAP) to the Couples department. The Signal Corps’ highest honor, the RIQAP recognized the department’s quality control and inspection techniques as among the best in the industry. The award also marked the first time that the Signal Corps had given the RIQAP to a manufacturer of specialty batteries. \(^{14}\)

Although the economic difficulties at the beginning of the decade had reduced profits and increased competition, an improved economy enabled Eagle-Picher to record higher sales and earnings during 1962 and 1963. \(^{15}\) However, price competition remained intense and company-wide return on investment remained below expectations. Faced with stiff competition, Shore emphasized other advantages that the company offered its customers. In the industrial marketplace, the company’s success did not depend on price alone. As Shore noted, "customers of the type we serve are increasingly interested in quality of product, efficient and reliable service, and financial strength and dependability of the supplier. In effect, we are an integral part of their organizations, and our interests and fortunes are intertwined." \(^{16}\)

The recession had also stalled Eagle-Picher’s acquisition program. As important as aerospace and defense production had become, the
firm remained devoted to the industrial market. During the first months of 1964 top management considered a merger with the Akron Standard Mold Company of Akron, Ohio. Akron Standard was the largest manufacturer of tire building drums in the United States and a leading manufacturer of tire molds and tire retreading equipment. The company also produced rubber processing machinery, iron and steel casings, precision aluminum castings, and molds for mechanical rubber goods. Akron Standard had recorded over $14 million in sales during 1963.\(^{17}\) Walter P. Voth, Akron Standard’s president and owner of a large block of shares, desired to sell the company and retire within several years. The O’Neil family, one of Akron’s leading industrial families and owners of the General Tire and Rubber Company, also held a substantial block of Akron Standard stock and desired to divest it as soon as possible. Through the Cleveland brokerage firm Fulton Reid and Company, Akron Standard contacted Eagle-Picher and arranged for Shore to visit the company. Impressed with the facilities, Shore and Voth began negotiations for a merger.\(^{18}\) The final agreement provided that Eagle-Picher would issue 250,000 shares of convertible series A preference shares for Akron Standard. After considering the reports from Coverdale and Colpitts and Peat, Marwick on Akron Standard’s business and future prospects, the Eagle-Picher board approved the merger on 29 April. Shareholder consent followed on 30 June, and Akron Standard became a division of Eagle-Picher.\(^{19}\)

Along the same lines, in October 1964, Eagle-Picher acquired the Davis Wire Corporation of Los Angeles, California. Davis Wire was a leading manufacturer of steel wire and related products on the West Coast, especially in southern California. With plant locations in Los Angeles and Hayward, California, and Seattle, Washington, the company supplied such products as chain link fence fabric, bailing wire, concrete reinforcing mesh, stucco netting, spring wire, and agricultural wire to other manufacturers.\(^{20}\)

In another significant move, Eagle-Picher created an Electronics division by spinning off the Couples, Precision Products, Compounds and Metals, and Commercial Products departments of the Chemicals and Metals division.\(^{21}\) A testament to the success of the specialty battery and germanium operations, the new division reflected the company’s continuing desire to explore technologically sophisticated, high-margin products.
A Conglomerate?

Since the late 1950s the company had experienced a radical alteration of its business. New acquisitions and the decline of long profitable businesses presented fresh challenges. In addition to the decline of the automobile floor covering market, Eagle-Picher faced a permanent decline in earnings from its mining and metal operations and lost a major portion of its battery oxide business as the larger battery companies integrated their operations. These developments, coupled with the liquidation of the storm window and door business, gave the company a new market orientation. The transformation begun in Shore’s early years had finally reached fruition, and the company entered a period of steady expansion. Changes in industrial markets and continuing attention to Eagle-Picher’s investment strategy resulted in structural changes as the diversified company matured. Not all its moves proved successful.

In November 1964 management arranged to borrow $15 million at 4.78 percent interest through several insurance companies. The notes, due in 1984, replenished the company’s working capital after the Davis Wire acquisition and was intended to finance several plant additions and improvements, as well as future acquisition opportunities. Repayment was scheduled to begin in 1975, after the $15 million, 3.75 percent loan obtained in 1955 was retired.22

Although Eagle-Picher set records for sales and earnings in 1965, the company was forced to close Ohio Rubber’s Fort Smith, Arkansas, plant. Almost from the beginning, it had become apparent that the markets that the plant was designed to serve did not materialize. The demand for original equipment rubber floor mats for automobiles had eroded as manufacturers turned to carpeting. The company decided to close the plant and transfer the business to Willoughby, where rubber mats for trucks and other heavy equipment, still a strong market, could be produced.23

In September 1965 Eagle-Picher acquired the Premier Rubber Manufacturing Company of Dayton, Ohio, on an exchange of stock basis. Founded in 1917, Premier Rubber produced a wide range of rubber goods for the automotive, aircraft, and appliance industries. The company complemented Ohio Rubber’s product line and gave Eagle-Picher a strong presence in many specialized markets. Shortly after the acquisition, Eagle-Picher combined the operations of both companies into a Rubber Product division.24
At a management meeting in November 1965 Shore raised the issue of corporate identity and described several situations "which indicated that the name 'The Eagle-Picher Company' did not properly reflect the several activities carried on by the Company." He then suggested the name *Eagle-Picher Industries* and called for further discussion about a name change. The board agreed with his suggestion, and shareholder approval followed at the annual meeting in March 1966. As in 1945 when the company dropped *Lead* from its name, management felt uncomfortable with the previous description and was anxious to match Eagle-Picher's public identity with its economic mission.\(^{25}\)

