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Diversification Strategy and Profitability*

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Summary

Prior work has shown an association between diversification strategy and profitability. This paper replicates that association using more recent and complete data and goes on to investigate the sources of the association. Theoretical arguments are advanced which predict the association which will remain once the effects of varying industry profitability are removed. Empirical tests verify this prediction and permit the discrimination between the effects of industry and diversification strategy on profitability.

In the twenty-five years following World War II the modal form of large corporate enterprise in the U.S. underwent a dramatic shift: between 1949 and 1974 the proportion of the largest 500 industrial firms that were substantially diversified more than doubled, rising from 30 to 63 per cent. An earlier investigation (Rumelt, 1974) documented part of this change and showed that firms varied not only in terms of absolute product diversity but also in the patterns of relationships they established among different lines of business. Interestingly, it was also found that corporate profitability differed significantly across groups of firms following different 'strategies' of diversification. The highest levels of profitability were exhibited by those having a strategy of diversifying primarily into those areas that drew on some common core skill or resource. The lowest levels were those of vertically integrated businesses and firms following strategies of diversification into unrelated businesses.

This paper reports on extensions to the earlier study and on a new empirical investigation into the sources of these performance differences. Using an enlarged sample and more detailed data on the timings of shifts between strategic categories, the earlier results are replicated for a more recent time period. Turning to the question of what produces the observed differences in profitability, a theoretical explanation of product diversity and degrees of 'relatedness' is presented. This theory predicts that once the effects of varying industry profitability are controlled, a particular pattern of category effects will remain. An empirical test of this prediction is performed and its implications discussed.

CATEGORIES OF DIVERSIFICATION STRATEGY

The traditional approach to measuring an enterprise's product–market diversity relies heavily on the SIC definitions of 'product class' (typically using 4-digit 'industry' codes). Given the

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number N of such classes in which a firm is active and the fraction p_j of the firm's activity attributable to class j, a wide variety of diversification indices may be created. Gort's (1962) composite index, for example, was defined as $D_3 = N/\max(p_j)$ and Berry's (1975) Herfindahl-type measure was $H = 1 - \sum_j p_j^2$.

Such measures have the advantages of concreteness and replicability, but all who have used them have noted their shortcomings. Most serious are the varying degrees of breadth in the SIC classes and the implicit assumption of equal 'dissimilarity' between distinct SIC classes. Instead of a single index of diversity this study used a set of seven categories of diversification 'strategy'. Measures of this type were introduced by Wrigley (1970). The categories used here are a slightly modified version of those defined and tested in my previous study (Rumelt, 1974). They were developed through the examination of the twenty-year diversification histories of 246 large industrial firms and have been used by a number of other investigators.[1]

Taking a *business unit* to be a product, product line, or set of product lines that have strong market interdependencies, a firm's specialization ratio, R_s, is the fraction of revenues accounted for by its largest single business unit. A firm's *related-core ratio*, R_c, is the fraction of its revenues attributable to its largest group of businesses which share or draw on the *same* common core skill, strength, or resource. The *related ratio*, R_r, is the fraction of a firm's revenues attributable to its largest group of *somehow* related businesses. This is defined as a group of businesses such that each is related to at least one other in the group but which need not exhibit any single common skill or resource. Finally, a firm's vertical ratio R_v is the fraction of its revenues attributable to its largest group of products, joint-products, and by-products associated with the processing of a raw material through a set of stages. Note that $R_s < R_v \leq R_c \leq R_r$. If these ratios could be measured with accuracy for each firm it would be possible to use them as a multivariate description of diversity. Unfortunately, firms do not report the breakdown of their businesses with sufficient precision or comparability to permit the precise measurement of these ratios. Nevertheless, it is almost always possible to make a good estimate as to whether a ratio falls above or below some critical level. Thus, the categories are defined as follows:

Symbol	*Category*	*Ratio specification*
SB	Single business	$R_s \geq 0.95$
DV	Dominant vertical	$R_v \geq 0.70$
DC	Dominant constrained	$0.95 < R_s < 0.7$; $R_c > (R_r + R_s)/2$
DLU	Dominant linked-unrelated	$0.95 < R_s < 0.7$; $R_c < (R_r + R_s)/2$
RC	Related constrained	$R_s < 0.70$; $R_r > 0.70$; $R_c > (R_r + R_s)/2$
RL	Related linked	$R_s < 0.70$; $R_r > 0.70$; $R_c < (R_r + R_s)/2$
UB	Unrelated business	$R_r < 0.70$

