SEGMENT DEFINITION FOR FINANCIAL REPORTING

BY DIVERSIFIED FIRMS

DISSERTATION

Presented to the Graduate Council of the
North Texas State University in Partial
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For the Degree of

DOCTOR OF PHILOSOPHY

By

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Both revenues and earnings of diversified firms are increasingly being reported, to the government and the public, on a subentity basis. Adequate criterial foundations do not exist to permit the effective general prescription of specific segment delineations, nor is it known whether such criterial assists can be usefully developed.

Demands for segmentation in financial reports are currently intense. Actual reporting practices are largely nonstandardized as to either the definition of segments employed or the disclosure modes used to present them. Neither conceptual nor theoretical supports are now adequate in guidance to the forms and levels of segmentation activity now required. Prerequisite to effective development of such supports is an adequate understanding of the corporate diversification phenomenon itself.

This dissertation project investigates and analyzes the nature of corporate diversification, as manifested in (1) its historical evolution; (2) general comprehensions of the phenomenon, as evidenced in published opinions and conceptual reasoning schemes of both authoritative experts and lay
investors; and (3) formal research by others. Additionally, the results of these investigations and analyses are developed into conceptual schemes and theoretical frameworks, at moderate levels of abstraction.

The dissertation is organized into eight chapters. The first presents issue perspectives, briefly reviews the status of present segment reporting practices, selectively summarizes relevant pre-existing research, and delineates the problem characteristics and investigational approach.

Chapters II through IV examine corporate diversification. Fundamental concepts are developed. Evolutionary history is traced in detail, with interpretation for modern investment relevances. Using outputs from these analyses foundationally, conceptual schemes and theoretical constructs are developed.

Chapters V through VIII deal with subentity segmentation. Fundamental entity characteristics are reviewed. Prominent diversificational reporting concepts are selectively critiqued, and modified, in light of earlier findings. By genealogical reasoning, based on observed evolutionary patterns and characteristics, conceptual diagnostics are developed hypothetically.

Explicitly challenged is the foundational postulate, now commonly employed in both empirical research and theoretical development for the diversification reporting issue generally, that investor-sensitive differences are not generated by variations among diversification increments, as
created by various types, modes, and integration patterns of corporate growth. For analysis of other problem areas within the diversified reporting issue, this assumption has served adequately. If prescriptive criterion assistance is now to be developed for more broadly applicational segment definition purposes, more sophisticated assumptions need to be refined.

Investor-sensitive corporate diversification assumes multiple forms. Identification and measurement of specific forms and sensitivities is, in most instances, difficult or impossible. Current segmentation practices tend to be criterion mixtures, with emphases largely external to the firm. But investor-sensitive diversification risks originate both externally and internally. Those generated internally, though more difficult to identify and measure, have greater potential investment decision impact. For pragmatic reasons, they tend to be least adequately reported.

Theoretically, the investor relies on semiaggregated risk information. He views the corporation as an aggregational hierarchy, comprised of various risks. But each risk, as he sees it, is actually compiled of lower-order semiaggregational risk subcompilations. Different types of investors rely upon differently aggregated risk structures, constituted according to various criteria.

As a practical matter, he may rely on personal perceptions in lieu of such aggregational risk actualities. Often, he
evaluates diversification risks by means of surrogate identificational factors. His demand is for an indicator which will convey a message to influence his behavior as though he had perceived the diversification risk information directly, in pure form.

Segmentation development needs radical departures from currently prevalent research modes and methodologies.
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CHAPTER I

INTRODUCTION

Issue Perspectives

Entity definition is one of the more difficult issues in financial reporting. When firms are diversified, the related problems tend to be particularly complex. As defined by R. K. Mautz, a diversified firm is one

... which either is so managerially decentralized, so lacks operational integration, or has such diversified markets that it may experience rates of profitability, degrees of risk, and opportunities for growth which vary within the company to such an extent that an investor requires information about these variations in order to make informed decisions.¹

In such a firm, the most logical entity subdivisions for financial reporting may well defy determination. The range of possible segmentation bases is both large and ambiguous.

To cite an example, a given investment decision might best use reports that are segmented by market characteristics, e.g., geographic areas or product industry classifications. In the same example, it may be easier and more accurate for

a specific company to segment with a production orientation, e.g., by manufacturing processes or by internally generated profit centers. The investor may be further frustrated if another corporation, under competitive investment analysis, should segment its reports still differently, perhaps by organizational factors, e.g., formal divisions or executive jurisdictions.

On the supply side of the investment equation, various types of potential segmentation criteria differ inherently, as to numerous relevant characteristics, among different reporting corporations. On the demand side, different report users interpret and use the reported information in numerous different ways.

When firms are severely diversified, these problems are compounded. For example, the published reports of a company that operates in many different product industries will generally service a broader range of analytical investment perspectives. To do so usefully, it must provide information that is more highly refined, but flexible, in order to permit each type of user to adapt it to its respective needs.
Similar complexities are found in compiling the data. For example, the arbitrary nature of most allocation procedures is a familiar problem. It is aggravated by lack of uniformity among internal accounting systems, as used by the organizational sub-units that are to be grouped into reporting segments, when diversification becomes a deliberate subject of reporting activity.

Even if these cost accounting subsystems are fully compatible, however, the problems introduced by diversification will still be quite substantial. Delineation of segments introduces new costing-sets into the overall accounting system at an advanced level of cost aggregation. The problems of allocating among these segments have been well recognized in most of the research literature of this issue to date. Emphatic focus has been largely confined to the three most difficult data supply areas of joint costs, central costs, and transfer pricing. So far, these areas have largely defied resolution.

As in many areas of accounting, there is a basic conflict here between information that is needed and that

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2 See, for example, Mautz, Financial Reporting by Diversified Companies, Chapter III.
which can readily be provided. As diversification levels in a firm increase, the conflict grows more severe.

Current Practices

Since August 14, 1969, the Securities and Exchange Commission (SEC) has required most securities registrations filed to it, by diversified corporations, to segment both revenues and earnings according to "lines of business." \(^3\) Effective December 31, 1970, essentially similar requirements were extended to annual 10-K reports. \(^4\) The 10-K requirement embraces currently reported figures for the past five years from date of filing, \(^5\) making the procedure essentially retroactive to December 31, 1965.

In annual public reporting, there is as yet no corresponding disclosure requirement. \(^6\) Despite a widespread


\(^5\) Ibid.

managerial reluctance, however, the practice of reporting both sales and earnings to stockholders on a segregated basis, in annual published reports, is becoming increasingly common. According to one survey, in 1970 an estimated 27 per cent of large U.S. corporations disclosed earnings on at least a partially segregated basis.

Accurate current figures are not readily available to indicate the extent of segmented reporting extant, but the American Institute of Certified Public Accountants (AICPA) annually surveys 600 major corporations as to various reporting practices, including "Product Line Reporting." Table I summarizes the results of this survey for five years, from 1968 through 1972. Such practices are clearly increasing.


8 George Hobgood, "Segmented Disclosure in 1970 Annual Reports," Financial Executive, XXXIX (August, 1971), 18-22. See also similar presentations in corresponding issues for previous four consecutive years.

9 The term "Product Line Reporting" will be more adequately defined in Chapter VI. As used here, it is a catchall term for five expressly defined, but criterially mixed, classification groups.
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<td>By division or subsidiary</td>
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at a rapid rate, with indeterminately trended flux among
the relative rates of increase for given criterial bases.

At the time of this writing, two additional segmentation
enforcements are imminent. The SEC is acting to implement
a proposed rule which would require companies to publish,
in their annual reports, "a brief description of the
business, lines-of-business and summary-of-operations data
as they appear in the issuer's Form 10-K filed with the
commission." The Federal Trade Commission (FTC) has
just formally adopted a requirement which

... will require the nation's 500 largest manu-
facturing companies to submit financial data to the
FTC for individual industries categories, rather than
comywide. The FTC also will collect data on cost
items, such as advertising and research, as well as
information on sales, profit and assets.11

The FTC defines 321 specific industries,12 forcing companies
to restructure their data availabilities for compliance.
Other requirements imposed to date have all granted manage-
ment effective segmental discretion.

10 "SEC Proposes that 10-K Data be Added to Annual
Reports," Journal of Accountancy, CXXXVII (March, 1974),
16-19.

11 "FTC Will Require Big Concerns to Detail Results of
Product Lines in Secret Reports," Wall Street Journal,

12 Ibid.
The futility of attempting to legislate quantitative enforcement of segmented reporting, in flexible formats, is illustrated by the current SEC requirements. SEC releases 33-4988, 34-8650, and 34-9000, with some minor exceptions, require disclosure, in registration Forms S-1, S-7 and 10, and in annual reporting Form 10K, on a segregated basis, both sales and earnings:

... attributable to each line of business which during either of the last two fiscal years accounted for--
(A) ten per cent or more of the total of sales and revenues,
(B) ten per cent or more of income before income taxes and extraordinary items computed without deduction of loss resulting from operations of any line of business, or
(C) a loss which equaled or exceeded 10 per cent of the amount of income specified in (B) above; provided, that if total sales and revenues did not exceed $50,000,000 during either of the last two fiscal years the percentage specified in (A), (B), and (C) shall be 15 per cent... 13

Though precisely stated, these requirements are essentially meaningless without an enforced definition of "lines of business." As noted by the Wall Street Journal,

The result has been an amazing trend, on paper at least, away from the diversification of which companies used to be so proud. Thus Minnesota Mining and Manufacturing Co., which has thousands of products and which breaks its sales into six major

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13 Reproduced in Rappaport, SEC Accounting Practice and Procedure, p. 23.15.
lines, is, for earnings purposes, a one-product company—scientifically applied coatings. Less than 5% of the company's total sales, a spokesman says, are unrelated to the technology of coatings and bondings...

Honeywell, Inc., is another concern with a broad product line ranging from computers to cameras. Its reports usually give sales figures for five major product groups. But for earnings purposes, says a spokesman, "We consider ourselves in just one line of business—automation." He comments that a breakdown of earnings by groups would be "extremely difficult" and "not a practical thing."