One of the best measures of the company's progress came in 1966, when it experienced a 27 percent increase in earnings entirely from internal growth.\(^{26}\) During the year Eagle-Picher gave the Lusterlite department of Chicago Vitreous division status and completed a large addition to its plant at Paris, Illinois. Chicago Vitreous also opened a new frit plant in Urbana, Ohio.\(^{27}\)

In March 1967 corporate management approved a $2.5 million capital expenditure to double the capacity of the Colado, Nevada, diatomaceous earth plant. The diatomaceous earth industry matured during the 1960s and experienced strong demand for all types of products. At Eagle-Picher, the expansion of the agricultural chemicals and sugar refining industries created additional demand for its line of filter-quality diatomite. Overseas marketing also became increasingly important as the division completed agreements with distributors around the world.\(^{28}\)

The market for diatomaceous earth was, and remains, very fluid. Product substitution or industrial displacement often frustrated division salesmen. Marketing and sales became the keys to success, and the division worked extremely hard to develop communication among research, marketing, and sales personnel. The physical separation of the diatomaceous earth operation from the general offices created an independent business style that also helped the division meet the demands of the ever-changing marketplace.\(^{29}\)

As with virtually all businesses within the company, the success of the diatomaceous earth section depended heavily on the division's ability to serve the special needs of industrial consumers. In this market, the type of diatomite products a producer could offer was directly related to the quality of the deposit from which it came. A
processing plant could not create filter-quality diatomite from a low-grade deposit. Eagle-Picher's high-grade deposits enabled it to offer varying grades of diatomite. This was the key to developing a diverse customer base.\textsuperscript{10}

Increased marketing efforts followed the expansion of the Colado plant. With a more efficient facility, the division could better match a customer with the proper grade of diatomite. This, not price, was the most important facet of the business. For an industrial producer, the cost of diatomite was insignificant in the overall expense of production. However, the performance of the filter aid was crucial because any interruption in processing or reduction of quality caused by poor quality diatomite resulted in exorbitant costs to the producer.\textsuperscript{11}

The growth and development of internal operations such as diatomaceous earth and electronics remained essential to the long-term success of the company. Yet top management remained alert for opportunities to acquire new businesses. In July 1967 Eagle-Picher acquired the Wolverine Fabricating and Manufacturing Company of Detroit, Michigan. Wolverine produced custom gaskets made from cork, rubber, aluminum, and steel and specialized in coated fibers and metals. The automotive industry was the company's primary, though not exclusive, market.\textsuperscript{32}

Throughout 1967 Shore had discussed with the board his retirement and possible candidates to replace him as president. On 2 August the directors elected William D. Atteberry president and Shore chairman of the board.\textsuperscript{33} Atteberry, forty-seven, had been an executive vice-president. A graduate of the University of Southern California in mechanical engineering, Atteberry had joined the Chemicals division in 1952. Previously, he had worked at the P. R. Mallory Company of Indianapolis and later cofounded the Western Lead Products Company of Los Angeles, California. Atteberry rose quickly at Eagle-Picher, becoming a director, corporate vice-president, and general manager of the Chemicals division in 1963. Elected executive vice-president in 1965, he held responsibility for several of the company’s divisions.\textsuperscript{34}

As president, Atteberry worked closely with Shore to maintain the firm's strategy. The first acquisition of the Atteberry era occurred in November 1967. Eagle-Picher acquired the Markey Bronze Corporation, a large manufacturer of brass and bronze alloy components
such as bearings, bushings, and custom fittings for the appliance, machinery, and other industries. Headquartered in Lima, Ohio, Markey had factories in Delta, Mansfield, and Cleveland, Ohio, and additional facilities in Chicago, Los Angeles, and San Francisco.  

During 1968 Eagle-Picher completed two significant acquisitions, the Cincinnati Cleaning and Finishing Company and the Union Steel Products Company. Cincinnati Cleaning and Finishing, located in Sharonville, Ohio, designed, engineered, built, and installed special purpose machines and entire systems to clean metal and rubber products. The company also manufactured a line of industrial ovens. The company's most promising product was can-cleaning machinery that could clean up to 3,000 two-piece cans per minute. Union Steel, located in Albion, Michigan, manufactured a variety of welded wire and sheet metal products such as refrigerator shelving, computer cabinetry, store shelving, and collapsible wire containers for materials handling.

Anticipating the continued growth of production facilities and working capital requirements, plus the cash requirement of possible additional acquisitions, the company strengthened its debt position in July 1968 by borrowing an additional $10 million. Eagle-Picher refunded the $15 million, 4.78 percent notes due in 1984 and arranged for a $25 million, 5.5 percent loan due in 1988. This raised the company's total long-term debt to $31 million, which included the remaining $6 million from the 3.75 percent notes issued in 1955 and due in 1974.

Reflecting upon the expansion and diversification of the company during the 1960s, Shore and Atteberry were quick to dispel any notions that Eagle-Picher was acquiring businesses without an underlying objective. Writing in early 1968, they assured shareholders that the company would continue to be committed to a policy of concentrating in areas of business we best understand. Our diversity of product lines and success in making acquisitions . . . have given us the reputation in some quarters of being a "conglomerate." To the extent that this description implies aggressive management dedicated to growth in net income per share we welcome it. But we still adhere to expansion in manufacturers' manufacturing industries requiring the same talents and experience, and, therefore, we may be excluded from the classification "conglomerate."
Shore and Atteberry’s attempt to distance Eagle-Picher from the conglomerate movement was a response to growing governmental and social pressures against this corporate structure.

