

ISSUES REVISITED FROM RUMELT'S (1974)
"STRATEGY, STRUCTURE AND ECONOMIC PERFORMANCE"

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ABSTRACT

Performance expectations are revisited pertaining to particular corporate strategies that were highlighted by Rumelt (1974). In particular, suggestions regarding expectations about conglomerate enterprises, vertical integration, and mature- or declining-demand businesses are offered in light of additional information about research findings and observed industry phenomena that are at odds with information available when Rumelt's (1974) study of diversification was performed.

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The field of strategic management holds these facts to be fundamental. Corporate strategy determines how firms grow (Ansoff, 1957). Because managers usually encounter diminishing returns at some point when reinvesting in their core lines of business, managers typically grow their firms' revenues by increasing the variety of customers served and products offered to them. Whether their firms evolve organically by creating products in-house to exploit known or new markets, work with third parties to gain new products or customers, or purchase extant firms to expand their product-market scope, managers must be concerned with how to increase their firms' revenues via diversification.

The mix of businesses that firms grow into is extremely important, as are the internal linkages between businesses that managers must establish in order to maximize the benefits of their investments in a particular mix of businesses. Thus corporate strategy deals not only with firms' diversification strategies, but also with the organizational structures, management systems, and decision-making processes that are used to enhance firms' internal linkages among their lines of business. When forging corporate strategy, managers are charged with matching the outward-facing strategy content of diversification with internally-facing implementation processes in order to maximize their firms' performance. Revenue and profit maximization are of interest herein.

Strategy, Structure and Economic Performance

When Richard P. Rumelt filed a dissertation in 1972 that combined his measures of corporate strategy and organizational structure with financial evidence of firms' performance, the field of strategic management received an important research contribution that subsequently legitimized scholarship therein. Rumelt (1974) added the precision of economic analysis to salient questions about how corporations grow, reconfigure themselves, and prosper (or not) by analyzing data. His book, *Strategy, Structure and Economic Performance*, was the first rigorous study of diversification that combined these salient concepts. Its publication launched decades of studies that have expanded the debate concerning which types of relatedness in diversification

were most valuable (Adner and Zemsky, 2015; Bettis, 1981; Pitts, 1977). Although most of the firms within Rumelt's (1974) original U.S. sample may have combined with others as competition within their respective core industries consolidated, the historical patterns investigated therein are still useful for predicting the *future* diversification patterns of currently-dominant firms, like Alphabet, Amazon.com, AT&T, Facebook, Microsoft, Netflix, and Wal-Mart, among others that may have embraced diverse line-of-business configurations. The implications of such diversification patterns (and others) are of interest herein.

Strategy

In order to analyze firms' strategy changes over time, Rumelt (1974) categorized and compared U.S. firms' diversification strategies. Firms' organizational structures and financial performance were also categorized and compared over the twenty-year period of his inquiry. "Corporate strategy" within Rumelt (1974) was nine diversification categories that were expanded from the four relatedness categories that were originally advanced by Wrigley (1970). These categories were sometimes used by the Federal Trade Commission to understand the effects of diversification upon competition. Although Rumelt (1974) consulted firms' annual report filings, diversification analysis typically used Standard Industrial Classification (SIC) codes for industry identification; COMPUSTAT files typically reported the proportion of revenues earned from firms' largest lines of business.

The granularity of Rumelt's (1974) diversification categories were further refined by considering the intersection of firms' *specialization* and *relatedness* ratios. The specialization ratio (SR) characterized the proportion of a firm's annual revenues attributable to its largest *discrete* product-market activity. (Like Wrigley (1970), the specialization ratio used 0.70 as a cut-off point for discriminating between "dominant-" and "related-" product-market activity.) The relatedness ratio (RR) represented the proportion of a firm's revenues attributable to its largest *group* of related businesses. A criterion of 0.70 was also used to distinguish between "unrelated" and "related" forms of diversification in order to posit categories of diversification. Thus "dominant" firms derived 70 percent (or more) of their revenues from a single line of business while "related" firms were more diversified in their revenue sources.

Rumelt's (1974) "related-constrained" categorization was assigned to those firms whose proportions of revenues from their largest line of business were *less* than 70 percent and whose

minor supply-side expansions had stayed relatively *close* to the origins of the largest lines of business (*e.g.*, exploited similar two-digit SIC-defined industry codes). Rumelt's (1974) "related-linked" categorization was assigned to those firms whose proportions of revenues from their largest line of business were less than 70 percent and whose minor expansions were largely unrelated to the firm's largest core businesses (and sometimes to each other).

Rumelt's (1974) "dominant-unrelated" category was assigned to those companies whose specialization ratio was *larger* than 0.70, but whose minor lines of business were unrelated to the firm's largest line of business. Similar parsing was created to sort firms within the "dominant" category into "dominant-constrained" and "dominant-linked" diversification strategy groups.

Firms that were categorized as being "dominant-verticals" generated 70 percent (or more) of their revenues from that group of businesses that made in-house sales of intermediate- and end-products within the firm's vertical chain of processing. Objectively, businesses comprising processing stages within such vertically related value chains may have been operating within unrelated SIC-classified industries, but they were typically related overall to the greater industry verticals under study, *e.g.*, food-processing, petroleum, or metals-processing, among others. As we explain herein, the value of serving customer verticals by participating in unrelated, but vertically linked, industries proved to be an underestimated diversification strategy. The efficacy of the dominant vertical strategy may have been obscured at the time by classifying firms pursuing some types of vertical diversification into other categories within Rumelt's (1974) schema.

By combining specialization and relatedness categorizations, Rumelt (1974) documented the evolution of corporate strategies (starting in 1949) for the 500 largest U.S. firms of that time as they evolved (until 1969) from pursuing single-business or dominant-business diversification strategies to using other patterns of diversification. Then Rumelt compared how the sample firms performed over time in order to discover which evolutionary patterns of diversification performed best. (As a robustness check of his own findings, Rumelt (1974) also grouped his sample of firms using the Wrigley (1970) relatedness categories and tested differences in firms' financial performance under those classifications.) Although Rumelt (1974) found *no* dominant evolutionary pattern concerning the path by which firms' diversification patterns had changed

over time, it was possible to isolate performance differences among firm's diversification strategies that suggested interesting conclusions.

Economic Performance

Although it was not the norm at that time for strategy research to use financial information as dependent variables, Rumelt (1974) used financial concepts to analyze how highly diversified firms created value (Mason and Goudzwaard, 1976). Briefly, Rumelt (1974) anticipated that the efficacy of corporate strategy could be evaluated by relating it to stock market price appreciation (and dividends paid). Patterns of rising stock prices were of interest—since they reflected expectations of demand growth and industrywide expansion, as did dividends paid. Rumelt's (1974) comparison of firms' performance from 1949 through 1959 to 1969 considered rate of sales growth (net revenues), rate of growth in earnings after taxes (plus dividends), rate of growth in earnings per share (as well as standard deviation), price-earnings ratios, rate of return (earnings after taxes) on capital invested and on equity, ratio of book equity to invested capital, firms' internal financing ratios, and their risk premium ratios.

Rumelt (1974) found that the related-constrained diversification pattern performed best. In other words, firms receiving higher proportions of revenue from largely related industries outperformed others from 1949 through 1969. Rumelt (1974) found that firms whose business mixes were merely "related-linked" underperformed relative to others. ("Linked" was a subjective categorization of the non-related, minority lines of business within firms' corporate families. Investments in "linked" minority business lines could have been firms' attempts to diversify incrementally out of unpromising industries, thereby transitioning into more promising lines of business.)