In making judgements as to the relatedness of business units, particular attention was paid to the absence or existence of shared facilities, common selling groups, and other tangible evidence of attempts to exploit common factors of production. For a much more complete description of the categories, the measurement methodology and examples of its application, see the original study (Rumelt, 1974). The category system presented here differs from the original in two respects: (1) the previous distinction between dominant linked and the dominant unrelated sub-groups has been eliminated, both types of firms being placed in the

[1] See, for example, Vancil (1979), Montgomery (1979), Bettis, Hall, and Prahalad (1978), Dundas and Richardson (1980), and Grinyer and Yasai-Ardekani (1981).

dominant linked-unrelated sub-group, and (2) distinctions among different types of unrelated business firms have been eliminated. The distinction between acquisitive and other types of conglomerates was eliminated in order to avoid defining categories in terms of observed growth rates or other measures of financial performance.

THE SAMPLE POPULATION

The population of interest is the largest 500 industrial corporations in the United States as listed annually by *Fortune*. The sample population was constructed by randomly selecting 100 of the largest 500 firms in 1949, 1959, 1969, and 50 of the largest in 1974 (the first three samples being separated by ten years and the last by five years). Seventy firms were represented in more than one sample and seven were dropped because of lack of adequate descriptive information, resulting in a sample population of 273 different corporations.

The diversification history of each firm was studied over the period 1949–1974 and it was assigned to one of the seven strategic diversification categories in each year it was a member of the largest 500.[2] Table 1 displays the estimated percentage of the largest 500 industrials falling in each diversification category at five year intervals.

Table 1. Estimated percentage of *Fortune* 500 in each strategic category

	1949	1954	1959	1964	1969	1974
Single business	42.0	34.1	22.8	21.5	14.8	14.4
Dominant vertical	12.8	12.2	12.5	14.0	12.3	12.4
Dominant constrained	14.2	15.0	14.4	13.6	9.2	6.2
Dominant linked-unrelated	1.2	2.4	4.4	4.8	3.6	4.0
Related constrained	16.9	22.3	28.4	24.2	21.1	19.8
Related linked	8.8	9.3	10.2	13·2	20.3	22.5
Unrelated business	4.1	4.7	7.3	8.7	18.7	20.7
Total	100.0	100.0	100.0	100.0	100.0	100.0

What is most striking about these data is the steady decline in the number of single business firms among the largest 500 and the rapid growth in the related-linked and unrelated business categories. Detailed examination of the patterns of change reveals that about one-half is due to strategic change by firms within the top 500 and one-half is brought about by shifts in the membership of the 500. Thus, the data reveal that during the 1950s diversifiers tended to adopt related-constrained strategies, but that during the 1960s there was a shift to the use of the related-linked posture. Also, it is interesting to note that the rapid growth of the unrelated business category during the 1960s did not continue into the 1970s.

PROFITABILITY AND DIVERSITY

Of the firms in the sample, 205 were still in existence in 1974 and financial data on them for the period 1955–1974 were collected from the *Compustat* data tape. The measure of profitability used

[2] A list of the firms in the sample together with their diversification and organization structure histories for 1949–1974 is available upon request (Rumelt, 1978).

was return on invested capital, defined as $(Y + I)/K$, where Y is net income after taxes (but before preferred dividends), I is the interest expense on long-term debt, and K is the sum of the book values of owner's equity and long-term debt. For the purposes of estimating category effects each twenty-year history was divided into four five-year time blocks. Retaining only those observations in which the firm's diversification strategy remained constant over the five-year time block, the following model was estimated:

$$R_i = \sum_{j=1}^{7} a_j S_{ij} + \sum_{k=1}^{4} b_k T_{ik} + \tilde{e}_i \tag{1}$$

Here R_i is the ith observed five-year average return on capital, a_j are the seven category effects, b_k are the four time block effects, S_{ij} are dummy variables set to one if the ith observation is of strategy j and zero otherwise, T_{ik} are dummy variables set to one if the ith observation is of time block k and zero otherwise, and $\tilde{e}_i$ is the stochastic disturbance term. To eliminate indeterminancy in the estimates of a_j and b_k the constraints $b_1 = 0$ and $\sum a_j N_j = 0$ were introduced, where N_j is the number of observations of strategy j. Finally, the model was re-estimated with the inclusion of an interaction term between each time block k and each strategy j. The main results are shown in Tables 2 and 3.