The increase in mergers and acquisitions among American businesses during the 1960s rekindled long-held fears about the role and power of the corporation in society. In each of the past periods of merger activity (1887–1903, 1921–29, and 1947–54) business, government, and academia had wrestled with the problems presented by the concentration of economic power. Public opposition was focused and to the point: the consolidation of wealth into fewer and fewer hands was contrary to the fundamental ideals of the Republic. The nature of the merger waves, typically horizontal or vertical combinations to increase a company’s presence within its industry or enter a related field, fueled the public outcry and pressured the government to consider new antitrust measures. The argument was clear cut and well understood on all sides.39

Such was not the case during the merger movement of the 1960s. Unlike previous periods, the merger wave that peaked during 1968 was different in several important ways. For a variety of reasons companies turned to diversification, acquiring firms in totally different lines of business. Soon many of the most active acquirers such as Textron, Litton, LTV, and ITT became symbols of the conglomerate movement. This phenomenon, which, as the history of Eagle-Picher illustrates, had been pursued by a few firms since the early 1950s, caused widespread controversy. The unique character of the movement heightened fears and distorted perceptions.

By 1968 the government had launched several efforts to examine alleged antitrust effects of mergers, tax loopholes, and perceived socioeconomic problems related to conglomerate mergers. Concurrently, the Accounting Principles Board issued new guidelines to acquisitive companies for reporting financial data. Many critics charged that the accounting practices followed by conglomerates deliberately misled the public about the pace and quality of growth. For example, if a conglomerate acquired a company late in a fiscal year and added the annual sales of the acquired company to its own annual sales, it presented a distorted picture to shareholders because it appeared that improved all-around performance accounted for the increase.40

Although critics attacked other accounting devices, the more fre-
sequently advanced criticisms of conglomerates centered on possible violations of section 7 of the Clayton Act, which prohibited anticompetitive mergers. Frequently used to bar horizontal and vertical mergers, section 7 as interpreted by the judiciary also prohibited conglomerate mergers if they could be shown to reduce competition. This proved an ineffective weapon, however, because many of the traditional perceptions about conglomerate behavior such as reciprocity and predatory pricing were either questionable economic theories or were not manifested in practice.41

Yet the lack of sound economic theories concerning the detrimental effects of conglomerates did not forestall attacks from a broad range of governmental agencies and congressional committees. During the latter half of the decade, the Securities and Exchange Commission, Federal Trade Commission, Interstate Commerce Commission, House Banking and Currency Committee, Senate Subcommittee on Antitrust and Monopoly, and House Judiciary Committee conducted investigations of conglomerate practices and explored potential solutions to the conglomerate problem.42

Shore and Atteberry's disclaimers about conglomerates occurred within this context. Moreover, the combined effect of proposed reform from the government and the accounting profession, coupled with public opposition, may have helped to drive down the stock prices of all conglomerates, even those multi-industry companies that had nothing to lose from greater regulation of accounting or trading practices. Thus the disclaimer responded to the tendency of the stock market to view all multi-industry companies as one entity. Although it was readily apparent that both strong and weak conglomerates existed, pressures from the government and the public tended to blur distinctions. While financial analysts expressed caution regarding investments in conglomerate stocks, a few urged investors to look beyond popular perceptions and "concentrate on those conglomerates which have displayed strong internal growth in addition to having a well-conceived policy of acquisitions."43

Analysts following Eagle-Picher noted the similarity of the company to the ideal conglomerate and recommended a long-term investment. One observer remarked that the company "did not engage in the abusive reporting or acquisition techniques which are the target of the proposed reforms."44 Furthermore, with Eagle-Picher com-
mon stock selling far below the multiples accorded companies with similar records of internal growth, analysts predicted significant appreciation.\textsuperscript{45}

Clearly Eagle-Picher’s fundamental goals and requirements for acquisitive growth separated the company from the true conglomerate companies. Although it had pursued the same philosophy for nearly fifteen years, top management constantly fought to publicize the differences between Eagle-Picher and other multi-industry companies. This struggle forced the company to become more aggressive in its relations with the financial community. Selling the virtues of Eagle-Picher to Wall Street, especially in the midst of tumultuous times, became more important to top management than ever before.

Eagle-Picher developed an effective system to carry its message to the financial community. Typically, companies made presentations to a large gathering of brokers with diverse interests. Eagle-Picher executives realized that many brokers would not be interested in the company. Rather than waste time presenting the company to people who did not care to listen, they took a more personal approach. A small group from the general office including the president or chairman and members of the financial relations department would arrange small meetings with brokers interested in Eagle-Picher. Often informal luncheon meetings, they gave brokers the opportunity to meet top corporate officials and discuss the company’s prospects face to face. The system assured that brokers who were interested in the company received detailed, accurate information.\textsuperscript{46}

Eagle-Picher’s results for 1968 fulfilled the expectations of financial analysts. With over $200 million in sales for the first time in its history and $10 million in earnings, the company performed well despite strikes against several important customers and a cyclical downturn in business that caused other customers to defer new projects and carry smaller inventories. Since 1963, Eagle-Picher had recorded an 11.5 percent increase in sales and a 20 percent increase in per-share earnings.\textsuperscript{47}

The board had approved a 2 for 1 common share split in early 1968. After conferring with various financial advisers and investment bankers, top management concluded that a split would broaden the market for the company’s stock, encourage more institutional holdings, and generally stabilize the price of common shares. The
split complemented the effort to increase awareness of the company in financial circles and encourage a diverse base of stock ownership.\textsuperscript{48}

**Down to Basics: The Role of the Central Office**

The development of Eagle-Picher's internal operations and the expansion of acquired businesses rested heavily upon the success of the company's management system. The conglomerate movement spawned a wealth of writing concerning the effects of diversification on management behavior. Often, observers have fallen into the same trap as investors and treated all diversified companies as a single type. However, upon close examination, the limitations that companies such as Eagle-Picher placed on diversification had a significant impact on the development and conduct of management systems.