In retrospect, these results were puzzling since it seemed logical that professional managers would respond to their firms' underperforming status by fine-tuning their firms' business mixes via divestiture, spin-off, resource redeployment, or other methods of shifting assets to better uses. Since turnarounds required time to implement, Rumelt's (1974) findings of underperformance for the related-linked diversification strategy seemed anomalous and spurred

subsequent studies of the relationship between diversification and firms' subsequent financial performance.

Rumelt's (1974) performance results were replicated thereafter and compared using other types of diversification indices (Hoskisson, Hitt, Johnson, *et al.*, 1993; Lubatkin, Merchant, and Srinivasan, 1993; Nayyar, 1992; Palepu, 1985; Vachani, 1991). Bettis and Hall (1982) found that the superior performance attributed to related diversification by Rumelt (1974) may have been due to industry effects driven primarily by the sample's subset of pharmaceutical firms. Singh and Montgomery (1987) confirmed that target-firm relatedness improved overall acquisition performance when firms grew via transactions.

Debates concerning the drivers of firms' economic performance centered initially upon whether industry was the primary driver of growth and profitability potential (Porter, 1980), whether market power (indicated by market share) benefitted multi-business firms asymmetrically, and whether firms' superior performance was due to factors that managers could directly influence (Vanneste, 2017), among others. A definitive answer was difficult to find as the nature of competition was continually evolving within industries (and profitability potential therein was waxing or waning accordingly). Similarly, firms' organizational structures—the other dimension of Rumelt's (1974) inquiry—were evolving over time.

Diversification patterns documented a significant change in which corporate strategy was being pursued (Gort, 1962). Although conglomerate (or highly unrelated) diversification strategies had been dominant in popularity during the years when analysis leading to Rumelt's (1974) findings was performed and were even commented upon by Servan-Schreiber (1967) in his call to arms concerning the non-competitiveness of European enterprise, other patterns of relatedness were found to be more successful corporate strategies in subsequent years. After the 1970s, the hands-off, conglomerate form of enterprise waned in popularity within the U.S. economy (Davis, Diekmann, and Tinsley, 1994). Instead, the interventionist activities of firms using centrally-coordinated systems of sectors, segments, and SBUs gained favor.

Organizational Structure

While Rumelt was testing the effects of line-of-business diversification patterns, his contemporaries were dissecting the effects of firms' diverse organizational structures upon performance. Pioneering research concerning the “structure” categories that Rumelt (1974)

examined—functional, functional within subsidiaries, and product organizations—was ongoing at that time. Chandler (1962) had chronicled the rise of the multi-business or M-form organization. Lawrence and Lorsch (1967) had contrasted group differentiation with organizational integration. Galbraith (1973) had explained the use of the matrix organization—which could balance consideration of product diversity with customer (or market) diversity.

Evolutionary linkage patterns among lines of business were anticipated as Rumelt (1974) examined the organizational structures of his U.S. sample within the decades under study. These expectations were appropriate since, during the 1970s, there had been studies (under the supervision of Professor Bruce Scott) concerning the rise of the M-form organization within leading firms from five different countries, while Scott himself had formulated a theory of firms' stages of organizational development that was similar in intent to Rostow (1960)'s five stages theory of nations' economic development. Therefore it was less surprising to learn about how firms' organizational structures had evolved during Rumelt's (1974) 20-year window of observation.

Rumelt's (1974) findings regarding organizational structure documented that the product-division design had become dominant by 1969. This organizational structure had been used by only 20 percent of U.S. firms in 1949, but it became more commonplace over time. Results challenged Chandler's (1962) proposition that structure follows strategy. Rumelt (1974) concluded that "structure follows fashion," *i.e.*, when an organization explicitly changed its structural arrangements, but not its strategy, diversification strategy nevertheless ultimately evolved to fit the firm's new organizational structure (Hall and Saias, 1980). This observation was especially salient during the merger wave years of 1965 to 1969—a period when passive conglomerate enterprises had been in vogue. Rumelt's (1974) observation concerning the role of organizational structure in pursuing corporate strategy ultimately spurred research into the role of the headquarters staff as a coordinating force within diversified firms.

Structure and Performance Issues

Although Chandler (1977) had demonstrated how the visible hand of vertical integration could manage diverse (but related) activities, the multi-divisional form of organization—with variance in the extent of headquarters' activities—became the organizational norm after 1974. Vertical integration was eschewed. Thus, the functional organizational structure of mid-1800s

U.S. railroads—one that was composed of a central management unit and several functionally organized departments that coordinated with their vertically related counterparts—gave way to the M-form (multidivisional-form) of organization whereby firms were decentralized into several semi-autonomous units that were guided and controlled by financial targets from headquarters (with separate groups or divisions within the firm being responsible for selling similar types of products or serving similar types of customers in order to avoid overlaps).

Rumelt (1974) tested a “product-market” categorization whereby the firm was split into a number of quasi-autonomous divisions—each headed by a general manager and supplied with the resources that were necessary for it to operate as an independent economic entity. Rumelt’s (1974) research design also considered the “holding company” and geographic diversification as categories within his organizational schema, as well as the “functional-with-subsidiaries” form of organizational design. Rumelt (1974) clarified that firms which were organized as “functional-with-subsidiaries” could have been in transition to another organizational structure that would manifest itself after his 1969 cut-off date for observing organizational adaptation.

Rumelt’s (1974) conclusions concerning how firms’ performance related to their evolving organizational structures were not as clear-cut as those concerning the performance links to diversification strategy. The performance shortfalls that Rumelt (1974) identified spurred others to investigate how to manage complex firms when they diversified along various line-of-business patterns. In particular, Lenz (1980), Hoskisson (1987), and Hoskisson, Harrison, and Dubofsky (1991) found noteworthy performance differences within the multidivisional structures of various types of diversified firms.

Since internal coordination among business units was expected to produce operating synergies (Hill, Hitt, and Hoskisson, 1992), the extent of headquarters intervention in decisions of subsidiaries became of interest when optimality within organizational structures was sought (Collis, Young, and Goold, 2007; Menz, Kunisch, and Collis, 2015). Studying the extent of headquarters staff intervention better illuminated key concepts within Rumelt’s (1974) framework, such as “passive” coordination—such as would be expected within those conglomerate diversification strategies where *no* relatedness among business units existed. At the other extreme of relatedness, dominant-constrained diversified firms were typically organized to pursue operating synergies from shared facilities, activities, and information. Business managers

operating within such strategies coordinated many of their operating decisions with their counterparts; coordination was reinforced by greater centralization of services and frequent corporate-level intervention.

Highly related diversifications justified the costs of underwriting greater headquarters activity as it facilitated attainment of scale, scope, and vertical integration economies; close coordination among business units facilitated frequent technology transfers and cross-fertilization of practices. Unlike the strict accountability of the holding company logic, companies pursuing operating synergies across their diverse lines of business sometimes permitted cross-subsidization of promising growth initiatives during their start-up period in order to foster corporate intrapreneurship. The proactive top management team within a *closely* diversified firm would have anticipated future resource and capability shortfalls, funded the development of salient, new ones and controlled the use of those resources to help members of the corporate family to improve their competitiveness (Collis and Montgomery, 2005). By contrast, the passive headquarters office that Rumelt (1974) associated with unrelated or conglomerate patterns of diversification did not.