Table 2. Estimates of category effects

Category	Estimated category effect 1955–1974	Uncertainty of estimate	Observations
SB	0.48	0.64	78
DV	−1.70[a]	0.68	132
DC	0.86	0.84	56
DLU	−1.05	1.11	24
RC	1.39[b]	0.66	150
RL	0.74	0.74	93
UB	−1.94[a]	0.81	59
Total	0.00		592

Significance tests on category effects test the hypothesis that each is zero (i.e., that the absolute category effect is equal to the sample average).

[a] Level of significance = 99 per cent.
[b] Level of significance = 95 per cent.

The analysis of variance shows that time interactions were not significant; the linear model described in equation (1) provides an adequate fit. It explains 10.8 per cent of the variance in return on capital and the categories themselves explain 6.9 per cent of the variance. The categories were constructed to distinguish among managerially meaningful patterns of product diversity; although they are clearly not powerful predictors of relative profitability, significant effects have been detected. Additionally, they do display a much stronger association with profitability than traditional measures of diversity. In regressing return in 1960 and 1965 against 4-digit Herfindahl measures of diversification provided by Berry (1975), only 0.1 per cent of the variance was explained and the slightly negative coefficient of diversity was not statistically significant.

The observed pattern of category differences is quite similar to that observed in the original study (Rumelt, 1974). The dominant vertical and unrelated business categories show levels of

Table 3. Analysis of variance of category effect model

Source	d.f.	R^2	F-ratio	σ_e
Categories	6	0.069	7.50[a]	
Time blocks	3	0.039	8.48[a]	
Linear model	9	0.108	7.83[a]	
Error	582	0.892		4.73
Linear model	9	0.108	7.93[a]	
Time interactions	18	0.039	1.43	
Error	564	0.853		4.69

[a] Level of significance = 99 per cent.
[b] Level of significance = 95 per cent.

profitability significantly below those of the other categories. The significantly lower rate of return obtained by conglomerate (unrelated business) firms has been verified by Holzmann, Copeland, and Hayya (1975). As before, the related constrained group is the most profitable.

THEORETICAL DISCUSSION

Are the differences among the categories essentially due to hidden industry effects? In particular, are the industries in which related constrained firms participate simply more profitable than those in which unrelated businesses have invested? This section develops a theoretical framework that allows the investigation of this question.

Diversification takes place when the firm expands to make and sell products or a product line having no market interaction (technically, having zero cross price-elasticity) with each of the firm's other products. The lack of interaction in the product market means that explanations of diversification must focus on the economies of shared factors of production and on the impacts of diversity on organizational efficiency. A simple theory of product diversity may be created by direct analogy to the neoclassical theory of firm size. Taking this viewpoint, the appropriate level of product diversity is that which balances *economies of scope* with diseconomies of organizational scale.[3]

Economies of scope will occur if (1) there are increasing returns (or indivisibilities) to scale in the use of one or more essential factors of production, (2) transaction costs prevent an efficient market in the relevant factors, forcing integration, and (3) there are limits on obtaining increased factor utilization by expanding the output of any single end-product. Factors of production that enable diversity because of increasing returns and transaction costs will be called *core factors*. All three of these conditions must be met if there are to be economies of scope. Without returns to scale in a factor there can be no gain in its expanded use. If there were no transaction costs, that factor could be purchased in a market at its marginal cost. Finally, if a firm can exhaust all economies of scale in the core factors with any single commodity product, it need not resort to diversity to obtain increased utilization of the core factor. The limitations on efficient expansion of single products can be due to product markets that are

[3] If there are no diseconomies associated with increased product diversity, there will be no optimal level of scope. Beyond the point at which returns to scope are exhausted, the scope of the firm would be indeterminate. Diseconomies of scope are most likely to arise through control loss, which can be viewed as the failure of the internal allocation and control system to perform better than the market. However, as in the neoclassical theory of firm size, it is virtually impossible to empirically distinguish the case of constant returns from that of eventual diseconomies.

differentiated, oligopolistic, or otherwise constrained. They can also arise when utilization rates are insensitive to the rate of output. For example, the demand for performance review and control is more strongly dependent on the number of business units controlled than on their size.