By the late 1960s, diversification had forced the company to refine its management system. Eagle-Picher's central office, which included about forty people, typified the new concepts of management behind the diversifying movement. Top executives viewed the company as a portfolio of diversified assets. Their responsibilities included evaluating the financial results of operating units and charting shifts in markets and industries to determine the best locations for profitable acquisitions. The concept of *synergy*—that the performance of the entire company would be greater than the sum total of its operating units if each were a sound investment and properly managed—held a strong appeal. Yet Eagle-Picher differed from most acquisitive companies because it placed such a strong emphasis on the maintenance of a good relationship, both financial and managerial, with acquired companies. Top management recognized early on that one of its most important functions was to know when to leave the divisions alone.\textsuperscript{49}

As Henry Mintzberg has observed concerning successful managers in conglomerate diversified firms, "the wise ones know what they cannot know."\textsuperscript{50}

Many of the problems associated with managing a diversified firm centered on the relationship between the divisions and the central office. Eagle-Picher nurtured this relationship, for it was essential to the company's success. Before completing an acquisition, top management carefully explained Eagle-Picher's approach to divisional
relations. Recognizing that a period of adjustment was crucial to the successful integration of an acquired business, the company took a hands-off approach in the months after an acquisition. Only a few people from the central office were permitted to visit a new division. This strategy was markedly different from other acquisitive companies that desired to replace acquired management with corporate insiders.\textsuperscript{51}

Furthermore, the company did not pressure a division to accept corporate profit-sharing plans, insurance, or other programs if managers wanted to keep existing plans. Eagle-Picher remained very flexible concerning divisional autonomy. For example, Davis Wire management did not want any association with the Eagle-Picher name because Davis had a high profile in its West Coast markets, where Eagle-Picher was virtually unknown. Shore found no problems with this and supported any arrangement to promote the division’s business.\textsuperscript{52}

Although Eagle-Picher recognized that the integration process would take some time, it insisted that each division adopt standardized budgetary, accounting, and reporting procedures. Corporate management placed special emphasis on the mastery of financial concepts and controls at all levels. The budgetary and accounting processes became proving grounds for the refinement of financial skills. Eagle-Picher’s budgetary procedure provided an important link between the divisions and the central office. It exposed a large number of employees to the company’s financial and operating philosophy and instilled fiscal awareness throughout the organization. Each division prepared its own budget for presentation to the Cincinnati office. Corporate management expected division managers to develop flexible budgets that offered realistic calculations of expected sales volumes and capital requirements as well as profit estimates.\textsuperscript{53}

The Cincinnati office used the divisional budgeting process as a guideline and organizational tool rather than as a strict test of budgeting accuracy. Emphasizing progress, corporate officials used historical comparisons to analyze actual results. Within ten days of each month’s end, division earnings reports reached Cincinnati. In most cases, shortly after receiving the results, division managers held meetings at their offices with the corporate vice-president in charge of the division and key division staff. Comparison of sales, earnings,
and return on invested capital with the previous year’s results, as well as significant variations from budget projections, enabled corporate managers to evaluate a division’s progress against corporate standards.54

The measure of return on invested capital provided the crucial indicator of a division’s performance. The Cincinnati office calculated net profit earned on invested capital for each division every quarter and distributed the rankings to division managers. The general manager of a division exercised considerable freedom to develop projects that required limited capital expenditures, although for major capital investments he had to seek approval from Cincinnati. Eagle-Picher’s emphasis of return on invested capital remained the cornerstone of its effort to manage diversification.55

The company’s accounting procedures also yielded an effective means to control the divisions without unnecessary interference from Cincinnati. The corporate controller coordinated the accounting functions among the divisions and also provided assistance to individual divisions if necessary. The company also maintained a training program for divisional controllers that stressed uniformity of attitude and style rather than imposing a rigid, uniform accounting system for diverse operations. The program developed expertise by educating division accountants in Eagle-Picher’s particular brand of financial management.56

In the pursuit of increased profitability, the company’s fiscal policies maintained the delicate balance between corporate performance standards and the unique demands of diversified, autonomous businesses. Unifying operations through financial controls was a common characteristic of multi-industry companies. Yet it provided only one facet of Eagle-Picher’s management philosophy. In addition to its fiscal policies, the company’s production standards, sales and marketing efforts, executive development process, and methods of corporate communication were designed to meet the demands of diversified operations.

Eagle-Picher adopted general guidelines for the operation of its plants. Foremost, the company intended to assemble a broad-based productive capacity consisting of small plants located in suburban or rural areas. These locations typically provided an industrious workforce who often remained with the company throughout their ca-
reers. Further, the company believed that rural or suburban plants were less likely to be unionized, a not unimportant consideration as we shall see.