The contrast between interventionist and passive headquarters offices was especially of interest in refining notions of corporate strategy since headquarters could provide centralized services and underwrite other activities that could encourage synergistic outcomes. An interventionist headquarters office could encourage cooperation among sister business units to share resources by creating management systems that encouraged intra-firm activity (or not)—depending upon how lines of business were related to each other. An interventionist headquarters could lead companywide campaigns for cost reductions, revenue enhancement, and other growth efforts. If resource shortfalls were identified, the interventionist headquarters could oversee the internal development of new technologies, resources, and capabilities or bring them to the enterprise via acquisition in order to close perceived resource gaps (Datta, 1991). Because managers were making changes to their firms' mix of businesses over time to improve performance, structural differences were inevitable in how they were managed, even within narrowly diversified firms (Hill and Hansen, 1991).

Diversification and Performance Issues

Although the organizational structure aspects of Rumelt's (1974) findings may be considered an incremental contribution that advanced the Scott studies of Wrigley (1970), Channon (1971), Pavan (1972), Pooley-Dyas (1972), Suzuki (1980) and Thanheiser (1972), Rumelt's use of financial performance data was revolutionary within the Harvard Business School context of the seventies. Performance considerations represented a major contribution to the research stream concerning strategy content. Although industrial organization economists were moving from field studies to data analysis to investigate structure, conduct and performance topics at that time, the marriage of strategy and economic thought was just beginning to be seen within the strategy field—as was evidenced by the pioneering research of Rumelt (1972), Hatten (1974), Hatten and Schendel (1977), and Harrigan (1979).

Rumelt's subsequent interactions with the UCLA economics department enriched his thinking regarding what the economic relationship between diversified firms and performance might be; it pioneered a dialogue between these fields of study. It is noteworthy to observe, however, that—although strategy scholars incorporated theories and findings from economics in their research thereafter—the citation pattern was not reciprocal. Strategy research was cited by economists primarily if strategists published their findings within economics journals, *e.g.*, Montgomery (1994). Economists did not cite research findings published within strategy journals; if a non-economics journal were included within their bibliographies, authors were most likely to cite a marketing journal since marketing scholars led in research findings regarding the effects of market share and subsequent market power upon performance during the 1970s (Harrigan, 2013).

Results from Rumelt (1974) provided the jumping-off point for many types of studies about diversification as corporate strategy. Subsequent theorizing about the efficacy of corporate strategies has added descriptive dimensions by which to amplify the ways in which strategy implementation has differed among various types of firms. The original gestalts of line-of-business relatedness and organizational structure dimensions remained of paramount importance to understanding what made corporate strategy valuable (Rumelt, 1982) as subsequent studies of corporate strategy incorporated the performance effects of market structure (Christensen and Montgomery, 1981), resulting market power (Montgomery, 1985), business cycles (Amit and

Livnat, 1988), considerations of financial risk (Bettis and Hall, 1982; Thomas, 1983), systemic risk (Montgomery and Singh, 1984; Thompson, 1984), and risk-return trade-offs (Chang and Thomas, 1989), among other factors when comparing the efficacy of corporate strategies; patterns of line of business relatedness remained fundamental to these inquiries. Diversification strategy remained an important explanatory factor when evaluating firms' distinctive competences (Hitt and Ireland, 1986), array of resources (Chatterjee and Wernerfelt, 1991), and resource allocation decisions (Harrison, Hitt, Hoskisson, *et al.*, 1991), such as their R&D expenditures (Baysinger and Hoskisson, 1989; Hitt, Hoskisson, Ireland, *et al.*, 1991).

Diversification across geographies became an especially important factor to consider. In a 2019 *Web of Science* citation search for publications about diversification, the most highly cited articles were those diversification studies that included aspects of firms' international scope of operations (Hitt, Hoskisson, and Kim, 1997; Khanna and Rivkin, 2001; Tallman and Li, 1996). Emphasis upon diversification scholarship within the international business literature stream should not be surprising since the greatest operational diversity may be found across geographic borders due to infrastructure and cultural differences (Hochmuth, 1972; Ickis, 1978; Lifson, 1979). Since many non-western economies were still developing their infrastructural arrangements, these contexts offered exciting opportunities to replicate Rumelt's (1974) findings by comparing how local firms have diversified, how their diversification decisions have evolved over time, and which organizational arrangements have proved to be most effective for managing the complexity of their firms' diversification over time.

Structural differences in diversification may be correlated with ownership differences. For example, India's business groups and Japan's keiretsu represent alternative forms of diversified, but related, business enterprise (Aoki and Lennerfors, 2013; Chen, Kaul, and Wu, 2019; Cheng, 2017; Khanna and Palepu, 1999; Khanna and Rivkin, 2001). Within some economies, tunneling activities among such related business groups may be an alternative method of coordinating resources among business units (Cho, and Lim, 2018). Briefly, the effects of geographic and infrastructural differences upon patterns of diversification strategy should be added to investigations concerning how variations in products, customers, technologies, and physical and intangible assets have affected firms' performance (Geringer, Beamish, and Dacosta, 1989; Hisey and Caves, 1985; Kim, Hwang, and Burgers, 1989).

In summary, Rumelt's (1974) findings concerning the efficacy of diverse corporate strategies offer an excellent touchstone for comparing how much relatedness among lines of business is needed in order to create beneficial operating synergies (and whether endogenous or exogenous conditions will modify such relationships). Intrafirm relationships among the businesses within a particular corporate family may provide the key to creating value within diverse types of diversification strategies.

The relatedness inquiry provides a starting point for the debate concerning what to do about those lines of business that do not benefit from using whatever corporate resources the headquarters office may provide. Since many of the benefits of having an interventionist headquarters office rely upon salient relatedness among subsidiary businesses that are expected to share common resources and cross-pollinate their ideas in order to grow (Sakhartov, 2017; Sakhartov and Folta, 2014; 2015), coordination among lines of business would be a logical extension of topics to revisit when reviewing Rumelt's (1974) ideas regarding the management of diversification and firms' subsequent performance.

Perennial Performance Conundrums

Diversification topics that merit further investigation are typically ones that Rumelt (1974) under-emphasized or dismissed from consideration altogether. Unforeseen outcomes worthy of further inquiry have emanated from U.S. firms' use of conglomerate strategies, vertical relationships among a firm's many lines of business, and the rationale for diversifying away from businesses facing mature demand from customers. Each of these diversification issues has enabled some firms to perform well within particular contexts while providing harmful economic outcomes to other firms within less hospitable contexts.

Conglomerate Strategies

The preference for closely related diversification strategies wherein managers orchestrate operating synergies is a recent investor bias. Unrelated diversification was well-regarded during the 1960s and 1970s when investors believed in the merits of conglomerate enterprises led by professional managers who possessed the superior information needed for resource allocation within firms' internal markets. Highly diversified firms like 3M, Beatrice, Berkshire Hathaway, Brunswick, Esmark, Gulf & Western, ITT, Litton, LTV, Norton-Simon, Philip Morris, Textron,

Transamerica, Tyco, United Technologies, and Whittaker were studied as being exemplars of good corporate strategy during this era.

Rumelt (1974) was surprised to discover that passive-unrelated diversification underperformed other types of diversification strategies since conglomerate enterprises had been commonplace when his research was executed and interventionist headquarters were rare. At that time, the passive, holding-company approach to diversification pursued financial synergies. Business unit managers enjoyed relative operating autonomy since decision making was highly decentralized. This freedom sometimes resulted in the duplication of facilities across business units and overlapping turf when serving customers. The passive, holding-company format generally provided easier accountability of results than other organizational structures and the direct link between risks taken and outcomes fostered greater entrepreneurial spirit among operating managers.