And if you think General Motors is going to provide the pretax earnings of its Chevrolet, Pontiac, Cadillac or Frigidaire divisions, forget it. It isn't likely that any of the Big Three—GM, Ford or Chrysler—will break its earnings down further than "automotive" and "nonautomotive," which for analysis purposes will be practically useless since 90% or more of the three companies' business is automotive.14

The SEC requires separate reporting of any "line of business" which exceeds 10 per cent of total volume. Management has the right to say that, by its definition, at least 90 per cent of everything within the total is one "line of business."

Such outright avoidance of federally mandated reporting requirements suggests that voluntary disclosure in public reporting will continue to meet intransigent resistance.

Other than for enforcement of practice through legislative specification, in fact, it would be difficult to

make a case that such management prerogatives are in any way inappropriate. The regulations and guidelines issued by the SEC were carefully designed with ample thought devoted to alternative specifications. There is little uniformity in the specific types of diversification found among various firms, and there is no obvious reason why segment definition should inherently lend itself to standardization. But the exposure draft circulated by the SEC drew a heavy response expressing concern over the adequacy of controls on segment definition; and, to this point, there has clearly been a documented tendency for many large corporations to avoid compliance with the spirit of the regulations by grouping products into overly broad generic "lines."

Should the accounting profession decide to implement a segmented reporting policy of its own at some future date, it will be faced with a similar problem.

Statement of the Problem

Although the revenues and earnings of diversified firms are increasingly being reported to both the government

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16Ibid.
and the public on a segmented basis, adequate criterial foundations do not exist to permit general prescription for specific segment delineations. Nor is it known whether such criterial assists are usefully feasible of development. Available research indicates there is little uniformity in either the defining of segments among firms, or in the modes of segmental disclosure employed, beyond minimal compliances with specifications enforced by regulatory agencies. Demands for segmentation in financial reports are intense. Neither conceptual nor theoretical supports are now adequate in guidance to the forms and levels of segmentation activity now requisite for beneficial satisfaction of these demands.

Research Environment

Segmented financial reporting by diversified companies has been the subject of extensive research, discussion, and debate. Virtually all of the published accounting literature on the subject has appeared within just the past decade. A substantial amount of factual data has been gathered, analyzed, and interpreted in two empirical studies sponsored by the Financial Executives Institute
Three studies have been published by the National Association of Accountants (NAA), one overtly empirical and two less formally observational/conceptual. At conferences, experts of varied background have exchanged diverse views as to practicalities, desirabilities, and methodologies of segmentation, but have succeeded in generating little or no agreement. A similar climate prevails in the extensive professional literature on the subject.


20 The most substantial published example of this is a 1968 symposium at Tulane University, transcribed in Alfred Rappaport, Peter A. Firmin, and Stephen A. Zeff, Public Reporting by Conglomerates (Englewood Cliffs, N. J., 1968).

To the extent that any real consensus stems from this activity, it is simply a general opinion that more segmentation is requisite in financial reporting. There are myriad viewpoints as to how to effect it. Financial analysts are fairly consistently in agreement with Mautz, as surveyed in the FEI study:

"...for all practical purposes, the type of diversification of significance for financial reporting can be viewed as industry diversification."

Their expressed desires are for use of a standardized scheme, such as the Standard Industrial Classification (SIC) codes. In practice, however, these are generally conceded as too narrow and specific to be practical for standardized enforcement. Mautz advocates use of "broad industry groupings," designed at management's discretion:

Activity in different industries remains as the only practicable basis for identifying diversified companies.

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23SIC classifications are standardized industry definitions formulated by the Technical Committee on Standard Industrial Classification, in the Office of Statistical Standards of the Bureau of the Budget, Executive Office of the President of the United States. Decimally arrayed at various levels of classification, this code is capable of technically defining industries in the thousands. For examples, see *Standard & Poor's Register of Corporations, Directors and Executives--1972* (New York, 1972).
Even here difficulties appear. . . . The operations of different businesses do not necessarily fall into . . . well-defined, mutually exclusive categories. . . . To require reporting on some strict industry basis might fractionalize a company into unnatural parts which could not fairly reflect the results of its operations.24

If any of the existing systems . . . is applied without consideration of a company's historical development and the interrelated nature of its established activities, the disadvantages to shareholders may be substantial. Considerable discretion to management in defining broad industry groupings for the purpose of meeting the disclosure requirements . . . is essential.25

Review of the SEC mandatory requirements shows substantial agreement with, and perhaps specific influence by, Mautz's results in formulation of the specifications.26 Pacter has observed:

. . . the SEC's guidelines leave company management with a considerable latitude in designing an appropriate line-of-business earnings presentation. Even a cursory examination of recent prospectuses reveals the diversity of the types of presentations used. . . . Lines of business have been defined variously in terms of product lines or groups, markets served, organizational divisions, areas of operations, technologies, and so forth.27


26See page 9 of this dissertation chapter.

Thus, investment analysts profess to like specific "industry" groupings. As a practical matter, they are looking for "broad industry classifications." In actual practice, this translates into almost any criteria that fits a given company's circumstances, as ascertained by its management.

"Industry" is an exceedingly vague term. In application, it can be essentially meaningless. In economics, this has been justified theoretically by Triffin:

The grouping of firms into industries, and the discussion of value theory within the walls of one isolated industry are perfectly valid and adequate procedures under purely competitive assumptions. They are, however, antiquated and entirely out of place in so far as monopolistic competition is concerned. Product differentiation robs the concept of industry of both its definiteness and its serviceability. Outside of limiting cases of pure monopoly and pure competition, the substitutability between any two firms varies only in degree. The grouping of firms into industries cannot be based on any clear-cut criterion, nor can it be of any help in a general statement of value theory.28

Thus, measured by needs instead of opinions, there is no real consensus as to segmentation criteria, even among investment analysts.

Among research projects which address the topic from empirical inquiry, there is a consensus that management tends to prefer the least possible segmentation in published reports.\(^2^9\)

In colleges and universities, doctoral research on diversification reporting has focused mainly on segmented information needs of financial analysts. A principal emphasis has been behavioral inquiry into the effects on their investment decisions of providing such data. Such research has been largely experimental and has tended to utilize surrogates in a laboratory environment.

Thus, using graduate students as surrogate financial analysts, Dascher found no statistically significant effects for differentiation of reports by various segment formats.\(^3^0\)


On the other hand, using undergraduate business students as surrogates and testing them against a smaller control group of actual financial analysts, Ortman drew just two main conclusions:

1. Segmental data should be included in the financial reports of diversified firms.
2. Undergraduate Business students are not valid surrogates in experiments that intend to make generalizations regarding investors' behavior.\[31\]

Using hypothetically contrived reports and actual financial analysts, Stallman experimentally studied segmentation effects:

... the disclosure of divisional income data was found to have influenced the judgments of responding financial analysts with respect to predictions of future earnings, dividend growth rate, the duration of dividend growth, stock valuations, and investment recommendations for the objective of maximizing price appreciation.\[32\]


\[32\] James C. Stallman, "The Effects of Divisional Income Data on Investors' Decisions," unpublished doctoral dissertation, Department of Accountancy, University of Illinois, Urbana, Illinois, 1969, p. 166. A concise summary of selected pre-1969 doctoral research projects, experimentally probing the behavioral effects of narrower subtopic areas which might be construed as componentially relevant to segmented reporting, can also be found on pages 110-114.
On the data supply side, doctoral research has stressed case-method analyses of intersegment cost allocation problems. Skousen concluded that bases for such allocations cannot be prescriptively generalized among companies, nor even throughout single companies. Neffinger drew essentially that same conclusion, but additionally reviewed legal court decisions which had hinged in part on the bases of such allocations. He found the court decisions to be at variance with generally accepted accounting principles.

Approach

To assist in the task of determining whether any general criterial prescription for segment definition is feasible; and, if it is, the manner in which it can usefully be developed and implemented; this dissertation project investigates and analyzes the nature of corporate diversification, as manifested in: (1) its historical evolution;


(2) general comprehensions of the phenomenon, as evidenced in published opinions and conceptual reasoning schemes of both authoritative experts and lay investors; and (3) formal research findings of others. Additionally, the results of this investigation are developed into conceptual schemes and theoretical frameworks.

Fundamental concepts of diversification are explicated in Chapter II. Chapter III traces evolutionary history. From Chapter II and III results, new conceptual schemes and theoretical constructs are developed in Chapter IV.

Chapter V reviews segmentation fundamentals. Selected concepts are critiqued and modified in Chapter VI. Chapter VII is a theoretical exposition of related subissues.

Selected saliencies are summarized in Chapter VIII.
CHAPTER II

CHARACTERISTICS OF CORPORATE DIVERSIFICATION

At the heart of the segmentation issue lies widespread confusion about the essential nature of business diversification, and about the consequences of changing types and levels of such diversification for economic society. While much financial and economic analysis currently conducted is "industry" oriented, the accepted notion of an "industry" remains ambiguous.

In recent years this ambiguity has been increased by an acceleration of business diversification generally, both in the United States and world-wide. The movement has progressed at a rate so astonishing as to obsolete, at least in part, some of the traditional procedures and techniques employed for making such analyses. As a major provider of organized data inputs, the accounting profession has come under heavy pressure to produce more useful classifications of reported information. So far, it has been largely frustrated in its attempts to adapt to the new environment.

Compounding the confusion, the diversification phenomenon interacts with other contemporary issues, as yet also unresolved. These include growth in size and power of corporations, a trend toward more extensive international operations, and continuing secular movements in the predominant...
economic environment away from classical competitive conditions. 
Such issues and their implications cannot be explored in depth here. Neither can they be ignored. They will be selectively addressed at appropriate points, in conjunction with topics to which they primarily relate.

Preparatory to historical inquiry and conceptual development in the next two chapters, certain fundamental characteristics of corporate diversification need to be identified in practical perspective.

General Definition

In essence, diversification is a means of spreading risk:

\[ \text{di-ver-si-fi-ca-tion . . . 2. the act or practice of manufacturing a variety of products, investing in a variety of securities, selling a variety of merchandise, etc., so that a failure in or an economic slump affecting one will not be disastrous.}\]

The word is fundamentally general. More specific meanings attach through application. In actual use, it carries a broad range of contexts and connotations.

Specific Terms

A substantial element of confusion has been infused into the literature of commercial/industrial "diversification" by inconsistent usage, often in nonuniform contexts, of that term; and also of certain other terms and concepts, inherently

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\(^{1}\)The Random House Dictionary of the English Language, unabridged (New York, 1967)
of a general nature. In this dissertation, the following terms will connote the distinctions designated below for the following concepts: (1) types of diversified growth; (2) modes of diversified growth; and (3) "lines of business" integration patterns.