Eagle-Picher used the profit center approach to promote independence and entrepreneurial thinking in the divisions. Each plant possessed the capabilities and efficiencies of an independent business but remained linked to the company through financial controls. The small plant requirement also made diversification more effective since no single plant produced a significant portion of the company’s total volume. Consequently, Eagle-Picher reaped the benefits of small, efficient production units and maintained the financial advantages inherent in a large, diversified company. 57

Combining technical expertise and long-term relationships with customers, Eagle-Picher had established an excellent reputation in the industrial marketplace. Yet marketing a diversified product mix required a more aggressive strategy to achieve the goal of leadership in each product line. Decentralization of marketing efforts to individual product lines proved to be one of the most important refinements of the sales function. The application of marketing expertise to individual products allowed salesmen to master their particular fields, provide efficient service, and develop customer confidence. An essential element in industrial marketing, specialization enabled Eagle-Picher to fashion a more aggressive and directed sales effort. 58

The success of Eagle-Picher’s managerial system depended most of all, though, on strong lines of communication between the central office and the divisions. Top management recognized this responsibility and pursued effective communication fervently. Each month the chief executive officer visited every division, meeting with top division personnel for a ‘‘listening session,’’ as Atteberry referred to the conversations. There he was updated on operational progress, research and development efforts, and future plans. Apart from the obvious advantages of developing regular and somewhat informal contact with division management, these sessions gave the central office far better insight into the true nature of a division’s performance and the character of its leadership than raw numbers on a financial statement. As the thousands of unsuccessful acquisitions and hasty divestitures in recent business history have evidenced, the central office of a diversified corporation cannot pretend to know the
status and potential of a divisional operation only from financial data.

Although systematized managerial accounting was a crucial component in Eagle-Picher's managerial philosophy, structured and frequent personal contact between the divisions and the central office provided an essential safeguard against the inherent weaknesses and inaccuracies of financial reporting. To be sure, it was not an easy task. As the company expanded, maintaining effective communication imposed an increasing burden on top management to visit each division every month. Yet Eagle-Picher remained firm in its commitment to this approach and provided many tangible and intangible benefits. The chief benefit was that it increased the ability of the central office to interpret financial data on divisional performance. Questionable or slanted data were easily spotted, and regular personal contact virtually eliminated surprises in financial reports. In fact, Eagle-Picher knew that any surprise, whether bad or good, suggested a lack of communication and warranted further efforts to avoid future incidents.

Labor Relations in the Diversified Company

The structure of the diversified firm affords it a unique position from which to approach labor relations. In a single-product firm, a labor union has a much better chance to enter the bargaining process with the power to interrupt production and inflict economic harm on a company. Yet in a multi-industry firm a union representing workers in a division or subsidiary has no power to cause company-wide disruption. The threat of a strike thus becomes far less menacing to corporate management.59

The resulting inequity in bargaining power is a manifestation of a number of structural and procedural advantages that the diversified firm brings to the management-labor relationship. Above all, a company's involvement in many industries makes possible a divide and conquer strategy. Management operates from a strong central position against a number of smaller, separated bargaining units. This advantage can be used to time difficult negotiations to the company's advantage, build inventories in anticipation of a strike, or permanently shift production.
An additional advantage of diversification in the labor negotiation process is the difficulties unions face in obtaining financial information about the plant or division with which it is negotiating. Although information is available about a company as a whole, data concerning profit margins and other critical economic information are rarely reported by plant or division. Labor unions therefore remain without important information that could reinforce their bargaining position.

As a diversified company, Eagle-Picher's approach to labor relations followed the general pattern of the general office-division relationship in other functions. Responsibility for day-to-day matters was left to the divisions while Cincinnati provided aid with contract negotiations or crisis situations. The legal department had handled labor relations until the late 1960s, but as the company grew more complicated top management added a vice-president to assist division managers in this area.60

The company's attitude toward organized labor was closely linked to the personal attitudes of top management. Weaned during the tumultuous labor-management struggles of the 1930s and 1940s, most were opposed to the union movement or, at best, held a paternalistic view of the labor-management relationship. The company's history of labor relations in the nonferrous metals industry during the 1930s, and the us versus them mentality that pervaded top management after the Tri-State experience made it very difficult for the few voices of moderation in management to be heard.

In 1968 approximately 75 percent of Eagle-Picher's plants were unionized, with nine different union affiliations. Yet, like other diversified firms, the company maintained several special advantages over organized labor. The economic diversity and geographic dispersion of its plants enabled the company to negotiate separate contracts with each bargaining unit, thus reducing the overall impact of a strike at one location. Further, contracts were structured so that only about one-third came up for renegotiation each year.61

According to the theory of countervailing force, one might expect unions to band together to increase their bargaining power over one diversified company. This did not occur within Eagle-Picher. Only one union, the United Rubberworkers, attempted to broaden its representation across divisional lines. Regional and cultural differences in the rank and file, and, more important, the personal incompati-
bility of union leaders at the various plants, played a key role in the failure of a consolidated union movement against the company.52

As the company diversified further, a formal employee relations department evolved to handle both personnel management and labor negotiations. The growing complexity of this function heightened awareness of the problems facing labor and generated a greater respect for workers. The attitudes that made Eagle-Picher one of the toughest negotiators largely disappeared as a new generation of management, without the antilabor bias of the World War II generation, assumed executive responsibilities.

A Balancing Act

As the company expanded, executive development became an increasingly important facet of managing diversification. The autonomous divisional structure provided an excellent proving ground for executive talent and produced a large group of managers with extensive operational, financial, and planning expertise. The structure also afforded a channel to disseminate the company's operating and financial philosophy and prepared selected managers for corporate responsibilities.