When Rumelt began his research in the 1970s, financial theory exalted the capital asset pricing model's reliance upon an optimal number of diverse lines of business to attain superior performance (Lewellen, 1970; Mason and Goudzwaard, 1976; Scott, 1977; Shapiro, 1970). In transactions that were typical for that time, the diversified firm's internal capital markets were expected to overcome the capital market's information deficiencies (Hubbard and Palia, 1998). Instead of valuing generalists, managers were retained for their industry-specific operational knowledge; central management provided few services within diversified firms besides capital-budgeting expertise (Lynch, 1971).

Ultimately, the conglomerate policy of acquiring and holding unrelated firms was eschewed in favor of the policy of building firms having strongly related asset positions. Acquired firms were integrated into an ongoing structure of related lines of business that were shepherded with strong central controls. Sentiment regarding conglomerates changed when economists tested models explaining why highly unrelated diversification would *underperform* other types of corporate strategy (Anjos and Fracassi, 2018; Chen, *et al*, 2018; Cheng, 2017; Goel, Nanda, and Narayanan, 2004; Gopalan and Xie, 2011). Schools of economic thought emerged regarding whether conglomerate diversification was beneficial (or not) to shareholders (Rajan, Servaes, and Zingales, 2000; Stein, 1997; Scharfstein and Stein, 2000). Although Maksimovic and Phillips (2002) found merit in the highly diversified firm, many economists

argued that the market justifiably imposed a conglomerate penalty upon the stock prices of diversified firms because they allegedly destroyed shareholder value (Berger and Ofek, 1995; Lang and Stulz, 1994; Rudolph and Schwetzler, 2014).

Villalonga (2004) tested for (and did *not* find) evidence of the so-called conglomerate penalty. Further, Kuppuswamy and Villalonga (2016) found that the internal capital markets of conglomerate firms provided beneficial financing for growth during 2007 to 2009—during a time when firms pursuing other types of corporate strategy had no access to funding sources.

As a result of Rumelt's (1974) conclusions regarding unrelated lines of business, strategy scholars have favored relatedness when discussing diversification, while eschewing the unrelated types of diversification that performed poorly in his results (Markides, 1992; 1995). As corporate raiders unraveled business combinations that created little value, merit was found in the practice of divesting or spinning off lines of business to improve analyst coverage of seemingly complex firms (Gilson, *et al*, 2001), but Çolak and Whited (2007) found no evidence of improvement in a conglomerate's efficiency after executing such a spin-off or divestiture. Such results created ambiguity regarding how highly diversified firms might create greater value and whether divestiture was indeed the best way to renew the viability of a firm's corporate strategy.

For those firms that encouraged relatively few linkages among their lines of business, the success of their conglomerate strategy ultimately turned upon how they were managed. It is noteworthy that Markham (1973)'s survey of how conglomerates were managed found little evidence of any internal trade relations office, such as might be found where a corporation pursued some elements of vertical integration or otherwise coordinated the activities of businesses within the corporate family. Since operations were largely autonomous, it was highly unlikely that divisional resources were commingled to support cross-subsidization of business start-ups or engage in reciprocity concerning buying and selling activities within their unrelated families. Thus they avoided the funding needs of a larger headquarters staff.

Berkshire Hathaway is an example of conglomerate enterprise with highly passive headquarters intervention in 2019. The headquarters function within firms like Berkshire Hathaway managed cash flows aggressively, but allowed other operating decisions to be discretionary at the business-unit level. Given that investor bias has favored relatedness, Berkshire Hathaway should be particularly suspect since its businesses are not related to each

other. Instead widespread ownership of Berkshire Hathaway’s equity and reverence for the architect of its diversification strategy has occurred—although the stock’s performance has been relatively mediocre among investment alternatives that included participation in the growth of high-tech industries.

Is the highly diversified firm becoming a dinosaur in a forum where investors believe that pure plays or narrowly diversified firms are best? Since Rumelt’s (1974) examination of diversification strategy, corporate managers have been celebrated for dismantling the business mixes that were created by their predecessors. Fifty years later, it would seem that conglomerate enterprise is *not* well regarded in the United States, and yet the performance of some highly diversified firms continues to thrive.

Although Berkshire Hathaway is not a rousing endorsement of the unrelated diversification and passive holding company combination, newer firms, like Danaher (and its spin-off Fortive), have offered novel ways of managing diversity successfully. Also, the rise of media and internet conglomerates call into question the reasons for earlier findings of underperformance for non-integrated, unrelated diversification strategies. Such relationships are of interest lest highly-diversified firms such as Alphabet, Amazon.com, AT&T, Facebook, Microsoft, Netflix, and Wal-Mart, among others, make the types of implementation errors that plagued Avco, Bangor Punta, Dresser Industries, Engelhard Industries, Genesco, W.R. Grace, Pullman, and Rockwell Manufacturing, among others. What may be different this time around is that the new conglomerates exemplified by these firms serve particular types of customers within dissimilar geographies by using a “demand-side” logic for pursuing growth (Manral & Harrigan, 2016; 2018b). The notion of diversifying in order to serve a core set of customers with a variety of goods and services represents an exciting arena for future scholarly inquiry about how to manage diversification as it ignores the unrelatedness of those assets that were used to provide goods and services.

In summary, because of the importance accorded to relatedness when assessing the efficacy of diversification, related-linked and conglomerate strategies have not been regarded as being long-lived ones—especially when firms that are so diversified face restructuring pressures from shareholder activists and similar types of asset-class investors. Yet it is noteworthy to observe that several of the U.S. firms that were classified as having related-linked diversification

in Rumelt's (1974) classification scheme have proven to be long-term survivors—even though their performance was considered to be lackluster in 1969.

In retrospect, the non-core, unrelated family members in Rumelt's (1974) classification scheme funded growth activity during firms' difficult years of slow growth within their core industries. Some of these diversified firms, like Allis-Chalmers and Westinghouse Electric, evolved from highly diversified firms to specialize around cyclical core businesses. Others, such as Borg-Warner, GAF, and Texas Instruments, used proceeds from their unrelated diversification strategy as a pathway towards finding promising new core businesses. A few like Crowell-Collier & Macmillan [now a part of CBS Corporation] and TIME funded growth into new and rapidly growing lines of business, even as their legacy cores were later divested (Feldman, 2014). Chemical companies, like Minnesota Mining and Manufacturing (3M), have used their internal research abilities to create new technologies in order to remain on the forefront of their sectors by revitalizing businesses facing waning demand in order to renew themselves.

In spite of these examples, however, the purely passive, holding company structures that once managed unrelated lines of business have become difficult to find within the United States. They are still abundant within emerging economies, such as those of India, China, Korea, Taiwan, Indonesia, Bangladesh, Brazil, and parts of Africa. Conglomerates continue to dominate the Japanese economy. Their prevalence suggests that the efficacy of unrelated diversification strategy should be re-examined within these additional geographic contexts and firms' performance should be reexamined in light of local economic conditions.

Vertically Related Lines of Business

Rumelt (1974) was also surprised to find that vertically integrated firms underperformed other types of diversification strategies. It was unclear at the time of these conclusions whether results were an artifact of the particular twenty years under study or whether some other factor obscured the fact that vertical integration can be a more effective form of diversification than was then recognized. Most likely, failing to categorize some firms as being “dominant vertical” within Rumelt's (1974) schema was a classification error since many so-called conglomerate firms were typically *also* vertically integrated (and many of them remain so to date).