**Types of Diversified Growth**

**Internal.**--Addition of new "lines of business" to a firm through development of products, facilities and/or marketing attributes, and/or through reorganization of existing organizational entities and relationships.

**External.**--Addition of new "lines of business" to a firm through acquisition of exogenously pre-existing products, facilities, marketing structures, and/or organizational entities and relationships.

**Modes of Diversified Growth**

**Evolutionary.**--Addition of new "lines" at a gradual rate, not seriously disruptive of internally pre-existing institutional structures (product lines, facilities, personnel, interpersonal relationships, etc.) or of basic pre-expansion patterns of over all organization, operation, and/or managerial policy formulation, long range planning, and control.

**Revolutionary.**--Rapid, sudden, and drastic "lines" expansion, sufficient in degree to fundamentally unsettle internally pre-existing institutional structures, and/or to
force radical revision in basic pre-expansion patterns of
ever all organization, operation, and/or managerial policy
formulation, long range planning, and control.

"Lines of Business" Integration Patterns

Vertical.--Addition of "lines" which relate to other "lines" of the firm in a predominantly serial manner.

Horizontal.--Addition of "lines" which relate to other "lines" of the firm in a predominantly parallel manner.

Conglomerate.--Addition of "lines" which essentially fail to relate to other "lines" of the firm in an institutionally significant manner.

Discussion

These definitions are idealistic conceptual extremes, formulated for purposes of orderly classification and theoretical reasoning. A given diversified firm or expansion action may not fit precisely into one slot for each concept. In most cases, useful distinctions should be feasible in spite of difficulties in ascertaining definitive predominances.

No attempt has yet been made here to define the term, "line of business." That definition is central to the derivatively related problem of segment definition and, accordingly, to the larger goals of this entire project. It must necessarily be deferred, pending later analyses and discussions. For now, it should be noted that the term is
exceedingly ambiguous. Of the no less than eighty different
groups of definitions accorded the word, "line." by The
Random House Dictionary of the English Language, the most
relevant appears to be number nineteen: "... a department
of activity; a kind of occupation or business ..." In
financial reporting for a diversified business, it must
ultimately be defined simply in terms of reportable "segments"
most useful to the designated recipients of the information
provided.

The ambiguity inherent in defining the term, "line of
business," lends flexibility to the conceptual classifications
presented above. These have been designed in the abstract,
and are appliable wherever a "line" has attained definition.
For example, the three terms employed to designate "line of
business integration patterns" (i.e., vertical, horizontal,
conglomerate) are by no means restricted to any one of their
popular contextual applications, as in production management
(where they usually refer to relationships among manufacturing
processes), marketing (among product lines, market strata,
etc.), or managerial/administrative organization (organi-
zational sub-units, decision power sources, etc.). As used
here, they apply simply to "lines of business," however they
might be defined.

\(^{2}\text{Ibid.}\)
Prevailing Views and Opinions

The literature of commercial and industrial diversification is vast. In accounting areas, it is recent. There, virtually all of the existing specialized research, and of published material, has become visible only within the past decade. Substantial agreement is apparent on the principal problem subareas in need of research. There is considerably less agreement among research findings; and as to solutions and procedural recommendations.

Conglomeration: "Versus" Diversification

Among the more crucial assumptions which fundamentally underlie these research efforts are those concerning the essential nature of a "diversified" firm. In recent years, during which virtually all such research has been performed, these assumptions have become complicated by the emergence of "conglomerates" as a major institutional element in economic society. Under the aegis of a strict investor orientation, it has become standard in accounting areas to assume that this particular change in the research environment creates no meaningful distinction not common to all "diversified" enterprises. Arguments to the contrary will be marshalled in Chapter VII.

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3Delineated in Chapter I. See pp. 10-14.
4This contention is documented in Chapter VII.
The popular conception. -- By formal definition, a "conglomerate" is "anything composed of heterogeneous materials or elements." More in context, the prevailing understanding of this term has been captured by Richard Fishbein, of Kuhn, Loeb & Company:

... the conglomerate can be described as a group of companies operating in multiple and diverse markets, coordinated and controlled to varying degrees by a central management group. It can be understood as in contrast to such firms as IBM, Volkswagen and British Petroleum that operate primarily in one industry, and it can also be distinguished from firms diversified over a broad field of activity like General Electric, Philips and Unilever. These latter have grown internally rather than through merger, although this distinction is becoming less clear as many generally diversified firms adopt the characteristics of conglomerates.

Fishbein draws an operative distinction between conglomerates and other diversified firms:

The conglomerate tends to be more diversified than the generally diversified firm, often operating in different sectors of the economy as well as in a wider range of markets within a particular sector. ... the generally diversified firm is apt to build its activities around a particular technological expertise or managerial know-how such as heavy industry, natural resources, electronics technology or consumer goods. ... the conglomerate is not limited to peripheral areas for its diversification.

Thus, in the popular view, "conglomeration" is set off as something apart from "other," "general," "conventional," or "traditional" diversification. Although there is little

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5The Random House Dictionary.


7Ibid., pp. 24-25.
agreement as to how it can best be defined, the "conglomerate" is viewed consistently as a separate breed.

Mautz. -- In undertaking the most substantial research project yet conducted in this area, R. K. Matuz first set about defining the "conglomerate company":

Just as "beauty is in the eye of the beholder," so "conglomerateness" will tend to vary with the interests of the definer. . . . a conglomerate company is one which is so managerially decentralized, so lacks operational integration, or has such diversified markets that it may experience rates of profitability, degrees of risk, and opportunities for growth which vary within the company to such an extent that an investor requires information about these variations in order to make informed decisions. 8

In the study itself, Mautz retained the definition intact; but dropped the distinction of "conglomeration" from "diversification," adopting it instead as the definition for all diversified firms:

Using the term "conglomerate company" in the broadest sense, an attempt was made to conceptualize the common characteristics which establish a group of companies appropriately designated by that term as distinct from all other companies. Given the point of view of the study ["financial or business"] . . . , attention was directed to those variables of interest to investors . . . thus the tentative definition adopted was essentially a definition of diversified companies. 9

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AICPA.--Mautz's definition is wholly compatible with the viewpoint of the Accounting Principles Board in APB Statement Number Two:

The term conglomerate is used popularly to describe a company that diversifies into distinctly different industries by acquisition or merger. The Board believes, however, that there is little distinction between industry diversification which arises by this method and industry diversification resulting from a company's own internal development and expansion efforts. All of these companies will be referred to in this statement by the more descriptive term diversified companies.10

Such pronouncement has yet to be issued.

Observations.--It can now be seen in retrospect that the Mautz definition, though highly abstract and somewhat abstruse, has become the generally accepted model in current use. This appears to be true in academia, in the professional guidance activities of the AICPA, and in governmental regulatory agencies such as the SEC. Prior to its development, there was little uniformity of definition anywhere.

Mautz performed a landmark service, to all who are concerned with developing these subject areas, by clearly conceptualizing myriad inexpressible threads of individual

10 APB Statement Number Two, p. 1.

11 Ibid.
perception into a coordinated whole cloth. Without this, it is extremely doubtful that the progress which has been made so far could have been achieved. It is also probable that the previous lack of a definitional grasp contributed to the almost total dearth of research and publication activity in these areas prior to the early 1960's, though later sections of this chapter will attempt to isolate some additional factors of greater moment.

For all of that, it can be argued that actual success in applying the Mautz definition to specific situations in the concrete world has been less notable. The present SEC requirements are imprecise, arbitrary, and controversial. The AICPA has yet to issue any form of official formulation. Academic research has largely avoided the specifics of formally applying such definitions to operative corporate structures and activities, placing greater emphasis on relatively abstract development through logic, theory, and conceptualization. Several projects have utilized empirical research, but these have relied primarily on opinion-seeking methodologies. Little effort has been made to apply an abstract definition, such as Mautz's, to substantial groups of specific organizations or to their activities. Though several authors have selected unique examples of actual companies to illustrate their conceptions, little evidence suggests that they have tried to start with an independent selection of companies and definitively apply those
conceptions across-the-board. More representative of commentary in the literature is that of Forbes magazine, which annually does attempt to measure both profitability and growth, by company and by industry:

You don't expect to find uniform trends among the FORBES Yardsticks for the multicompanies. About the only thing these companies have in common is their diversity. Each must be examined on a case-by-case basis.12

To gain a deeper familiarity with the intricacies of financial report segmentation at the operative level, a substantial number of published annual reports; plus, for the same corporations, corresponding Forms 10-K, and registration statements, filed with the SEC subject to the recently imposed mandatory segmentation requirements; were studied preparatory to this dissertation project. Judgmental application of the Mautz definition to these companies was attempted.

With reliance only on these external document sources, the difficulties of tangible interpretation from the definition were severe. Using it simply as a straightforward instrument of classification, virtually every firm fits. Accordingly, all are diversified. When it is employed as a more sophisticated tool for segment definition, the required multidimensional measurements prove too elusive to permit even meaningful conjecture. The experience confirmed

12 "Multicompanies: They May Be Down, But They're A Long Way from Being Out," Forbes, CXI (January 1, 1972), 125.
that Mautz has handsomely conceptualized broad criteria, desirable for the purpose. It should serve well as the foundation for further theoretical development to this end. As an operational vehicle, it remains too idealistic and abstract.

A more complete "case" knowledge of each corporation would have facilitated this endeavor, but it was apparent that adequate ascertainment of all necessary classification criteria would have remained out of reach.