By the late 1960s the organizational structure of top management reflected Eagle-Picher's increasing complexity. During the decade the company established the offices of chairman of the board, executive vice-president, group vice-president, and vice-president for industrial relations. The expansion of corporate responsibility raised the number of executives who had to adopt a multi-industry perspective and provided additional opportunities for executive development.

An American Institute of Management survey praised the company's approach: "An important part of Eagle-Picher's management development, as it should be in any diversified company, is the emphasis both in the divisions and at headquarters on the sophisticated application of financial concepts and controls. Constant stress on the development of these skills at all levels gives most personnel, regardless of background, ample opportunity to meet this prime requirement for promotion to the top."53 By the late 1960s Eagle-Picher had established an excellent climate for the development of managers well-schooled in the fundamental goals and operating character of the company.
As the popularity of diversified companies waned, critics often declared that by virtue of its complexity such a firm could not be managed efficiently. The experience of Eagle-Picher revealed that controlled diversity backed by a comprehensive management philosophy could bring substantive growth. Pure conglomerate firms frequently gave more attention to the acquisitions process than to the successful integration and maintenance of an acquired business. Motivated by the need to show dramatic growth to Wall Street to keep price/earnings ratios and share prices high, many of these companies created massive management problems by following an unstructured acquisitions program. Although far from perfect, Eagle-Picher's approach enabled the company to create structures and procedures to solve a broad range of problems. Recognizing its capabilities and setting realistic goals were the keys to successful growth by diversification.

By 1969, after eight consecutive years of growth in sales, income, and earnings-per-share, Eagle-Picher began to show a great deal of confidence in its management philosophy and economic mission. For the first time, its annual report included a detailed explanation of the company's principles and policies. Optimism ran high, and Atteberry claimed that the company "[had] never been in a stronger position" and that "regardless of the climate we believe that EPI will show a relatively good performance as compared with other industrial companies."\textsuperscript{64}

Eagle-Picher completed its eighth acquisition in five years during August 1969. Through an exchange of common shares, the company acquired Ross Pattern and Foundry of Sidney, Ohio.\textsuperscript{65} Ross manufactured premium-quality aluminum castings for the transportation, aerospace, electronic, and recreation industries. Founded in 1931 by William Ross, Sr., as a pattern jobbing shop, the company prospered during World War II and developed a good business producing lightweight aluminum casings for military aircraft. Facing stiff competition from other materials and manufacturing processes during the late 1950s and early 1960s, Ross upgraded the company's research and testing facilities to serve high-technology markets. Additionally, the company initiated a "zero scrap" program, which stressed communication and accountability to produce perfect castings. In step with the zero defects programs throughout industry, Ross's efforts proved extremely successful. By the end of the decade, the company
had developed the necessary expertise to compete in high-growth markets. With a capable organization and the financial strength of Eagle-Picher, Ross quickly became one of the best performers among the divisions.\textsuperscript{66}

Through a combination of internal growth and the acquisition program, Eagle-Picher by 1970 was a medium-sized, broadly diversified industrial producer. With sixteen divisions divided into six major product groups, the company had largely accomplished its mission outlined by Shore in the early 1950s. Each group accounted for no more than 20 percent of total sales.\textsuperscript{67}

The Fabricated Metal Products group, which included Davis Wire and Union Steel, contributed $46 million of Eagle-Picher’s total sales of $228 million in 1970. The Chemicals and Minerals group, composed of the Chemicals and Fibers, Agricultural Chemicals, and Minerals divisions, recorded the second largest sales volume with $43 million. The Rubber and Allied Products group, including Ohio Rubber, Premier Rubber, and Wolverine, accounted for $41 million in sales. Akron Standard, Cincinnati Cleaning and Finishing, and the Lusterlite division, which formed the Machinery Equipment and Buildings group, contributed $36 million. The Electronics and Precision Products group, including Markey Bronze, Ross Aluminum, and Electronics, accounted for $32 million of the total sales. Finally, the Plastics and Coatings group, including Chicago Vitreous, Fabricon Products, and Fabricon Automotive Products, contributed $30 million to corporate sales.\textsuperscript{68}

Eagle-Picher’s business during this period was equally divided between products sold to companies in the consumer market and products sold to producers of industrial goods. In the consumer field, sales to automotive companies accounted for 15 percent of total sales, the appliance industry for 10 percent, the tire industry for 10 percent, the food and beverage and paint industries for 5 percent each, and an additional 5 percent spread among a dozen different fields. The remaining 50 percent of sales fell into the industrial end market. This included 15 percent for capital goods, 15 percent for materials and components, 10 percent for the construction industry, and 10 percent for the government.\textsuperscript{69}

The company’s desire to develop specialized product lines within various growth markets was a valuable operating technique that often enabled the company to outpace the general economy during
expansionary periods and reduce the impact of an economic slowdown. This strategy, employed internally as well as by acquisition, brought impressive results during the 1960s. In 1961, Eagle-Picher’s 5 percent return on invested capital ranked 370 on the Fortune 500 list of the largest U.S. manufacturers. By 1970, the company ranked 177 on the Fortune survey with a 9.6 percent return on invested capital. Even more impressive, given the tenor of the times, was that Eagle-Picher achieved this growth through improved operating performance rather than financial leverage.\textsuperscript{70}

The desire to achieve balanced diversification became one of Atteberry’s foremost priorities. Constant evaluation of product mix presented a clear picture of the company’s position and future prospects with regard to market conditions and projections. For Atteberry, balanced diversification meant more than diverse product lines. He stressed the proper balance among young, mature, and declining, yet profitable businesses. Perfect balance was unattainable, yet taken with other measures such as return on invested capital, the company could balance high-growth operations and mature businesses with those marked for divestment. A continuing process, the concept forced top management to remain alert to the overall progress of the company and assured evaluation of operations against fundamental financial principles.