Diversification into vertically related industries places a firm's lines of business into potential buyer-seller relationships with each other. If their businesses have highly dissimilar

types of assets, firms will exhibit *both* conglomerate and vertical patterns. The economic arguments of conglomerates regarding agent incentives and the monitoring of agents' decisions persist as firms' intrafirm relationships become more complex since non-economic considerations may temper how they might exploit potential vertical ties. For example, business units' minimum efficient scales of throughput can be so highly mismatched in their various stages of the vertical chain that their relationships may seem asymmetrical in productive capacity, breakeven levels, and other economic aspects (Harrigan, 1983). Furthermore, diversification has cross-subsidization at its heart (as the BCG or product-market matrix that has been used to illustrate resource allocation epitomizes). Even if firms were taper-integrated within those asymmetrically sized vertical stages where transactions could occur, it is inevitable that some cross-subsidization of operations would occur as a part of firms' corporate strategies. Indeed the full strategic benefits of having vertically related lines of business within the same corporate family would not be realized if every line of business were managed as a standalone enterprise.

Chandler (1977) and Harrigan (1983) each explained how the cross-subsidization of diverse processing stages was sometimes necessary within vertically related chains of business in order to develop and coordinate the complex organizational infrastructures needed to operate international facilities. During the period when Rumelt (1974) examined vertically related aluminum, meat-packing, oil and gas, petrochemical, pulp and paper, rubber, and steel firms, among others, such firms may have underperformed economically if they were cross-subsidizing one (or more) of their vertically related stages in order to balance operating throughputs while also innovating. Expectations of managed growth, *i.e.*, performance without fluctuations during periods when firms invest in innovation or renewal, create the perception of underperformance whenever such fluctuations are incurred. They are (in fact) a normal part of firms' growth processes that cannot be avoided so long as investors eschew diversifications into stabilizing but slower-growth lines of business.

Rumelt (1974) found that Rumelt (1974) vertically related firms relied upon their internal markets to evolve and grow revenues from 1949 through 1969. Thus when oil companies extended the number of vertically related stages that they participated in, they incurred higher costs to create new management structures, systems and decision-making processes as needed to exploit their new vertically related potential because doing so was the most-appropriate operating

arrangement. Later, firms had to unwind some of what they had created in order to exploit exogenous economic incentives. For example, during the early 1980s, some U.S. oil firms de-integrated their chain of linked industries when it was politically opportunistic to do so (but many of them re-integrated these same chains of business after the federal oil entitlement program was ended, thereby incurring internal coordination costs once again). Net financial performance over time has been high for firms within the oil industry even though their returns are often highly cyclical and investors punish their industry for downturns.

The oil industry example has spurred managers to question how the benefits of potential vertical relationships might best be used. Coupled with studies that eschewed the use of internal markets, de-integration has become a popular short-term, corporate strategy fad because it releases assets to get cash that could be deployed elsewhere. Since investors reward the redeployment of capital into growing-demand industries, managers have often used the short-term ploy of de-integrating business units as a cost-saving way to fund resource redeployment. In doing so, they have destroyed the internal linkages among businesses that once constituted a long-term means of maximizing value (Harrigan, 1985).

In his study of diversification, Rumelt (1982) classified those firms that used vertical-integration strategies as underperformers—even though vertically integrated firms could manage their tax obligations advantageously by recognizing higher profits at diverse processing stages of their choice within their vertical chain of industries. Pressures from investors for de-integration meant that vertically integrated companies—*e.g.*, firms making steel, petroleum, rubber, forestry products, meat-packing, copper, aluminum, and other processed minerals, among others—were encouraged to divest their seemingly less-profitable processing stages to third parties. Retailers stopped making their own products for sale under store brands. Makers of electric and electronic devices were discouraged from producing their own components. Drug makers were encouraged to outsource production of their active pharmaceutical ingredients. These movements away from vertical integration created unforeseen economic effects.

Hollowed out value-adding relationships.

The hollowing out of firms that once operated within certain, seemingly unattractive industries sent associated jobs to lower-wage companies that frequently operated within newly industrializing economies; thus knowledge and skills were lost. Since the industries that were

often vertically integrated were frequently also capital-intensive ones, there was an accompanying flight of investment capital overseas to follow the jobs lost when processing stages were divested. Typically only brand name assets remained in domestic hands as firms adopted virtual strategies.

The net result of the de-integration wave was a hollowing out of domestic competitors that became virtual firms—*i.e.*, they coordinated a network of international suppliers and logistics providers. Fulfillment of customer demand was, in fact, performed by companies who had purchased divested assets from formerly integrated firms during the period when spin-offs became the most- popular form of corporate renewal in the United States. When the cyclical demand faced by mature or declining-demand business units was not substantial enough to enable firms' overseas subsidiaries to break even by performing processing activities in-house, such lines of business were summarily divested to local investors—sometimes giving former customers an ongoing and viable business infrastructure to optimize that frequently had been undervalued by the divesting and de-integrating firm.

Loss of technological expertise.

The flight of capital and knowledge resulting from such divestitures facilitated the development of newly skilled firms elsewhere in the world to refurbish the expertise that would no longer be funded by older firms. For example, when U.S. electrical utilities once again desired to offer energy from uranium after 2015, Westinghouse Electric discovered that the knowledge of how to build atomic reactors resided primarily within Chinese engineers. Contracts to build new atomic energy electrical utilities in the U.S. could not be awarded to domestic engineering firms since their salient expertise had retired four decades ago. To re-enter such industries, domestic contractors would have to re-develop such expertise organically (and suffer the risks and performance penalties commonplace to entrepreneurs when subsidizing such learning experiences). Their tacit knowledge had been divested with their unwanted assets forty years earlier and it was subsequently not politically palatable to sub-contract such important projects to formerly vertically integrated firms' successors.

Although the older industry structures of the Rumelt (1974) sample may have changed markedly, elements of vertical integration strategy continued to be used by leading firms such as Amazon.com, Netflix, and Facebook, among other firms that undertake a conglomerate

diversification pattern. Their logic of diversifying around customers makes the productive assets used to serve such customers seem to be highly-unrelated to each other. Unlike the “dominant vertical” firms that were examined by Rumelt (1974), these newer vertically integrated firms are highly valued by investors—even though they appear to be diversified in a highly unrelated manner. A portion of their value arises from close vertical coordination of the diverse parts of their corporate families in order to provide a coherent customer experience. As a part of their strategy implementation, these firms use vertical integration effectively (where it is appropriate to do so).

In summary, in the new millennium, a new generation of firms has rediscovered the value of vertical integration as they invested to coordinate or control adjacent operations within media, software, and biotechnology, and other complex technologies. Vertical coordination is used to serve customers seamlessly. In light of this trend of rethinking the logic of vertical integration, it may be that the alleged flaws of extensive coordination within vertically related chains of businesses may have been overstated. The viability of vertically related strategy implementation merits re-examination. Moreover, it is likely that the performance weaknesses that Rumelt (1974) originally attributed to pursuing the “dominant-vertical” strategy should have been attributed to weaknesses created by industry effects instead.

Mature and Declining Demand

Rumelt’s (1974) explanation for the logic of diversifying deserves reconsideration. Rumelt (1974) commented that managers diversified their firms’ mixes of business to escape the confines of operating within mature- or declining-demand industries. Rumelt’s (1974) assumption that mature industries offered a less promising growth path reflected popular biases of that era regarding corporate renewal processes. Briefly, investors valued highly the allocative efficiency of managers who diversified their firms’ mix of businesses away from mature and declining-demand industries while investing aggressively in embryonic and emerging technologies—even if doing so was more risky because the nature of demand was uncertain. Capital redeployment strategies such as Rumelt (1974) advocated meant entering into new types of industries whose burgeoning competitive boundaries ultimately converged with those of existing ones—eventually making extant lines of business obsolete as well.