The logic developed thus far has ignored risk. Although a decrease in non-systematic risk is the rationale for portfolio diversification of marketable securities, there is no evidence that firms can create value through the simple ownership of diverse assets. However, capital markets do more than allocate risk; although there is ample evidence that capital markets (in the U.S.) are price-efficient, diversified firms might still be able to exploit allocative or control failures.[4] In particular, the headquarters office of a diversified firm may well be superior to capital markets in withdrawing capital from failing businesses and in correcting management inadequacies. For example, Grossman and Hart (1980) have shown that free-rider problems considerably diminish the rewards available to those who attempt to profit by buying control of poorly managed public firms and turning them around. These problems would also affect the diversified firm's ability to do the same but would not interfere with post-acquisition control efficiency.[5]

The degree to which a firm's businesses are 'related' turns on the nature of the core factor they share and also on the degree to which the association between the factor and businesses using it is *idiosyncratic*. According to Williamson (1979), idiosyncratic exchange is marked by investments and expenses which are non-marketable—they are specific to the partners involved. Very idiosyncratic transactions tend to involve task-specific investments in intangible human capital, while nonspecific transactions can be made with market-like arms length arrangements. When a business's transactions with a core factor are idiosyncratic, the same will be true of transactions undertaken by other businesses sharing the same core factor. Therefore, idiosyncracy may be regarded as a property of the core factor and of the cluster of businesses it supports. Businesses which share a highly idiosyncratic core factor will be more similar to one another than businesses sharing a non-specific core factor; they will appear to be tightly related. By contrast, the administrative core factors used by unrelated business firms must be close to nonspecific if they are to encompass a wide diversity of business types and be able to quickly absorb new acquisitions.

The sources of category effects

Return on capital (ROC) is a very imperfect measure of efficiency and is biased by accounting methods and patterns of capital disbursement and use that vary systematically across industries. One important bias is that towards observing high levels of return in industries and firms where a substantial fraction of capital is intangible (e.g., brand-name capital, specialized human skills). By contrast, in industries where the preponderance of investment is in marketable plant and equipment (capital intensive heavy industry), measured rates of return are low. Thus, because highly idiosyncratic core factors tend to induce relatedness among the sharing businesses and also signal the presence of intangible assets, *there will be an association (mediated by asset tangibility) between core factor idiosyncracy and observed ROC*. In particular, this association would explain the low profitability of the dominant vertical

[4] If there are substantial costs to bankruptcy, diversification can be justified apart from its impact on beta. Furthermore, a less risky internal environment may enable more efficient long-term employment arrangements with key executives. Small review and planning groups may actually work more efficiently if the results of the businesses they review are uncorrelated with one another.

[5] Dundas and Richardson (1980) discuss these categories from a market-failures perspective and provide a more complete discussion of the administrative implications.

category. Although these firms exhibit strong core factors, forcing product relationships, the factors are quite nonspecific and take the form of tangible capital-intensive assets.

A final piece of the theoretical puzzle is the concept of uncertain imitability as introduced by Lippman and Rumelt (1981). According to this view, a persistent dispersion in the efficiencies of competing firms can stem from ambiguity and uncertainty surrounding the creation of key portions of the firm's productive processes or managerial system. This uncertainty prevents the homogenization of the industry and acts as a barrier to new entry. In particular, the well established[6] association between market share and profitability may be explained in terms of uncertain imitability without recourse to economies of scale arguments. This theory and empirical results[7] suggest that higher profitability is not *caused* by larger market share; rather, both are the joint outcomes of inherently uncertain processes.

Note that if share does not 'cause' profitability, both being joint products of unobserved entrepreneurship or luck, then differences in share will correlate with, but not explain, differences in return. From this point of view, for example, Montgomery's (1979) demonstration of an association between diversification strategy and market share that parallels the association with return does not 'explain' either pattern. In what follows a different tack is taken. An argument is offered that the observed properties of firms are correlated in principle so that portions of the category effects may be deduced by examining the selection biases imposed by sampling only large firms and by the category definitions themselves.