Conglomeration: A Concept in Disrepute

At this writing, a period of speculative excess in corporate financial affairs is recent history. Through the late 1960's, judgmental prudence succumbed to unprecedented managerial abandon as corporations in large number strove to build empires by broadly diversifying through merger and acquisition. Emphasis shifted from industrial operation to finance. The "conglomerate" was born as a new major force in society. The period has become popularly known as "the conglomerate era," and the "conglomerate" has undergone an image change from hero to villain. As phrased by Fortune:

Memories of the merger wave tend to evoke among executives the sense of collective embarrassment that sometimes follows a particularly disastrous office party. As merger mania seized both business and Wall Street, even some ostensibly prudent managers were caught up by the contagious exuberance of the time, and put empire building ahead of running their companies. All too frequently, misfortune followed for them and for their stockholders. "It was a time of intense insanity in
which greed and fear were the ruling emotions," recalls
the president of one prominent Manhattan investment
banking firm. "We have not yet paid the full price
for what happened."13

Fundamentals of this "merger boom," comparative to
earlier movements, are analyzed in Chapter III. For now,
it is important to note that the recency of recognition
 accorded the problems of financial reporting for diversifi-
cation is related to a highly controversial, and very
contemporary, organizational and structural phenomenon in
the economy. While accurate delineation must await further
analysis, it is readily observable as radically aberrant
from pre-1960's stereotypes of the diversified firm.

Of further interest at this point is the stigma that has
attached to the term, "conglomerate." Currently, there is
a movement in the literature to replace the word with
alternative terminology, such as "diversified company" or
"multicompany." If the change were simply in name, it would
matter little. But the current literature is a confusing
welter of terminology, conceptualization, and judgmental
imputation that draws diverse and conflicting distinctions
among the different types of firms that have emerged from
the recent period of organizational upheaval.

The "conglomerate" is clearly in disfavor with investors:

First came cocktails. Acquisitions could lead to
sparkling [reported financial] performances. Then

13 Lewis Beman, "What We Learned from the Great Merger
Frenzy," Fortune, LXXXVIII (April, 1973), 70.
came the binge. . . . Many companies, cheered on by giddy investors, went on a toot that lasted for much of the Sixties. Then came the morning after. As conglomerates nursed their hammering headaches . . . investors . . . took after them as Carry Nation would a saloon, chopping their stock prices to depression levels. The 1969-70 stock market crash is now past. . . . But the melody, in the form of low P/E's, lingers on.14

There is a consensus that some of the newly built "empires" will mature into respectability, while others will simply fail into oblivion. There is less consensus as to which will do which, and a freely acknowledged profusion of uncertainty:

Perhaps the investors are right. Perhaps only a handful of conglomerates can hope to become tomorrow's GEs or Westinghouses. Which ones? Alas, only time will tell.15

But far beyond the "conventional" distinction that has previously occupied the public mind as between conglomerates and conventionally diversified companies, there are new efforts to differentiate among these empired entities through inferential labeling:

Just what is the difference between a multi-industry company and a conglomerate? In the main, the former diversified primarily from within, the latter by acquisition. But there is another big difference: The multi-industry companies have been around a while longer and thus have an asset conglomerates could never get by acquisition—respectability.16

14"In a Bull Market, an Attractive Mistress?" Forbes, CXII (January 1, 1973), 158.

15"Multicompanies—Belated Revelation: Conglomerates are Nothing Special. Like Other Companies, They are Individually Good, Bad or Indifferent," Forbes, CXII (January 1, 1973), 154.

16Ibid., p. 158.
That a stigma exists is clear. As lamented by John Billera, Chairman of U.S. Industries, one of the more highly regarded such firms: "The public feels that birds of a feather fly together. The conglomerate has a connotation of a prostitute." 17

Fundamental Properties

**Traditional Qualities**

In the competitive worlds of business and finance, the diversification process is not a recent development. A potent tool of risk management, its responsible employment has long been recognized as orthodox administrative procedure. As calculated managerial strategy, the judicious implementation of various diversification policies among individual firms has been a factor in the growth and development of industrial organization. Reciprocally, the increasing decision complexities created by use of those policies have forced a higher degree of sophistication into the development and use of the diversification strategies themselves.

A strategy is a tool of the decision maker. Like any tool, it can be effectively used or destructively abused. It can abet progress or suppress it. As a factor in industrial growth, policies of diversification have served in both positive and negative roles, depending upon the

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17 "In a Bull Market, an Attractive Mistress?" p, 158.
individual wisdoms of each formulation and implementation. As long as they represented the purposive, responsibly calculated judgments of managers, their consequences simply reflected the individual competencies of those managers.

Recent Aberrations

In the "conglomerate boom" just ended, the tool was widely abused. Diversification became an unreasoned fad, and an accessory to growth per se. Rational calculation was subordinated to irresponsible pursuit of ulterior goals, notably including improvement of reported financial results with a short term focus. Risk management gave way to gambling. Again, in the metaphors of Forbes:

The numbers game, not the management game, prevailed in the late Sixties. . . . What mattered in making acquisitions was not stability, not balance, but the mathematical impact of an acquisition on the income statement. Permissive accounting and stock market enthusiasm could turn almost any sow's ear into a silk purse, and did. Says one conglomerate executive: "It was like that guy that came up to a crap table for the first time, rolled seven and said, 'What a way to make a living!'" 18

Clearly, the typical diversified firm forged in the 1960's is not of the same breed as its counterpart from earlier eras.

18"Multicompanies: They May Be Down, But They're A Long Way from Being Out," p. 128.
Multisource Foundations

As noted,\textsuperscript{19} diversified growth can be internal or external; evolutionary or revolutionary; and patterned vertically, horizontally, or conglomerately. It can be the objective product of deliberate managerial strategy, or a consequent subfactor of other managerial decisions. It may be motivated by aggressive plans and instincts, or it may be a response to uncontrollable competitive forces within industries. According to Mautz, the variables of primary investor interest are: (1) rates of profitability; (2) degrees of risk; and (3) opportunities for growth; all within the firm, and resultant from: (a) managerial decentralization; (b) lack of operation integration; or (c) market diversification.

Also as noted,\textsuperscript{20} the essence of the diversification process is a spreading of risk(s). Relevant to investor interests, risk-spreading activities can come from one or more of multiple sources; utilize one or more of multiple methodologies; and result in structure taking one or more of multiple forms. To draw a separate set of professional reporting rules or guidelines tailored for each of these variations, or even for each differentiable type of variation, would be an impossible task involving multidimensionalities in the extreme.

\textsuperscript{19} Pages 22-24 of this dissertation.

\textsuperscript{20} Page 22.
Alternatively, whether such variations can all be lumped together into a single group under the simple heading of "diversification," without compromising the basic objective of providing meaningful investor information, is a serious question. Without really exploring that question, most existing theory advocates in the affirmative. The debate is whether to segment. Very little of substance is being said about how.

Through the past several years, sentiment has clearly grown toward requiring segmentation for firms that are classed as "diversified" under the Mautz criteria. Specific identification of those firms has been largely ignored. The actual means of segmentation is generally: (1) unspecified; (2) discussed only in broad types of groupings, such as "product," "market," etc., e.g., Rappaport and Lerner;21 (3) left to others in a better position to decide, such as "management," e.g., the SEC for its Form 10-K and certain

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21 Rappaport and Lerner diagnose segmentation criteria according to a developed conceptual scheme which tries to identify "basic activities." Though designed for applicational viability, it was essentially a product-versus-market classification scheme. See Rappaport and Lerner, A Framework for Financial Reporting by Diversified Companies, pp. 3-5. In attempting actual application to segmentally published annual reports, however, they found about three-fourths of their intended "basic activity" diagnoses turned out to be "product-market hybrids." This forced them to modify their basic concepts into a more realistic, but less usefully discriminatory, format. See Rappaport and Lerner, Segment Reporting for Managers and Investors, pp. 12, 91-93.
registration statements; or (4) specifically, but arbitrarily, selected according to some conveniently available outside framework.

An excellent example of this last alternative is a currently pending proposal, at the time of this writing, by the Federal Trade Commission. It would require about 2,000 companies to segment revenues at the five-digit SIC code level, plus cost and investment detail for as many of 442 specific industry-defined "line of business" segments as apply to each firm. The latter figures include such detailed and arbitrary data as allocated assets; and detailed cost of sales including research and development, advertising, etc.; with certain sub-classifications for types of data under each category.

Corporate data at the five-digit SIC level is not conveniently available; but to cite one example of the complexities involved, there are over 1,000 SIC categories at just the four-digit level. If Dresser Industries, of Dallas, were to segment at the four-digit level, it would need 33 "line of business" segments. A more conventional proposal

23Ibid.
is the two-digit "major industries" SIC level, where 78 potential "lines of business" would be defined. At that level, Dresser would still use ten.25

For accountants who have to identify, classify, develop, valuate, allocate, match, and interpret the data in conglomerate firms with wide industry dispersal, such narrow and rigid requirements are severe impositions. To gather data for compliance with the FTC proposal, new accounting systems would be required. Several firms have submitted cost estimates for developing and installing these systems, ranging from $500,000 to $1,000,000 per company exclusive of continuing operating expenses.26

Specification of uniform and precise segment definitions, for use by all firms, appears impractical a priori. However, tailoring differentiated sets of broad reporting requirements to different groups of companies might be feasible, if uniform fundamental differences among the groups of firms could be detected and if such differentiation would be significant to investor decisions.

At the Harvard Business School, in a recent library study of fifty large corporations, Didrichsen observed:

It seems that a roughly equal number of firms has diversified by internal development, acquiring

25Ibid.
technology, acquiring firms in closely related markets, and, finally, following a conglomerate strategy.\textsuperscript{27}

The selection was frankly biased, attempting only to draw from the 200 largest U.S. corporations, by sales; and to include all major industries, with exclusion of single product firms.\textsuperscript{28} He constructed his categories broadly. "There is an arbitrary element in the definition of these strategies since every individual strategy chosen by a firm will necessarily be unique . . .";\textsuperscript{29} and there may be firms basing strategies on special skills that are "far more difficult to define than those underlying these four basic classes. Nonetheless, he has provided four usable groupings, into which he was able to sort out the fifty firms according to their adjudged predominant characteristics.

That he was able to do this so easily, from simple library sources, is notable. If the necessary correspondences can be established, this type of classification might prove to be of some use in translating the Mautz variables into a usable tool for empirical application in establishing segmentation guidelines.


\textsuperscript{28}Ibid., p. 208.

\textsuperscript{29}Ibid., p. 209.
His four groups, above, identify the achievement of diversification: by internal development; by acquiring technology; by acquiring firms in closely related markets; and by following a conglomerate strategy. In the terminology of this dissertation they would fall, respectively, within the bounds of these headings: (1) internal, all; (2) external, vertical; (3) external, horizontal; and (4) external, conglomerate. Evolutionary versus revolutionary modes of growth are ignored.