With time, investor bias has become institutionalized against long-lived firms that have operated successfully within mature- and declining-demand industries. The relative under-appreciation of their stock prices has decreased their access to capital—making corporate renewal more difficult for them to achieve. Their managers have been criticized for retaining businesses offering good cash flows, but stagnant growth prospects. Interestingly, some of these same firms pursued “related-linked” diversification strategies during the years examined by Rumelt (1974) and were classified as being successful at that time—only to lose their luster by failing to abandon their arenas of past success and otherwise reinvent themselves as time passed.

Rumelt (1974) presumably foresaw a way for firms to enjoy perpetual revenue growth—although 75 percent of the industries comprising post-industrial economies faced slowing demand in the 1970s. Rumelt (1974) assumed that managers could diversify their firms away from the challenges of mature- and declining-demand industries by adding resources that would enable their firms to compete within more attractive, growing-demand industries. Seemingly less-attractive lines of business were divested into the hands of presumably gullible buyers or were otherwise liquidated in order to deploy firms’ accumulated resources to better uses. The flight of investor capital into assets that offered the promise of rapid returns was later coupled with divestitures and spin-offs that resulted in a stub of seemingly less-attractive assets that was left behind for operating managers to rationalize.

This popular viewpoint regarding the need to exit less attractive venues has ignored the challenge of recovering value from customer relationships that were nurtured while building up dominant market positions within slower-growth lines of business. The bias favoring exit may have persisted since embedded assets were often industrial in nature and the rationalization of survivors’ competitive positions frequently required substantial downsizing in order to operate efficiently.

As firms shifted their mix of businesses and the assets that supported competition therein, the problems implied by mature industries represented a special conundrum to address since (a) large portions of the total revenues generated within post-industrial economies were earned from such industries, and (b) the skill sets and types of jobs required to sustain competitiveness within mature industries were fundamental to some nations’ income redistribution ideals (since they did not require graduate degrees in computer science or engineering specialties in order to be

staffed). Divesting such lines of business to off-shore competitors moved jobs overseas that were unlikely to return to their country of origin. Meanwhile extant customers learned to consume products and services that were produced elsewhere instead of patronizing the goods and services that had been offered by domestic firms.

The issue of how to manage mature- or declining-demand lines of business advantageously was not addressed until turnaround management firms began to identify which types of declining-demand businesses were, in fact, highly profitable. Harrigan's (1980) framework and field work suggested how firms facing mature or declining demand might best restructure themselves to preserve their inherent advantage of having mature customer relationships. Successful management of such asset stubs has frequently generated strong cash flows and high returns on assets because customer demand has persisted longer than anticipated for laggard customers who were willing to pay premium prices for products that impatient investors believed to be without merit (Harrigan, 1980).

Successful firms that reinvested in their mature products found ways to preserve their more-viable competitive positions while lesser competitors had to divest their businesses for cash to deploy elsewhere. The returns available within well-managed mature industries proved to be surprisingly high, but the difficulty of implementing the turnaround task was substantial. Specialized investors, such as private equity firms, developed strategies for exploiting endgame contexts. Such owners sometimes restructured industrywide excess capacity and reaped the associated rewards of doing so because publicly-traded firms were unable to undertake such strategies.

The mis-management of mature- and declining-demand businesses has created significant negative spillover effects. Where sales growth was considered more important than high profit margins, significant differences in cash flows have resulted—sometimes with adverse effects mentioned herein. Errors in resource redeployment have harmed economies' allocative efficiency.

Similar resource allocation errors were repeated where centralized coordination of firms' value chains could have generated more cash than outsourcing. Although vertical integration is a strategy that investors have long eschewed and corporate renewal efforts reflect a financial

preoccupation with unraveling unrelated diversification strategies, it is appropriate to question the wisdom of the path that firms propelled by such strategies have taken fifty years later.

Summary

Results reported in Rumelt (1974) provided the field of corporate strategy with a rigorous example of how to parse the differences in firms' diversification strategies. As a result of these findings, line-of-business patterns of relatedness and the use of diverse organizational arrangements are questioned for their impact upon firms' financial performance.

Some of the diversification strategies that Rumelt (1974) reported upon have been impugned with adverse subsequent effects. Fortunately, new entrants have rediscovered the merits of corporate strategies that scholars once rejected and are now using intra- and interfirm arrangements in creative new ways to create value propositions for their customers. The new conglomerates, in particular, offer interesting research opportunities to isolate the problems that have been alleged from unrelated diversification strategy. As the examples of General Electric, Walt Disney Company, and Comcast suggest, there can be many ways to pursue unrelated diversification with varying degrees of success. There can be synergistic conglomerates and other salient strategy categorizations that have not yet been isolated by strategy scholars. The future verdict regarding diversification will depend upon how the unrelated portions of firms' business mixes are treated when characterizing firms' corporate strategies.

Publicly-traded multi-business firms will face pressures to grow their revenues as well as generate ample cash flows via operations to fund growth. Diversification can be an important route for finding appropriate growth paths—provided that firms can adjust the internal linkages among their lines of business appropriately to foster coordination economies where doing so improves long-term financial performance.

Rumelt (1974) started the dialogue concerning how strategy and structure may interact to improve firms' performance. Even with minor imprecisions concerning intrafirm relationships, study of the under-performing strategies within Rumelt's (1974) longitudinal sample offer an excellent base case for re-discovering the coordination challenges to cope with when managing diversification effectively.

REFERENCES

- Adner, R., and Zemsky, P. 2015. Diversification and performance: Linking relatedness, market structure, and the decision to diversify. *Strategy Science*, 1(1): 32–55.
- Amit, R., and Livnat, J. 1988. Diversification strategies, business cycles and economic-performance. *Strategic Management Journal*, 9(2): 99-110.
- Anjos, F., and Fracassi, C. 2018. Technological specialization and the decline of diversified firms. *Journal of Financial & Quantitative Analysis*. Vol. 53(4): 1581-1614.
- Ansoff, H.I. 1957. Strategies for diversification. *Harvard Business Review*, 35(5): 113-124.
- Aoki, K., and Lennerfors, T. 2013. The new, improved keiretsu. *Harvard Business Review*. 91(9): 109-113.
- Baysinger, B., and Hoskisson, R.E. 1989. Diversification strategy and R and D intensity in multiproduct firms. *Academy of Management Journal*, 32(2): 310-332.
- Berger, P.G., and Ofek, E. 1994. Diversification's effect on firm value, *Journal of Financial Economics*, 37(1): 39-65.
- Bettis, R.A. 1981. Performance differences in related and unrelated diversified firms. *Strategic Management Journal*, 2(4): 379-393.
- Bettis, R.A., and Hall, W.K. 1982. Diversification strategy, accounting determined risk, and accounting determined return. *Academy of Management Journal*, 25(2): 254-264.
- Chandler, A.D., Jr. 1962. *Strategy and Structure: Chapters in the History of the American Industrial Enterprise*, Boston: MIT Press.
- Chandler, A.D., Jr. 1977. *The Visible Hand: The Managerial Revolution in American Business*, Boston: Harvard University Press.
- Chang, Y.M., and Thomas, H. 1989. The impact of diversification strategy on risk-return performance. *Strategic Management Journal*, 10(3): 271-284.
- Channon, D.F. 1971. *The Strategy and Structure of British Enterprise*. Harvard Business School. Unpublished doctoral dissertation.