As the new decade dawned, the unbridled optimism of the 1960s was replaced by a more reserved view of Eagle-Picher’s progress. The go-go years had faded with the prevailing economic uncertainties, and several persistent problems caused concern among top executives. Although sales increased slightly in 1970 and 1971, earnings-per-share fell to $2.20 and $2.22, respectively, compared with $2.37 in 1969. The most significant decline occurred in the last quarter of 1970 and the first quarter of 1971. The drop ended a twenty-two-quarter period of increased earnings-per-share.\textsuperscript{71}

In addition to a general slowdown in the U.S. economy, Eagle-Picher suffered from a major strike against General Motors in 1970 that greatly reduced demand for automotive goods produced at Ohio Rubber, Premier Rubber, Fabricon Automotive, Wolverine, and Akron Standard. Furthermore, low demand for the company’s specialized capital goods reflected a general slowdown in capital expenditures throughout industry beginning in mid-1970. Even after the General Motors strike ended, sales to the automotive industry did not recover
quickly due to continued bargaining over local issues at key plants that Eagle-Picher served.  

Yet amid the general economic turmoil, the company acquired two new divisions in 1971. In October Eagle-Picher purchased the A. D. Weiss Lithograph Company of Hollywood, Florida. Weiss, a high-volume commercial printer, specialized in the publication of circulars, periodicals, and catalogs. The division served a variety of industries in the eastern United States and several foreign countries. During the same month Eagle-Picher also acquired the Hillsdale Tool and Manufacturing Company of Hillsdale, Michigan. Hillsdale Tool produced a variety of vibration dampening devices for drivetrains, crankshafts, and other linkages for the automotive industry. The company also provided close tolerance machining of automotive castings. Combined annual sales of the new divisions totaled approximately $27 million.

Although economic pressures during 1970 and 1971 hindered the company's performance, Eagle-Picher fared better than many other industrial producers facing similar problems. Buoyed by the two acquisitions and an improved economy, the company's business increased steadily throughout 1972. Sales and earnings-per-share rose 12 and 17 percent, respectively.

In March 1972 the company agreed to sell the Davis Wire Company to a new company formed by members of Davis's management team and several institutional investors. The Davis divestiture illustrated Eagle-Picher's commitment to its fundamental concepts, for Davis was neither an unprofitable operation nor one without prospects for future growth. As a converter, Davis needed a steady supply of steel rod to support its wire operations. The company had grown dramatically during the late 1960s and rod mills on the West Coast could not meet its demands. Prohibitive transportation costs from rod mills in the East forced Davis to look to Japan for a steady supply of steel rod.

Uncomfortable with the situation, Davis management wanted to buy or build a steel mill to eliminate dependence on foreign steel. When it presented the proposition to the general office, corporate management expressed serious reservations. After reviewing a feasibility study, top management opposed the plan. Foremost, Atteberry argued, the return on investment from the capital required to build a steel mill would not live up to corporate standards. Addi-
tionally, Eagle-Picher had no desire to enter the steel business because it did not fit into the company’s long-term plans for specialized industrial manufacture. Moreover, such an investment did not fit the concept of balanced diversification. Facing resistance from Cincinnati, Davis management arranged a leveraged buyout and took the company private. The Davis divestiture revealed Eagle-Picher’s resolve to maintain its course despite the temptation to expand into other fields.78

The sale of Davis Wire for $23.5 million left Eagle-Picher in a highly liquid position, and Atteberry remained alert for new investment opportunities. The company also arranged additional loans totaling $10 million. During 1973, Eagle-Picher acquired three companies: the Johnson Manufacturing Company of Lubbock, Texas; the Faulkner Concrete Pipe Company of Hattiesburg, Mississippi; and the Plas Chem Corporation of Saint Louis, Missouri. Johnson Manufacturing produced self-loading earth-moving equipment for the Caterpillar Tractor Company. Faulkner was the leading manufacturer of concrete pipe and related products in the Southeast. Plas Chem produced specialized protective coatings for a variety of anticorrosion applications on metal structures such as bridges and storage tanks. Both Johnson Manufacturing and Faulkner became divisions while the smaller Plas Chem operations were integrated into the Chemicals and Fibers division.79

Eagle-Picher reported record sales and earnings in 1973 as capital spending increased throughout American industry. Strong demand for tire building, can cleaning, and virtually all automotive products produced record years for many divisions. The Electronics division benefited from several new contracts for specialty battery systems and also entered a promising new field. The production of boron10 isotopes, used to control nuclear reactions for military and civilian applications, began at Quapaw, Oklahoma, near Miami, during late 1973.80 Coupled with the development of new markets for its rare metals department, Electronics remained one of the company’s leading divisions.