Didrichsen claims no scientific validity for his findings that the fifty firms were distributed about equally among the four groupings. He did find that the differences among them are fundamental:

Firms in the first two groups emphasize R & D and technology and the functional area of production. The third group of firms stresses advertising and promotion and the functional area of marketing. The firms which follow a conglomerate strategy are financially oriented. To them a business is not primarily a product, a technology, a market, nor a consumer, but a balance sheet and an income statement.

Intuitively, these differences would seem to involve the Mautz variables in some substantial manner and degree of classificational correspondence.

Though accounting for only about one-fourth of his sample, conglomerates as a group exhibited particularly sharp fundamental differences:

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\[30\] Pages 22-24.

\[31\] Ibid., p. 219.
The 1920's saw the emergence of the large, diversified, multidivisional firm in the United States. In the early 1950's the conglomerate firm appeared. Though diversified and multidimensional, it exhibited characteristics which set it apart from the earlier diversified firms. The conglomerate firm has grown extremely rapidly to become a significant element in American industrial structure.\(^\text{32}\)

As has most of the more general literature on conglomerates, Didrichsen emphasized their tendencies toward a predominantly financial nature at the expense of an industrially operational orientation.

**Basic Questions**

As an academic topic, industrial diversification is not new. As a controversy, it is contemporary. As an accounting issue, it is strictly current. Virtually all research and publication devoted primarily to the problems of adequate financial reporting when firms are diversified has appeared within the past ten years. Though recent, this literature is both urgent in tone and voluminous.

The impetus was conceived in concern about monopoly concentration in the U.S. economy, and born in federal antitrust hearings. Skousen dates the current financial reporting issue to September, 1964, when concentration hearings were begun by the Subcommittee on Antitrust and Monopoly of the Senate Committee on the Judiciary.\(^\text{33}\) In April, 1965:


Professor Joel Dirlam, an economist, gave testimony recommending an amendment to the Securities Exchange Act of 1934 which would require corporations to disclose revenues and profits for each of the operations engaged in. In the same month, Senator Philip Hart, Chairman of the Subcommittee on Antitrust and Monopoly wrote to Manuel F. Cohen, Chairman of the SEC, asking for comments and analysis of Professor Dirlam's proposal.34

Cohen responded with a summary of selected existing SEC regulations, and pointed out some technical obstacles to implementing such a proposal. Then, after a year of gestation, in May, 1966:

Manuel Cohen spoke at the annual meeting of the Financial Analysts Federation in which he stated that a defined profit statement on a divisional basis should be the next objective beyond the breakdown of sales for conglomerate companies. This data is often accepted as the beginning of the campaign for segmented disclosure by diversified companies.35

Later that year, Cohen testified to the Subcommittee:

... that the SEC already has authority under 1933 and 1934 Acts to require disclosure of segment operating results if that is in the interest and for the protection of the investing public.36

Approximately three years later, the first such SEC requirements were implemented.

The Financial Analysts Federation, to whom Cohen addressed his remarks, went on to sponsor the bulk of the major empirical research that has since been conducted on this topic, and has generally exercised leadership in pressing for this type of disclosure in published annual reports.

34 Ibid.
35 Ibid.
36 Ibid.
The conglomerate phenomenon, which recently created explosive multi-industry development, is widely associated in the literature with the external type of diversified growth. The related financial reporting issue materialized from officially manifested concern over the growth of monopoly power, and of economic and financial concentration, in American industry. In much of the literature, there appears to be a common assumption that these forces are the product of the recent merger boom, which undeniably did contribute to growth in the size of certain individual firms; to greater use of the acquisition form of corporate growth; and to multi-industry operations. Yet the reporting issue dates back only to the mid-1960's, while "merger booms" have been occurring since the turn of the century.

To gain a more adequate perspective on the root forces that have caused these problems, Chapter III will briefly examine American merger movements, their evolutionary characteristics, and their institutional environments.

In view of the extreme recency of consideration that has been accorded the reporting problem, certain questions should be kept in mind:

1. Is the basic reporting problem essentially of recent origin, or should it have been more emphatically recognized in earlier eras?

2. If it is materially of recent origin, why?
3. For development of adequate reporting standards, are current accounting theorists correct in combining conglomerates with other diversified firms for treatment as a uniform grouping?
CHAPTER III

DIVERSIFICATION: EVOLUTIONARY ANALYSIS

Merger Movements in the United States

According to most of the specialized literature on mergers and consolidations, there have been three major merger movements in this country within the past century.\(^1\) Approximately, these occurred: (1) around the turn of the century; (2) during the 1920's leading up to the Great Depression; and (3) throughout the decade of the 1960's.

Two additional periods will be recognized in the discussion here. Though less intense than during the three intervals just enumerated, merger activity in the years immediately following World War II was well above the norm. Those years are of interest not only for types of economic change involved, but also as a periodic referencing tool. Their inclusion yields a sequence of four "movements," spaced more or less at twenty year intervals. The fifth and final period will be devined by splitting the 1950's-1960's wave into two contiguous portions, dichotomized by characteristics of the merger activity taking place.

\(^1\)For example, see Beman, p. 71.
Figure 1, from an empirical study by Ralph L. Nelson for the National Bureau of Economic Research, provides a graphic perspective on the first three movements. At the right hand edge of the chart, the shaded area labelled as the second "postwar merger revival" marks only the beginnings of the fourth.

One visual impression is illusory. Of the three movements shown, the first was actually largest by a substantial margin. In the chart, the first two look about coequal because noncomparable data was incorporated by Nelson from an earlier study by Thorp. Scientific comparison of the two complex data sets is impossible, but he conjectures informally:

... the turn-of-the-century merger wave was in absolute numbers approximately 1.75 times as large as that of the 1920's; and 4.2 times as large as that of the highest postwar years.

Later analysis will show that these earlier "waves" were all dwarfed by the explosive boom in the late 1960's.

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4Nelson, p. 29. Comparisons are of "five-peak-year" totals for each movement, with "postwar" years drawn from the period 1946 through 1956.
Two different data series are depicted, not based on strictly comparable measurements. They are unspliced.

Fig. 1--Annual firm disappearances by merger, 1895-1956. Source: Nelson, *Merger Movements in American Industry*, 1895-1956, p. 3.
Terminology

For the discussion that follows, it will be necessary to differentiate among the terms merger, consolidation, and acquisition. For simplicity, these terms will be used as defined by Nelson for the National Bureau of Economic Research (NBER):

Merger.—"A merger is the combination into a single economic enterprise of two or more previously independent enterprises." 5

Consolidation.—"A consolidation is the more or less simultaneous multiple-union of firms into a consolidated company . . ." 6

Acquisition.—"... an acquisition is the taking over of one firm by another, either as an isolated action or as one of an extended series." 7

By this distinction, consolidations and acquisitions are two forms of mergers. The distinction "between the consolidation form of merger and the acquisition form . . . is in part between single and multiple mergers, and in part between all-at-once and one-at-a-time mergers." 8

5Ibid., p. 3.
6Ibid., p. 59.
7Ibid.
8Ibid., pp. 58-59.
Definitionally, the distinction is essentially one of degree. Operationally,

The economic and legal factors involved in an acquisition may be different from those involved in a consolidation. Consolidations may represent an attempt to secure a dominating market position directly, without a lengthy competitive war. . . . On other grounds, a consolidation may represent the success of a promoter in convincing a number of firms to unite into a new, highly capitalized company. . . . Consolidation might be the more common form for mergers of large firms in which the organization of a new, more highly capitalized corporation may be necessary. Finally, . . . changing fashions in the enactment and interpretation of various states' corporation laws may cause changes in the form and timing of mergers.9

One further definition is necessary at this point:

Concentration.--The crude share of an industry or product market of its largest companies.10

Although economic concentration has been the subject of considerable empirical research, definitions that are concurrently precise, workable, and theoretically meaningful have proven elusive. Conceptually, the term is generally used to imply synonymity with the phrase, "extent or amount of monopoly power." Both the applied utility and the measurement of that phrase are less stable.

Nutter and Einhorn, who have published extensive measurements of economic concentration for a time period which

9Ibid., p. 59.

closely parallels that of Nelson's work with mergers, grappled with the essence of the definition problem:

It is important to distinguish at the outset the "political" and "economic" aspects of monopoly. In a political sense, monopoly may refer to situations that provide a concentration of privileges or advantages in making and enforcing the effective rules of society. In an economic sense, monopoly refers to situations in the market that, within the existing framework of rules, lead to a particular kind of pricing process.\textsuperscript{11}

They attempted to ignore the political aspects:

The present study is concerned with monopoly in the market place. For that reason, no attempt will be made to analyze the findings and implications of studies of the "concentration of economic power" in any other sense.\textsuperscript{12}

Divorcement of political from economic considerations in any endeavor is a hazardous undertaking. With dual focus on the financial information needs of the investor and the availability of usable empirical data from the literature, this dissertation will similarly emphasize market place aspects when discussing industrial concentration.

The definition of "concentration" selected above is compatible with the bulk of the published factual literature on the subject. Until recently, all of this was based on quite limited available data. As Nelson has summarized:

The systematic and comprehensive compilation of measures of industrial concentration is a fairly recent development. The first tables were published in 1939. . . . In this and in all subsequent tabulations the basic source of data has been the files


\textsuperscript{12}Ibid., p. 4.
of the Census Bureau. These are the only source from which reliable measures of both the size of industries and the shares of individual firms might be computed. From time to time the Census Bureau has compiled comprehensive lists of concentration ratios. The measure of concentration, whatever has been the classificatory basis for the economic sector described, in all cases has been the crude share of the industry or product market of its largest companies. A "company" is defined as all of the establishments in the given classification under single ownership or control. [italics mine]

**Merger Movement One: Around 1900**

The first of the five movements, and the largest of the first four, effected a dramatic surge in industrial concentration:

The first recorded merger movement of major proportions, its peak years being 1898 through 1902, transformed many industries, formerly characterized by many small and medium-sized firms, into those in which one or a few very large enterprises occupied leading positions. It laid the foundation for the industrial structure that has characterized most of American industry in the twentieth century.