- Chatterjee, S., and Wernerfelt, B. 1991. The link between resources and type of diversification—Theory and evidence. *Strategic Management Journal*, 12(1): 33-48.
- Chen, C., Martin, X., Roychowdhury, S., Wang, X., and Billett, M.T. 2018. Clarity begins at home: Internal information asymmetry and external communication quality. *Accounting Review*. 93(1): 71-101.
- Chen, M., Kaul, A., and Wu, X. 2019. Adaptation across multiple landscapes: Relatedness, complexity, and the long run effects of coordination in diversified firms. *Strategic Management Journal*, DOI: 10.1002/smj.3060.
- Cheng, T.K. 2017. Sherman vs. Goliath? Tackling the conglomerate dominance problem in emerging and small economies—Hong Kong as a case study. *Northwestern Journal of International Law & Business*. 37(1): 35-105.
- Cho, S., and Lim, K.M. 2018. Tunneling by related-party transactions: Evidence from Korean conglomerates. *Asian Economic Journal*. 32(2): 147-164.
- Christensen, H.K., and Montgomery, C.A. 1981. Corporate economic performance: Diversification strategy versus market structure. *Strategic Management Journal*, 2(4): 327-343.
- Çolak, G., and Whited, T.M. 2007. Spin-offs, divestitures, and conglomerate investment. *Review of Financial Studies*, 20(3): 557-595.
- Collis, D.J., and Montgomery, C.A. 2005. *Corporate Strategy: A Resource-Based Approach*, NY: Irwin/ McGraw-Hill.
- Collis, D.J., Young, D., and Goold, M. 2007. The size, structure, and performance of corporate headquarters. *Strategic Management Journal*, 28(4): 383-405.
- Datta, D.K. 1991. Organizational fit and acquisition performance—Effects of post-acquisition integration. *Strategic Management Journal*, 12(4): 281-297.
- Davis, G.F., Diekmann, K., and Tinsley, C. 1994. The decline and fall of the conglomerate firm in the 1980s: The deinstitutionalization of an organizational form. *American Sociological Review*, 59, 547–570.

- Feldman, E. 2014. Legacy divestitures: Motives and implications, *Organization Science*, 25 (3): 815-832.
- Galbraith, J.R. 1973. *Designing Complex Organizations*, New York: Addison Wesley.
- Geringer, J.M., Beamish, P.W., and Dacosta, R.C. 1989. Diversification strategy and internationalization—implications for MNE performance. *Strategic Management Journal*, 10(2): 109-119.
- Gilson, S.C., Healy, P.M., Noe, C.F., and Palepu, K.G. 2001. Analyst specialization and conglomerate stock breakups. *Journal of Accounting Research*, 39(3): 565-582.
- Goel, A.M., Nanda, V., and Narayanan, M.P. 2004. Career concerns and resource allocation in conglomerates. *Review of Financial Studies*. 17(1): 99-128.
- Gopalan, R., and Xie, K. 2011. Conglomerates and industry distress. *Review of Financial Studies*. 24(11): 3642-3687.
- Gort, M. 1962. *Diversification and Integration in American Industry*, Westport, CT: Greenwood Press.
- Hall, D.J., and Saias, M.A. 1980. Strategy follows structure. *Strategic Management Journal*, 1(2): 149-163.
- Harrigan, K.R. 1979. *Strategies for Declining Businesses*, Harvard Business School. Unpublished doctoral dissertation.
- Harrigan, K.R. 1980. *Strategies for Declining Businesses*, Lexington, MA: D.C. Heath & Company, Lexington Books. Reprinted in 2003 as *Declining Demand, Divestitures and Corporate Strategy*, Frederick, MD: Beard Group.
- Harrigan, K.R. 1983. *Strategies for Vertical Integration*, Lexington, MA: D.C. Heath & Company, Lexington Books. Reprinted in 2003 as *Vertical Integration, Outsourcing and Corporate Strategy*, Frederick, MD: Beard Group.
- Harrigan, K.R. 1985. Strategies for interfirm transfers and outside sourcing, *Academy of Management Journal*, 28(4): 914-925.
- Harrigan, K.R. 2013. Sustainable impact: Do “they” cite strategy research? Presentation at Strategic Management Society, October 1, 2013.

- Harrison, J.S., Hitt, M.A., Hoskisson, R.E., and Ireland R.D. 1991. Synergies and post-acquisition performance—Differences versus similarities in resource allocations. *Journal of Management*, 17(1): 173-190.
- Hatten, K.J. 1974. *Strategic Models in the Brewing Industry*. Purdue University. Unpublished doctoral dissertation.
- Hatten, K.J., and Schendel, D.E. 1977. Heterogeneity within an industry—Firm conduct in United-States brewing industry, 1952-71. *Journal of Industrial Economics*, 26(2): 97-113.
- Hill, C.W.L., and Hansen, G.S. 1991. A longitudinal-study of the cause and consequences of changes in diversification in the United-States pharmaceutical-industry 1977-1986. *Strategic Management Journal*, 12(3): 187-199.
- Hill, C.W.L., Hitt, M.A., and Hoskisson, R.E. 1992. Cooperative versus competitive structures in related and unrelated diversified firms. *Organization Science*, 3(4): 501-521.
- Hisey, K.B., and Caves, R.E. 1985. Diversification strategy and choice of country—Diversifying acquisitions abroad by United-States multinationals, 1978-1980. *Journal of International Business Studies*, 16(2): 51-64.
- Hitt, M.A., Hoskisson, R.E., and Kim, H. 1997. International diversification: Effects on innovation and firm performance in product-diversified firms. *Academy of Management Journal*, 40(4): 767-798.
- Hitt, M.A., Hoskisson, R.E, Ireland, R.D., and Harrison J.S. 1991. Effects of acquisitions on research-and-development inputs and outputs. *Academy of Management Journal*, 34(3): 693-706.
- Hitt, M.A., and Ireland, R.D. 1986. Relationships among corporate level distinctive competences, diversification strategy, corporate structure and performance. *Journal of Management Studies*, 23(4): 401-416.
- Hochmuth, M.S. 1972. *The Effect of Structure on Strategy: The Government Sponsored Multinational Joint Venture*. Harvard Business School. Unpublished doctoral dissertation.

- Hoskisson, R.E. 1987. Multidivisional structure and performance—the contingency of diversification strategy. *Academy of Management Journal*, 30(4): 625-644.
- Hoskisson, R.E., Harrison, J.S., and Dubofsky, D.A. 1991. Capital-market evaluation of M-form implementation and diversification strategy. *Strategic Management Journal*, 12(4): 271-279.
- Hoskisson, R.E., Hitt, M.A., Johnson, R.A., *et al.* 1993. Construct-validity of an objective (entropy) categorical measure of diversification strategy. *Strategic Management Journal*, 14(3): 215-235.
- Hubbard, R.G., and Palia, D. 1998. A re-examination of the conglomerate merger wave in the 1960s: An internal capital markets view. NBER Working Paper No. 6539.
- Ickis, J.C. 1978. *Strategy and Structure in Rural Development*. Harvard Business School. Unpublished doctoral dissertation.
- Khanna, T., and Palepu, K. 1999. The right way to restructure conglomerates in emerging markets. *Harvard Business Review*, 77(4): 125-134.
- Khanna, T. and Rivkin, J.W. 2001. Estimating the performance effects of business groups in emerging markets. *Strategic Management Journal*, 22(1): 45-74.
- Kim, W.C., Hwang, P., and Burgers, W.P. 1989. Global diversification strategy and corporate profit performance. *Strategic Management Journal*, 10(1): 45-57.
- Kuppuswamy, V., and Villalonga, B. 2016. Does diversification create value in the presence of external financing constraints? Evidence from the 2007-2009 financial crisis. *Management Science*, 62(4): 905-923.
- Lang, L.H.P., and Stulz, R.M. 1994. Tobin's q, corporate diversification, and firm performance. *Journal of Political Economy*, 102(6): 1248-1280.
- Lawrence, P.R., and Lorsch, J.W. 1967. *Organization and Environment*, Boston: Harvard Business School Publishing.
- Lenz, R.T. 1980. Environment, strategy, organization structure, and performance: Patterns in one industry. *Strategic Management Journal*, 1(3): 209-226.