The battery, boron isotope, and rare metals operations seemed poised for steady growth during the 1970s. Eagle-Picher’s contributions to battery technology remained legendary. Electronics had supplied virtually all the U.S. space program’s electrochemical requirements since the early 1960s. The Mercury-Redstone/Atlas,
Gemini-Titan, and Apollo-Saturn programs all used primary and secondary silver-zinc batteries produced in Joplin. Eagle-Picher also supplied all the batteries for the lunar module and lunar rover, including the batteries that enabled the Apollo 13 crew to return to earth after an explosion had crippled their service module.

The division's rare metals department capitalized on the growing markets for high-purity germanium in the infrared optics industry. Additionally, high-purity gallium for use in light-emitting diodes for electronic displays presented another opportunity to participate in the fast growing consumer electronic industry. Though in its infancy, the boron\textsuperscript{10} project held significant promise as the civilian nuclear power industry, spurred by the possibilities of the breeder reactor, needed a steady supply of the compound.

Used in safety shields and control rods, boron\textsuperscript{10} absorbed thermal neutrons that enabled engineers to control a nuclear reaction by preventing continued chain reactions. Boron\textsuperscript{10} was about twenty times more effective than lead and over 500 times more effective than concrete as a neutron shield. Eagle-Picher, as the sole producer in the Western Hemisphere, was well-positioned to serve the expanding civilian nuclear power and U.S. government markets. Interest in boron\textsuperscript{10} paid off handsomely when, in 1976, the company signed an agreement with the U.S. Energy Research and Development Administration for the production of the compound for military applications. The $90 million contract provided for the expansion of existing facilities and the construction of a new plant at Quapaw, Oklahoma.\textsuperscript{81}

During the mid-1970s Eagle-Picher attained record levels of sales and earnings. Capital spending also remained strong. The company completed a major addition to the Lovelock diatomaceous earth facility and expanded the Hillsdale, specialty battery, and rapidly growing plastics operations (granted division status in 1975).\textsuperscript{82} The company also completed two acquisitions in 1976: the Elmac Corporation of Huntington, West Virginia, and Pritchett Engineering and Machine, Incorporated, of Houston, Texas. Elmac manufactured and distributed replacement and maintenance parts for the coal and hard rock mining industries, including mining conveyors, electrical transmission and controls systems, and diesel loading and hauling equipment. Pritchett was primarily a precision machining and fabricating company for the petrochemical and oil drilling industries. The company also provided repair and maintenance services for the steel in-
dustry. The acquisitions cost Eagle-Picher $20.4 million in cash and represented a concerted effort to explore energy-related markets.83

**Before the Storm**

With sales approaching half a billion dollars and income and earnings-per-share at record levels, the company’s progress seemed to affirm the virtues of its management system and, specifically, its efforts to balance diversification. To illustrate the company’s success, Atteberry offered shareholders the following “product mix profile” in the late 1970s:

<table>
<thead>
<tr>
<th>Life Cycle Growth Phase</th>
<th>% of Sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Products or New Markets with Accelerating Growth</td>
<td>13.3%</td>
</tr>
<tr>
<td>Products Increasing Market Share with High Growth</td>
<td>23.9%</td>
</tr>
<tr>
<td>Products Increasing Market Share with Cyclical Growth</td>
<td>26.6%</td>
</tr>
<tr>
<td>Products which are Cyclical Market Leaders</td>
<td>13.9%</td>
</tr>
<tr>
<td>Products which are Market Leaders with Moderate Growth</td>
<td>8.9%</td>
</tr>
<tr>
<td>Products which are Market Leaders with Low Growth</td>
<td>8.3%</td>
</tr>
<tr>
<td>Mature Products</td>
<td>5.1%</td>
</tr>
</tbody>
</table>

Reflecting upon Eagle-Picher’s approach, Atteberry asserted that the company’s management style fostered an entrepreneurial spirit that enabled it “to generate the many new investment ideas which are necessary to maintain a favorable product mix. This includes a large proportion of fast growing product lines, complemented by a number of healthy but more mature products having the capability to generate sufficient cash to finance our growth opportunities.”84

The sources of Eagle-Picher’s efficiency had a direct relationship to its diversified, divisionalized structure. Its use of internal capital markets among divisions helped the company respond quickly to the long-term trend of shortened product life cycles. Internal capital mar-
kets also aided in the development of proprietary technologies since the company did not have to disclose information to outside investors. The company’s quick response to drops in divisional performance due to division manager–central management reporting procedures also increased efficiency. Further, economies in staff functions benefited the company because it did not have to increase central management significantly as it expanded. In 1957 the central office was staffed by thirty-three persons; in 1968, despite considerable growth, central staff numbered only forty. Finally, Eagle-Picher’s specific approach to managing diversification brought a nontraditional outlook to acquired divisions and, in many cases, fostered an atmosphere of innovation that translated to the bottom line.

The period 1960–79 proved to be one of the most successful eras in the company’s history. Sales increased from $120 million in 1960 to $590 million in 1979. Earnings per share (adjusted for stock splits and dividends) also rose from $0.53 to $3.03, owing in large part to the refinements of the company’s direction and operational systems under Atteberry. The benefits gained from well-conceived acquisition and management policies enabled the company to enjoy a newfound respect and recognition from the business community. The prevailing optimism in Cincinnati revealed a company committed to continue along the same path. Eagle-Picher remained confident that its philosophy would not fail even under adverse conditions.

This belief would face a serious challenge during the following years. In the 1980s the company defended thousands of legal suits alleging damage from asbestos-containing insulation products manufactured between 1931 and 1971. As the dimensions of the problem expanded yearly, the momentum, confidence, and pride in the company so prevalent during previous years faded to uncertainty and retrenchment.