Discernible concentration already existed in the U.S. economy; but sharp, substantial spurts in this growth rate were a new phenomenon. This period marked the effective inception of the merger as a broad vehicle for such spurts:

... mergers leading to enterprises of large size relative to national markets have become significant only since the Civil War. This process had to await the elaboration of the business corporation. The corporation, the basic instrument for mobilizing large amounts of capital with limited liability of

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13 Nelson, *Concentration*, p. 17.

the investors, has become important in the manufacturing and mining industries only [since about 1885].

A small spate of merger activity had occurred from 1888 to 1893, but almost all of this was accounted for by activity within the Standard Oil empire.

In many respects, this was the most important of the pre-1960 merger waves. In the ten years from 1895 through 1904:

... the average number of firms disappearing annually was 301... with 1,028... in 1899 alone. The huge turn-of-the-century merger wave produced U.S. Steel, American Tobacco, International Harvester, Du Pont, Corn Products, Anaconda Copper, and American Smelting and Refining, to name on a few. Its effect on American industry was widespread and enduring.

Although Nelson explored trends for the entire period through 1956, his major contribution was analysis of this first wave plus the previously almost unexplored years from there through 1920. Because of the importance of this period as the first and largest among early "waves," his analysis altered causal perspectives for the entire merger movement. Prior to his work, the Watkins "retardation hypothesis" had held popular predominance.

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15 Ibid., p. 3.
16 Ibid., p. 34.
17 Ibid., p. 5, fn. 2.
18 Ibid., p. 5.
19 Ibid., p. 34.
20 Ibid., p. 6.
21 Ibid., p. 71.
Mergers, in this context, were interpreted as devices whereby producers could preserve profits in the face of slackening demand and greater pressures of competition.\(^2\)

This was basically a negative construction. For institutional impetus it relied on the closing of the frontier, slackening of population growth, slowing of technological change, and the post-1873 secular decline in prices.\(^3\)

Through detailed empirical research, Nelson refuted this. He found the causes of the merger boom in such positive forces as the development of an organized, large-scale capital market\(^4\) and expansion of the railroad system.\(^5\)

He concluded that the capital market was the predominant factor:

The organized securities market had experienced important and substantial growth in the last quarter of the nineteenth century . . . and was therefore large enough to support the huge turn-of-the-century merger wave. The market's immediate relationship to the merger movement was complex; changes in the capital market permitted developments in merger activity which, in turn, caused further changes in the capital market. However, in view of the earlier and important role played by railroad reorganizations in these changes in the capital market, industrial mergers were probably more the beneficiaries of the changes in the capital market than a cause of them.\(^6\)

\(^2\)Ibid.
\(^3\)Ibid., p. 72.
\(^4\)Ibid., p. 89.
\(^5\)Ibid., pp. 78, 88.
\(^6\)Ibid., p. 99.
The capital market factor was essentially permissive by nature, since it simply had not existed before to accommodate extensive merger activity. In spite of this, the main impetus for the boom was financial:

A correlation analysis of merger activity and stock-price changes, using industrial production as a control variable, indicated that in this period of peak merger activity mergers were more closely related to stock-price changes than to industrial activity changes. Indeed, though mergers are probably related positively to long-run movements in industrial production, in this period the effect of stock-price changes apparently overrode the immediate influence of industrial production.27

Figure 2 depicts these interactions graphically for the entire period of the Nelson study, 1895-1956.

The concurrence of booms for mergers and for the stock market was manifested not only in stock prices, but also in volume. According to Fortune magazine:

The rise of active public trading of industrial securities supported the consolidation of a number of basic industries into trusts. Merger activity and trading volume on the New York Stock Exchange followed a parallel course both up and down. Monthly trading volume increased from 3,342,000 shares in January, 1897, to 24,252,000 shares two years later, then receded to 9,964,000 shares in the first month of the twentieth century.28

For all of this, Nelson found substantial credence for market power motivations on the part of the entrepreneur:

Whatever the precise share of merger activity resulting in the control of markets, . . . evidence shows that it was substantial. . . . [T]he findings . . . tend to

27 Ibid., p. 100.
28 Beman, p. 73.
Shaded areas represent periods of business activity contraction.

Fig. 2—Quarterly series of firm disappearances by merger, industrial stock price index, and industrial production index, 1895-1955. Source: Nelson, Merger Movements in American Industry, 1895-1956, p. 110.
demonstrate the existence of a fairly strong desire to avoid rigorous competition. Second, if we assume that the promoter and financier were important motive forces in the merger movement, it seems probable that the promise of "monopoly" profits would have served as one of the more effective inducements for firms to surrender their independence. 29

Finally, this first major boom was characterized by its dominant form:

The huge turn-of-the-century merger wave was probably unique in the overwhelming importance of the consolidation form of merger. In neither the 1905-1914 decade of very low activity nor the 1915-1920 period of reviving merger activity did the consolidation resume this dominant role. 30

1905-1920: Post-Boom Quiet

Measured by volume of merger activity, the years immediately following the boom of 1895-1904 were quiet. The quietness is attributed by some scholars to an increasing of prosecutions under the Sherman Antitrust Act of 1890. 31 During this period, however, the criteria for successful prosecution under that act were not well established. 32 At least as importantly, the merger boom had simply run its course:

29 Nelson, Merger, p. 103.

30 Ibid., p. 64.


In 1904 John Moody estimated that 78 corporations controlled 50 percent or more of the production in their respective fields, and that 26 of them controlled 80 percent or more. Eight of the corporations . . . controlled some 90 percent of the output of their respective products.  

This time span can best be described as having two distinct components: (1) 1905-1914, characterized by very low levels of merger activity; and (2) 1915-1920, when such activity expanded gradually in prelude to the movement of the 1920's.

The first component:

. . . was distinguished by the absence of any strong burst of merger activity. A yearly average of 100 firms disappeared into mergers, the total for the decade being less than that for the year 1899.  

Some large companies were formed, including General Motors and Computing-Tabulating-Recording Company. There were brief periods of minor expansion in the merger rate, followed by longer declines, all quite gradual.

During the second component:

. . . firms disappeared into mergers at an average rate of 139 per year, much lower than the 301 yearly average of 1895-1904, but well over the 100 yearly average of 1905-1914. It is probably fair to describe this as the initial phase of the higher merger activity that was to characterize the 1920's.

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33Ibid., p. 50.
34Nelson, Merger, p. 34.
35Ibid., p. 35. Computing-Tabulating-Recording Company is now known as International Business Machines, Inc.
36Ibid.
Most of this period saw virtually no combinations with the "consolidation" format. Toward the end, they returned.37

The merger resurgence in the late 1910's is significant. Since comparable statistical series published prior to Nelson's had dated back no earlier than 1919, it had been widely presumed that the boom of the 1920's was a rather abrupt creation of "roaring twenties" economic phenomena. Nelson found the resurgence to be part of a longer term occurrence, with momentum dating back to the mid-1910's.38 He detected tendencies toward cyclicality, with considerably greater continuity than had previously been reckoned.

The low total merger figures obscured other patterns, previously unpublicized, of some interest. Merger activity leadership rotated from industry to industry during these "quiet" years; eventually, virtually all manufacturing and mining industries participated.39 There was also a geographic rollover, with New Jersey dominating all mergers from 1895-1904, then declining gradually to zero activity by 1915 in favor of states adopting more liberal corporation laws. Apart from a few large transactions late in the period, consolidations tended to decline in both size and number relative to acquisitions.40

37Ibid.
38Ibid., p. 40.
39Ibid.
40Ibid., pp. 55-64.
Movement Two: The 1920's

Though independently substantial as a "wave" in merger history, the second boom tends to become overshadowed by broader views of the dramatic economic surge it accompanied. Retrospectively, however, it is seen to be not simply a byproduct; to a substantial extent, it was a cause. Nelson observed:

... the second great merger movement in the United States is seen to be not strictly a creature of the "roaring twenties" but a longer-run phenomenon originating considerably earlier. 41

It was a force that had been building for several years, rather suddenly released by a dissolution of legal restrictions. According to Mund:

The Department of Justice had brought suit to dissolve the giant United States Steel Corporation as a monopolistic merger. The Supreme Court, however, dismissed the case on the ground that the resulting monopolistic restraints were not "unreasonable." ... The effect ... was to usher in a second great wave of mergers, based upon the acquisition of the stock of competitors and increasingly upon acquisition of their assets. 42

In the 1905-1920 low phase of the merger cycle, new industry groups had assumed merger activity leadership. In substantial measure, these new leaders fueled the subsequent economic boom. During the modest 1915-1920 merger resurgence, the two industries exhibiting greatest activity were petroleum products and transportation equipment, most notably including

41 Ibid., p. 40.
42 Mund, p. 50.
automotive. In size and character, the 1920's boom has been subsequently described as follows:

In the Twenties the nation's shift to autos and trucks enlarged markets, destroyed local monopolies, and created a new potential for economies of scale, while the home radio receiver enhanced the effectiveness of national advertising. Supported by a booming stock market, the second great merger wave took shape. Volume on the Big Board rose from 34,689,000 shares in January, 1927, to 110,804,000 a month two years later. The number of mergers increased from 368 in 1924 to 856 in 1926 and reached a peak of 1,245 in 1929. And, again, a new group of corporate giants emerged, including RCA, Chrysler, Caterpillar Tractor, and National Dairy Products.

The diversification mode was both vertical and horizontal, but not as yet conglomerate. Both acquisitions and consolidations were well represented, but the latter continued to yield to the former as larger-firm activity assumed predominance. As reported by the Federal Trade Commission:

... many of the horizontal mergers were engineered by concerns, which, though not the largest in the industry, were still among its first three or four. ... Vertical expansions took on the character of intervention into medium-sized business sectors producing parts, components, etc., consumed in the mass-production industries ..., while the encroachment of large corporations into the fabricating fields ... was promoted to a limited extent. In some characteristically small-business industries, which had been relatively untouched by mergers, new consolidations were formed and expanded to great prominence by the acquisition route (e.g., National Dairy Products, General Foods, and Standard Brands).