- Lewellen, W. 1971. A pure financial rationale for the conglomerate merger. *Journal of Finance*, 26(2): 521-537.
- Lifson, T.B. 1979. The Sogo Shosha: Strategy Structure, and Culture. Harvard Business School. Unpublished doctoral dissertation.
- Lubatkin, M., Merchant, H., and Srinivasan, N. 1993. Construct-validity of some unweighted product-count diversification measures. *Strategic Management Journal*, 14(6): 433-449.
- Lynch, H.H. 1971. *Financial Performance of Conglomerates*, Boston: Harvard Business School Publishing.
- Maksimovic, V., and Phillips, G. 2002. Do conglomerate firms allocate resources inefficiently across industries? Theory and evidence. *Journal of Finance*, 57(2): 721-767.
- Manral, L., and Harrigan, K.R. 2016. The performance implications of demand-side diversification: Evidence from the US telecommunications sector, 1990-1996. *Journal of Strategic Marketing*, 24(7): 551-577.
- Manral, L., and Harrigan, K.R. 2018a. Corporate advantage in customer-centric diversification. *Journal of Strategic Marketing*, 26(6): 498-519
- Manral, L., and Harrigan, K.R. 2018b. The logic of demand-side diversification: Evidence from the US telecommunications sector, 1990-1996. *Journal of Business Research*, 85: 127-141.
- Markham, J.W. 1973. *Conglomerate Enterprise and Public Policy*, Boston: Harvard Business School Publishing.
- Markides, C.C. 1992. Consequences of corporate refocusing: Ex ante evidence. *Academy of Management Journal*, 35(2): 398-412.
- Markides, C.C. 1995. Diversification, restructuring and economic performance. *Strategic Management Journal*, 16(2): 101-118.
- Mason, R.H., and Goudzwaard, M. 1976. Performance of conglomerate firms: A portfolio approach. *Journal of Finance*, 31: 39-48.
- Montgomery, C.A. 1985. Product-market diversification and market power. *Academy of Management Journal*, 28(4): 789-798.

- Montgomery, C.A. 1994. Corporate diversification. *Journal of Economic Perspectives*, 8(3): 163-178
- Montgomery, C.A., and Singh, H. 1984. Diversification strategy and systematic-risk. *Strategic Management Journal*, 5(2): 181-191.
- Menz, M., Kunisch, S., and Collis, D.J. 2015. The corporate headquarters in the contemporary corporation: Advancing a multimarket firm perspective. *Academy of Management Annals*, 9(1): 633-714.
- Nayyar, P.R. 1992. On the measurement of corporate diversification strategy—evidence from large United-States service firms. *Strategic Management Journal*, 13(3): 219-235.
- Palepu, K. 1985. Diversification strategy, profit performance and the entropy measure. *Strategic Management Journal*, 6(3): 239-255.
- Pavan, R.D.J. 1972. *Strategy and Structure of Italian Enterprise*. Harvard Business School. Unpublished doctoral dissertation.
- Pitts, R.A. 1977. Strategies and structures for diversification. *Academy of Management Journal*, 20(2): 197-208.
- Pooley-Dyas, G. 1972. *The Strategy and Structure of French Industrial Enterprise*. Harvard Business School. Unpublished doctoral dissertation.
- Porter, M.E. 1980. *Competitive Strategy: Techniques for Analyzing Industries and Competitors*. NY: Free Press.
- Rajan, R., Servaes, H., and Zingales, L. 2000. The cost of diversity: The diversification discount and inefficient investment. *Journal of Finance* 55: 35–80.
- Rostow, W.W. 1960. *The Stages of Economic Growth: A Non-Communist Manifesto*, Cambridge: Cambridge University Press.
- Rudolph, C., and Schwetzler, B. 2014. Mountain or molehill? Downward biases in the conglomerate discount measure. *Journal of Banking & Finance*. 40: 420-431.
- Rumelt, R.P. 1972. *Strategy, Structure and Economic Performance*, Harvard Business School. Unpublished doctoral dissertation.

- Rumelt, R.P. 1974. *Strategy, Structure and Economic Performance*, Boston: Harvard Business School Publishing.
- Rumelt, R.P. 1982. Diversification strategy and profitability. *Strategic Management Journal*, 3(4): 359-369.
- Sakhartov, A.V. 2017. Economies of scope, resource relatedness, and the dynamics of corporate diversification. *Strategic Management Journal*, 38(11): 2168-2188.
- Sakhartov, A.V., and Folta, T.B. 2014. Resource relatedness, redeployability, and firm value. *Strategic Management Journal*, 35(12): 1781–1797.
- Sakhartov, A.V., and Folta, T.B. 2015. Getting beyond relatedness as a driver of corporate value. *Strategic Management Journal*, 36(13):1939–1959.
- Scharfstein, D.S., and Stein, J.C. 2000. The dark side of internal capital markets: Divisional rent-seeking and inefficient investment. *Journal of Finance* 55: 2537–2564.
- Scott Jr., J.H. 1977. On the theory of conglomerate mergers. *Journal of Finance* 32(4): 1235-1250.
- Servan-Schreiber, J.J. 1967. *The American Challenge*. NY: Scribner.
- Shapiro, D.L. 1970. Conglomerate mergers and optimal investment policy. *Journal of Financial & Quantitative Analysis*. 4(5): 643-656.
- Singh, H., and Montgomery, C.A. 1987. Corporate acquisition strategies and economic-performance. *Strategic Management Journal*, 8(4): 377-386.
- Stein, J.C. 1997. Internal capital markets and the competition for corporate resources. *Journal of Finance*, 52: 111–133
- Suzuki, Y. 1980. The strategy and structure of top 100 Japanese industrial enterprises 1950-1970. *Strategic Management Journal*, 1(3): 265-291.
- Tallman, S., and Li, J.T. 1996. Effects of international diversity and product diversity on the performance of multinational firms. *Academy of Management Journal*, 39(1): 179-196.
- Thanheiser, H.T. 1972. *Strategy and Structure of German Industrial Enterprise*. Harvard Business School. Unpublished doctoral dissertation.
- Thomas, H. 1983. Risk analysis and the formulation of acquisition diversification strategies. *Long Range Planning*, 16(2): 28-37.

- Thompson, R.S. 1984. Diversification strategy and systematic-risk—an empirical inquiry. *Managerial and Decision Economics*, 5(2): 98-103.
- Vachani, S. 1991. Distinguishing between related and unrelated international geographic diversification—A comprehensive measure of global diversification. *Journal of International Business Studies*, 22(2): 307-322.
- Vanneste, B.S. 2017. How much do industry, corporation, and business matter, really? A meta-analysis. *Strategy Science*, 2(2): 121–139.
- Villalonga, B. 2004. Does diversification cause the "diversification discount"? *Financial Management*, 33(2): 5-27.
- Wrigley, L. 1970. Divisional autonomy and diversification. Unpublished doctoral dissertation. Boston: Harvard Business School.