If the category effects were due purely to industry connected measurement biases (e.g. intangible capital), they would vanish if a proper control for industry membership were introduced. If every industry has a characteristic or average return on capital, R_i being the value for the ith industry, then we may define the jth firm's expected return $\hat{R}_j$ by

$$\hat{R}_j = \sum_i p_{ij} R_i \tag{2}$$

where p_{ij} is the fraction of the jth firm's capital invested in the ith industry. Defining the profitability premium $P \equiv \mathrm{ROC} - \hat{R}$, consider an 'imaginary' continuous variable regression of the elements of diversification strategy on P:

$$P = b_0 + b_1 R_s + b_2 R_c + b_3 R_r + b_4 R_v + \tilde{e} \tag{3}$$

Here the b_i are regression coefficients and R_s, R_c, R_r, and R_v are the specialization, core, related, and vertical ratios. These regression coefficients would reveal the impacts of different diversification strategies on profit rate premiums. In what follows the signs of the b_i are deduced and, from them, the signs of the category effects.

Since it has been argued that the performance of the dominant vertical group is an industry matter, the expectation is that the adjustment for $\hat{R}$ will reduce that category effect to zero. Since there will be little idiosyncracy or uncertain imitability operating in these mature capital intensive environments, the expectation is that this category will have a premium of zero.

Given that the population of interest is the *Fortune* 500, a number of associations can be immediately deduced about categories other than dominant vertical. If two firms are the same size, the expected average market share of the less diversified is larger. Thus, because we are studying only large firms, there is an implied positive association between R_s and average

[6] Shepherd (1972), Gale (1972). Also see Schoeffler, Buzzell, and Heany (1974).
[7] See Rumelt and Wensley (1981).

market share and, therefore, profitability. Letting the symbol of a strategic category stand for its coefficient, the implied ordering of industry corrected category coefficients from this source is

$$SB > DC > [RC, RL, UB] \tag{4}$$

Both share and profitability signal the presence of intangible rent-yielding assets. *Ceteris paribus*, factors of production that are more idiosyncratic and which have heavier human capital components will be more subject to uncertain imitability. Consequently, where uncertain imitability in a core factor is important there will be a larger dispersion in core factor quality and *more efficient core factor processes will generate higher levels of return and will tend to be associated with larger levels of core factor output and, therefore, a greater number of businesses sharing that core factor.* Since the core ratio measures the span of a core factor in relation to firm size and, given that we are looking at large firms, a larger value of R_c tends to signal the presence of greater and more idiosyncratic single-factor economies of scope and larger measured premiums. The expected ordering of industry corrected category coefficients from this source is

$$[DC, RC] > [SB, RL, UB] \tag{5}$$

Finally, the same argument applies in a diluted form to R_r. Larger values of this ratio, given that we are looking at large firms, indicate more core factors and, given uncertain imitability, this suggests a positive association with P. The implied ordering of category coefficients from this source is

$$[RC, RL] > [SB, DC, UB] \tag{6}$$

These ordering relationships contain inconsistencies and therefore do not imply an unambiguous ordering of all the category coefficients. However, there are five internally consistent pair-wise orderings. Combining these consistent orderings with the hypothesis that the adjusted effect of the DV category will be zero, we have the following single hypothesis:

$$\begin{gathered} DV = 0 \\ [SB, DC] > UB \\ RC > RL > UB \end{gathered} \tag{7}$$

This hypothesis is, of course, satisfied for the category estimates presented in Table 2. What is being predicted, however, is that these orderings will be preserved when ROC is adjusted by $\hat{R}$, a measure of expected industry return.

INDUSTRY ADJUSTED ESTIMATES

Data on average industry return on capital were obtained from the IRS Source Books for the period 1970–1973. In order to compute values of $\hat{R}$ for each firm, information on the industry commitments of the firms in the sample was gathered from a wide variety of sources: annual reports, 10K statements, prospectuses, investment analyst's reports, *Moody's*, and direct inquiries. Despite these efforts, the data gathered could scarcely be termed 'hard' or precise. Judgments had to be made, interpolations were required, and more aggregate definitions of

'industry' had to be used in many cases. Still, no better method was available.[8] Estimates of $\hat{R}$ were made for 187 firms.[9]

Table 4 displays the estimates by strategic category of ROC, $\hat{R}$, the return premium $P = \text{ROC} - \hat{R}$, and the gap $P - P_{\text{UB}}$ between each premium and that of the unrelated business category. Of the variance in ROC explained by the strategic categories, about 21 per cent can be attributed to 'industry effects'. After adjusting for industry participation, a pattern of declining profitability premiums with increasing diversity emerges, with the SB and UB premiums differing significantly from each other and from the population average. It was