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43Nelson, Merger, pp. 45-46. See esp. Table 20, p. 45.
44Beman, p. 73.
Thus, corporations again grew dramatically. Consolidations formed the nuclei; but acquisitions provided the ongoing vehicle for continued expansion. Industry concentration, which had regressed somewhat, regained in vigor:

The second large movement . . . to some degree . . . represented attempts to restore the industrial concentration achieved by the first merger wave, a concentration which had become diluted over the years.46

Again, the merger activity bore a strongly financial flavor. In relation to stock prices and industrial production, it more closely accompanied the former. Graphically, the following observations can be clearly followed on Figure 2:

Merger activity increased with the post-World-War I increase in stock prices and industrial production. . . . From 1924 through 1929 stock prices increased greatly while industrial production increased only moderately. The merger series more closely followed stock prices.47

Beyond this single example, further visual scanning of Figure 2 will confirm that, with minor exceptions, this was the general condition throughout the years included there. Nelson ran statistical correlations for each period:

. . . mergers were more positively correlated to stock-price changes than to changes in industrial production in the three periods of high merger activity—1895-1904, 1919-1931, and 1943-1954. . . . This suggests that capital market conditions or their underlying causes were of leading importance in periods of high merger activity, . . . their role in times of low merger activity was not important. While industrial production

46 Nelson, Merger, p. 5.
47 Ibid., p. 121.
was the more important factor in times of low merger activity, the correlations were so low that no strong cause-and-effect connection is suggested. 48

Following a serious economic downturn, merger activity tends to remain unresponsively flat. 49

From 1932 to 1946, merger activity was flat. 50

**Three and Four: Post-War Years**

Figures 1 and 2 show interim merger peaks in 1946, and around 1954-1955. Since much of the definitive literature in this subject area, other than current analysis, was written in the late 1950's and early 1960's, these moves tend to be classified and analyzed as independent "waves." Different data sources are notably not standardized as to bases for compiling merger figures; data from one source will seldom match illustrations from another. For rough perspective, however, Federal Trade Commission figures list 419 mergers during the 1946 peak year, and 525 and 537 for 1955 and 1956, respectively. 51

Figure 3 provides a broader perspective. After a short fall-back from the 1956 high, the rate advanced to other interim peaks of 759 in 1961 52 and 1,018 in 1963 53 before

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48 Ibid., p. 119.
49 Ibid., pp. 122-23.
50 Ibid.
51 Mund, p. 51.
52 Ibid.
53 Ibid.
Fig. 3—Acquisitions of manufacturing and mining companies, 1895-1972. Scale beyond 1960 expanded. Data from Fortune, April, 1973, p. 71
rocketing to a spectacular new peak of 2,751 in 1969.54 This is now leading current merger scholars to dismiss the post-World War II wave as insignificant, and to reclassify the 1950's and 1960's together as one monstrous final wave, the last of three major merger booms.55 For many analytical purposes, including that of this discussion, this is a mistake. Writing as late as 1964, Mund observed:

Today, merger activity continues to center on horizontal acquisitions of companies producing or selling the same or closely related products. In many cases, horizontal mergers have been—and are being—accompanied by vertical acquisitions designed to secure a control over processing and marketing facilities, as well as essential raw materials.56

Although a Congressional Committee had expressed alarm about the radical growth of conglomerates as early as 1962,57 merger integration patterns in the early 1960's were still thoroughly mixed. Only later in the decade did conglomerates really come to dominate the scene.

The effect of the two war time periods on merger rates is difficult to assess. Mund has summarized an update from 1929 concisely:


55These are all Federal Trade Commission figures. While they do not correspond precisely to the scales on Figures 1, 2, or 3, which also vary amongst themselves, they do preserve a consistent trend visible in each Figure on which the respective years are represented.

56Mund, p. 51.

57Mergers and Superconcentration, House Small Business Committee, 87th Congress, first session (Washington, 1962), see esp. p. 44.
Although the number of acquisitions fell off sharply after 1929, the process of corporate acquisition slowly but steadily continued. . . . A special study prepared for the Senate found that the formation of mergers was continued throughout the course of World War II . . . "the giants expanded greatly, while all other firms, especially small business, suffered a substantial decline." . . . Following V-J Day in 1945, the number of corporate acquisitions increased rapidly. A decline occurred in 1948 and 1949, but an upturn developing in 1949 brought on the third great merger movement in our history.58

Writing from a 1964 frame of reference, Mund had already adopted the "three waves" modification, considering himself midstream in the largest wave.59

Wave Five: The Conglomerate Era

The essential nature of the conglomerate era, and the principal effects of its inherent abuses, have already been discussed.60 Though most dramatically evident from 1967 through 1970, the era is generally defined to span a decade starting about 1963.

It was a time of large transactions. Figure 4 depicts the number of acquisition transactions over $10 million, by years; and, of those, such acquisitions completed by the 200 largest U.S. corporations. During the three years from 1964 through 1966, 283 major corporations, with over $10 million assets each, disappeared from public view; in a corresponding time period from 1967 through 1969, 530. This suggests a

58Mund, p. 51.
59Ibid.
60See esp. pp. 32-36.
Fig. 4—Annual number of merger transactions involving the acquisition of firms with assets over $10 million, 1963-1972. Source: Fortune, (April, 1973), p. 71.
further dimension to the segmented reporting problem: Not only has the competitive situation within industries been altered by diversification generally; but, also, the number of very large corporate entities for which public information was previously available has declined because of the acquisition mode.

Beman has summarized some consequences of the era concisely:

Probably the most damaging result of the conglomerate merger era was the false legitimacy it seemed to confer on the pursuit of profits by financial manipulation rather than by producing something of genuine economic value. Some conglomerates specialized in using adroit but legal tricks to fatten their profits, and the example has been widely emulated. By temporarily seducing much of Wall Street with earnings growth based on accounting gimmicks, conglomerates may have, for the long run, weakened public confidence in the securities market. Certainly their activities accentuated the tendency of some publicly held companies to overemphasize immediate profits, sometimes at the expense of stockholders' long-term interests.61

Mergers: Summary and Interpretation

The literature on mergers and merger movements is overwhelmingly too vast and unsettled to permit comprehensive review. There is no attempt at a thorough coverage of it here, or even to determine a consensus of authoritative opinion on any of the more controversial issues. Yet, the true nature of the financial reporting problem for diversified firms cannot be adequately discerned without perspectives

61Beman, p. 70.
from these complex evolutionary forces, which have forged so much of the diversification now pervading industry. Effective financial reporting requires an effective knowledge of the basic nature of the entities reported for. The information of the preceding sections, emphasizing selected findings and opinions of others who are authoritative in merger areas, documents a number of observable characteristics, trends, and patterns relevant to the financial reporting issue. Though merger movements are widely known for the extraordinary speed and power with which they have spread diversification, some of these effects appear to be largely ignored in accounting areas.

Merger movements are a continuous and cyclical phenomenon:

An outstanding characteristic of mergers, which have been a basic force in molding our industrial structure, is the highly episodic nature of their occurrence. ... merger movements [have] occurred on so extensive a scale that they constituted giant waves ...62

The "waves" correlate with business cycles generally, but cause-and-effect interactions cannot be defined beyond a conclusion that the relationship is mutually complex.63

They tend to mirror the business cycle in direction, but not in magnitude; the first wave, at the turn of the century, was substantially larger than that which accompanied the socio-economic spree of the 1920's. They correlate more closely

62 Nelson, Merger, p. 4.
63 Ibid., Chapter 5.
to financial factors than to physical output. Over all, Nelson found:

... merger expansion was not only a phenomenon of prosperity, but that it was also closely related to the state of the capital market. ... the condition of the capital market, as reflected in stock price changes, has clearly been a more important immediate influence in merger activity than underlying industrial conditions have been.\footnote{Ibid., p. 7.}

Informally, he appeared to believe that merger movements are fundamentally caused by an accumulation of reorganizational needs, spawned by technological "real" factors of industrial production, and temporarily suppressed; with timing of their release, in bursts, determined by subsequent conditioning of the requisite permissive factor, the capital market.\footnote{Ibid., Chapters 1 and 5. See esp. pp. 125-26.} More commonly in the literature, others, albeit less intensely specialized on the internal workings of merger movements, agree as to this role of the capital market; but attribute the motive forces more to power greed and a struggle for monopolistic concentration than to any internally generated form of physical output needs.

As an economic force, merger movements are almost entirely a phenomenon of the past century. Their innovation had to await the development of the corporate business structure, and the subsequent growth in sophistication and capacity of the capital market. Whether responding to real
output needs or to market power motives, their mechanical essence has been consistently of a financial nature.

On a secular basis, the use of mergers has tended to grow, approximately, in proportion to increases in both stock prices and physical output; Figure 2 will visually confirm that trend lines, if fitted to the three quarterly series graphed there, would exhibit reasonably similar slopes. As a complex shaping force in the economy, however, the influence of these merger movements has grown considerably more than would be so indicated. On Figure 2, the "mergers" chart excludes the impact of growth in value per firm merged.66

This is a common failing throughout much of the literature on mergers; most of the available data for earlier years is simple tabulation of the number of firm disappearances. Since the time of Figure 2, of course, the influence of merger movements in the economy has grown even more sharply.

A few non-comparable figures might be of interest here. In the "first wave" peak year of 1899, the average "capitalization" 67 per disappearing firm was $1.87 million 68 total

66 By no means is this a shortcoming of the source research, which purports only to analyze the data that was included. Nelson's study is exceptionally thorough, wholly valid, and a remarkable breakthrough within its intended scope of analysis.

67 For most of the firms included here, this means par value of equities authorized. Improbable though it sounds, comparison tests on the seventy 1895-1920 consolidations for which assets data is also available show little difference between authorized par value common stock capitalizations and gross assets totals. For possible explanations, see Nelson, Merger, p. 19.

68 Computed from data in Ibid., Table 14, p. 37.
disappearance capitalization was $2.25 billion.\textsuperscript{69} In 1968, when the number of disappearances was approximately double those of 1899, average asset value of such firms was $4.5 million;\textsuperscript{70} total disappearance assets, over $12 billion.\textsuperscript{71} The first $100 million disappearance occurred in 1952;\textsuperscript{72} there were 23 such mergers in 1967.\textsuperscript{73} None of these figures are adjusted for price level changes in the economy, nor, for proportionality comparisons, for growth in the economy at large. The really large growth in disappearance value per firm has occurred only in the more recent years. See also Figure 4.

Much of the publicity about diversification; much of the impetus for mergers research; and much of the recent pressure on the accounting profession to improve its procedures, regarding both diversification generally and mergers in specific; has all emerged from concern about economic concentration, and about activity related to antitrust action, either potential or as effected. The earlier merger "waves" did in fact result in larger firms, fewer firms, and greatly increased market power concentrations.