Table 4. Return, expected return, and the return premium

Category	Observations	ROC	$\hat{R}$	P	$P - P_{\text{UB}}$
SB	23	10.4	9.30	1.64[b]	3.53[a]
DV	33	8.48[b]	8.80[a]	−0.32	1.57[b]
DC	12	11.78	9.83	1.96[b]	3.85[a]
DLU	9	10.97	9.96	1.02	2.91[b]
RC	41	11.63[a]	10.68[a]	0.95	2.85[a]
RL	38	9.33	9.77	−0.44	1.45
UB	31	7.55[a]	9.44	−1.89[a]	—
Total/average	187	9.82	9.70	0.12	
Estimated σ		4.34	2.15	3.88	
F-statistic	[6, 180]	3.98[a]	2.60[b]	3.17[a]	

Significance tests for ROC, $\hat{R}$, and P test hypothesis that value displayed is equal to the population mean. Significance tests for $P - P_{\text{UB}}$ test hypothesis that value displayed is zero.

[a] Level of significance = 99 per cent.
[b] Level of significance = 95 per cent.

theorized that such a pattern would occur, the reason being an underlying implicit positive association between specialization and market share and between relatedness and factor idiosyncracy and importance.

Since hypothesis (7) contains multiple inequalities, it cannot be tested in a single step with ordinary methods. The sub-hypotheses DC = 0, SB > UB, DC > UB, and RC > UB are each supported at the 0.01 level of significance. As hypothesized, the estimate of RL falls between RC and UB, and the separate null hypotheses RL = RC and RL = UB can be rejected at the 0.1 level. Finally, the composite null hypothesis RC = RL = UB receives an F-statistic of 4.97 [2,180] and can be rejected at the 0.01 level. Accordingly, it may be concluded that the observed pattern of category effects does not differ importantly from the prediction.

DISCUSSION

Although the predictions dealt with the pattern of premiums, the expected returns, or industry effects, are of interest in their own right. According to the F-statistic, the observed $\hat{R}$s are not.

[8] According to Montgomery (1979), EIS provides, at a substantial cost, data on the industry participations of large firms. Unfortunately, these data were not available for the present study.

[9] Forty-three firms were dropped from the sample population because of lack of adequate data. However, sixty-six new firms were added for which good financial and product breakdown data were available. Consequently, the sample used in this portion of the study does not reflect the true population category frequencies, but should nevertheless provide unbiased estimates of the category effects.

homogeneous across the categories ($p = 0.05$); the major contributors to this result are the low $\hat{R}$ of the DV group and the high $\hat{R}$ of the RC category. The industry effect associated with the dominant-vertical strategy was anticipated, but that of the RC group was not.

These data show that the high ROC of the RC group was primarily an industry effect and that RC firms perform as would be expected, given the industries in which they participate. This agrees with the results obtained by Montgomery (1979) and those reported by Christensen and Montgomery (1981). However, there remains the question of why RC firms are concentrated in high-profit industries. Are they uniquely able to penetrate these industries? Does the RC strategy act as a barrier to entry? Or is this industry effect simply another type of measurement bias? New research on these and related questions is needed; theories of industry structure have almost universally ignored the fact that the modal form of enterprise is the diversified firm. Rather than explain category differences as due to industry effects, perhaps it is time to consider the diversification strategies of participants as an aspect of industry structure.

CONCLUSIONS

The theory of product diversity developed in this paper draws on concepts of factor-based economies of scope, idiosyncratic investment, and uncertain imitability. Its predictions as to the pattern of profitability *premiums* have been supported in an empirical test. In substance, the theories and predictions drew heavily on two opposing biases: (1) within the largest 500 firms (those that are less diverse will tend to have larger average market shares), and (2) within the largest 500 firms (those exhibiting larger clusters of related businesses will also be those which have developed unusually productive core factors). Biases of this nature will influence all studies restricted to large firms and have no normative implications.

Much remains to be understood about the relationships among diversification strategy, industry, and performance. However, in estimating the returns from future research, it is worth noting that even more remains to be understood about why firms diversify and the proper management of different patterns of diversity. The core-factor theory advanced here, for example, does not explain why so many related constrained firms have changed their strategies and moved into unrelated business postures. An adequate theory of this phenomenon would have to explain not only why unrelated business diversification can be an attractive strategy, but also why it is eschewed by so many firms.

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