\textsuperscript{69}Ibid., Table 14, p. 37.

\textsuperscript{70}Computed from Federal Trade Commission figures. See \textit{Annual Report of the Commission—1970}.

\textsuperscript{71}Ibid.


\textsuperscript{73}Ibid.
in many specific industries and in the total economy. The tidal wave "boom" of the 1960's also increased the size of a large number of corporations, and did so abruptly and explosively. Most notably, however, it did not substantially increase monopoly concentrations, either on balance among various industries or in the total economy. These aspects will be reviewed in the next section.

Among the causes for the altered impact of this most recent merger movement, some additional trends and cross-currents can be chronologically traced. The early merger pattern was of consolidation; this yielded gradually, but quite early, to acquisition. Nelson observed:

The rise in importance of the acquisition form of merger, though not unbroken, claimed some of the characteristics of a secular trend phenomenon. Apart from the very large consolidations which reappeared on the resumption of increased general merger activity in 1915-1920, acquisition merger activity has been a consistently growing share of total merger activity.\(^{74}\)

Further, in the earliest wave, the predominant integration pattern was horizontal. While horizontal integration did not really phase out in future waves, as the consolidation merger form did, it was more strongly joined in the second wave by growing emphasis on vertical integration. In 1950, an amendment to the Clayton Act added new legal discouragements to both vertical and horizontal integration. Gradually, the "merger movement" of the 1950's metamorphosed into the "conglomerate boom" of the 1960's.

\(^{74}\)Nelson, Merger, p. 7.
Figure 5 illustrates the shifting mix of integration patterns approximately through the 1950's and 1960's. The "P" and "M" classifications are Federal Trade Commission creations. According to Fortune, from which Figure 5 was adapted:

... mergers in which the acquiring and acquired companies have nothing in common have come to dominate the increase in conglomerate unions. What the Federal Trade Commission calls product-extension conglomerate mergers, in which a company acquires another producing a related product, have dwindled in relative importance. And what the FTC calls market-extension mergers, in which a company acquires a similar but geographically separate company, have practically disappeared.  

Note the classification problems in using data from various sources. Much of the numerical information that has appeared in the literature in recent years about mergers and about conglomerates has been provided by the FTC. According to such figures, conglomerates came to dominate merger transactions, with 53 percent, in the 1952-55 period. If the two improvised categories, product-extension and market-extension, should be classified as nonconglomerate, leaving the conglomerate designation to the mergers where buyer and seller have nothing in common, the 50 percent milestone was not reached until 1968.

In the earliest merger "waves," which resulted in the greatest increments of concentration, the pattern was to join a number of smaller corporations together simultaneously.  

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P = Product extension (conglomerate)
M = Market extension (conglomerate)
O = Other (conglomerate)
V = Vertical (nonconglomerate)
H = Horizontal (nonconglomerate)

Fig. 5--Integration patterns in U.S. mergers, 1948-1968. Source: Adapted from *Fortune*, February, 1969, p. 81. (FTC data.)
to form the power nucleus; then, during the later merger movements, or, in some cases, more gradually between "waves," to expand them in size and power via the acquisition route. By the end of the 1920's wave, much of this consolidating had run its course. These firms went on to become the mature, traditionally diversified corporate giants of today. Of the 100 largest manufacturing firms in 1955, 63 had grown importantly by early merger. About half (31) had had their most formative mergers by the end of wave one; 54, by the end of wave two. 76 Though some have undergone name changes, almost all are still among the corporate leaders today. 77 Beyond the second wave, the consolidation form of merger effectively disappeared. Waves three and four, though reflecting influences of post-war prosperity, were relatively shallow, broad waves. From 1930, merger waves were damped in magnitude until the new form came along in the 1950's, and exploded in the 1960's

Monopoly Concentration and Antitrust

There is no intent here to analyze either monopoly concentration or antitrust activity broadly. Further, this dissertation will attempt to avoid involvement in the controversies that have long surrounded them. In the ubiquitous style of John Kenneth Galbraith:

76 Nelson, Merger, p. 4.

77 See Ibid., Appendix C, where the names of all 100 corporations are listed, pp. 154-56.
Data on the concentration of individual activity in the hands of large firms, and especially any that seem to show an increase in concentration, sustain a controversy in the United States that, at times, reaches mildly pathological proportions. The reason is that much of the argument between those who see the market as a viable institution and those who feel that it is succumbing to monopolistic influences has long turned on these figures. These figures are thus defended or attacked according to predilection.\textsuperscript{78}

On the other hand, to simply ignore these issues in any attempt to resolve the current financial reporting problem for diversified firms would constitute negligence. One of the key institutional forces historically affecting the merger movement, and, as previously noted,\textsuperscript{79} the root source of current pressures on the accounting profession in diversified disclosure areas, has been the antitrust movement. Monopolistic concentration in industry, whatever its broader effects on the economy, has been an evolutionary concomitant in the development of today's forms of industry diversification; any attempt to diagnose or describe those forms of diversification must at least accord it consideration. Accurate measurement is a dubious proposition:

Any . . . simple characterization of changes in concentration is inadequate . . . because of the complexity of these changes. . . . There are two major complications. First, the change in overall concentration for all business enterprise in the economy is essentially a composite or additive result of (1) changes in concentration in individual sectors of the economy . . . , and ultimately in individual industries, and (2) changes

\textsuperscript{78}John Kenneth Galbraith, \textit{The New Industrial State} (Boston, 1967), p. 75.

\textsuperscript{79}See pages 43-46.
in the relative importance of different sectors in the economy, so far as these different sectors have differing degrees of concentration. . . . Second, the whole idea of change in concentration, as a statistical concept, is inherently complicated and potentially ambiguous.80

Mergers and Concentration

For all of these difficulties, there is a historical consensus on the general progression of concentration through the earlier merger years. It generally agrees with the excerpted views in the preceding sections. As summarized by Bain:

(1) Starting with a relatively unconcentrated business structure after the Civil War, the economy experienced a marked increase in overall business concentration from then until the early 1900's . . . (2) From 1905 or 1910 until the middle of the 1930's, . . . there was no further dramatic overall increase in concentration in manufacturing. (3) From about 1935 up roughly to the present [1959], business concentration has remained relatively stable both within the economy as a whole and within the principal sectors. A plateau of concentration was reached by the middle 1930's from which we have not departed, upward or downward, to any significant extent.81

These periods correspond approximately with the first four merger waves, and the descriptions correspond precisely to Nelson's findings about them. Much of today's industrial concentration apparently derived from the first big merger wave, wherein consolidation was the dominant merger form and the predominant integration pattern was horizontal. The

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rest of it, considerably lesser in amount, came largely during the second merger wave, when consolidation was still a major force and integration was mixed horizontal-vertical. After that, merger waves were damped; the consolidation form phased out, almost entirely; and integration patterns were somewhat ambiguously mutant, until the conglomerate form assumed dominance in the 1950's-1960's. That most recent period is still controversial as to its concentration contributions.

1929-1962: Quiet Crosscurrents

In the subject areas of industrial concentration, authoritative figures can be located to prove almost any point. Berle and Means have contended that concentration continued to increase past the 1929 crash:

The 100 largest manufacturing corporations increased their proportion of all manufacturing corporation assets from approximately 40 per cent in 1929 to approximately 49 per cent in 1962, while their proportion of net capital assets increased from 44 per cent in 1929 to 58 per cent in 1962.82

There is confusion here as between industry sectors and time periods:

For the period from 1929 to 1950, there is no present basis for saying whether there was an increase in concentration for non-financial corporations taken as

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a whole. . . . it is established that there was a very considerable increase in over-all concentration from 1929 to 1933, clearly in large part a depression phenomenon, which was presumably reversed between 1933 and 1939. There is little evidence that World War II changed the degree of concentration significantly. Only a careful repetition of the 1929 study can establish the changes in concentration between 1929 and 1950.83

Since Berle and Means distinctly detected a substantial increase in concentration for the largest manufacturing corporations from 1929 to 1962, but conceded that "there is no present basis for saying whether" there was such an increase for non-financial corporations from 1929 to 1950, no definitive conclusion emerges. The latter sector is larger than the former, though the former substantially dominates it. It is entirely compatible, and plausible, to suggest that most of the growth occurred within the period from 1950 to 1962.

This would be a logical result, in light of the mergers analysis of the preceding sections. The continuing, though diminished, activity level from 1929 to 1933 demonstrates the "continuity" of merger movements, established by Nelson. The backsliding concentration rate through the 1930's corresponds to his findings of flatness and indeterminacy for merger rates in periods of nonprosperity, and constitutes a post-second-wave counterpart to the backsliding concentration rate Nelson found in his depth study of the post-first-wave period. This all corresponds nicely to the

83Ibid., p. 357.
merger subsurface shifts: from predominance of horizontal integration toward a horizontal-vertical mix for this period, and to the demise of the consolidation form of merger in favor of acquisitions. It infers that consolidations are more concentration prone than acquisitions, and horizontal integration patterns somewhat more so than vertical; again, an intuitively logical behavior pattern conjecturally posited in preceding sections.

Though notably not very vigorous, merger activity continued at a modest rate throughout most of this 1929-1950 period, with a moderate increase during wave three following World War Two. This activity undoubtedly continued to add an element of sharpness to the growth rates of corporations; but the changing merger forms and integration patterns of those years tend to support the notion of a sharply curtailed growth of concentration. Wave three was severely damped, and horizontal integration was subjected to rather heavy antitrust discouragement. That wave effectively concluded the 1929-1950 period for which Berle and Means were unable to document any dramatic concentration growth in nonfinancial sectors of the economy, above. In 1950, precisely at the end of the period, the Celler-Kefauver Amendment to the Clayton Act added fresh antitrust discouragements to use of both the horizontal and vertical merger patterns, as traditionally conceived. In the years that followed immediately, variations of these forms evolved in a semiconglomerate context. These have already been described. See Figure 5.
If the Berle-Means 1929-1962 concentration growth did occur almost entirely from 1950 to 1962, as conjectured above, it occurred during a substantial merger wave (wave four); with a thorough mix of integration patterns, and an almost purely acquisitional form; and endured the mutant Korean War, which began in 1950 and had no real precedents as to economic impact in earlier wartime periods.

Statistical concentration studies for these time periods are largely inconclusive. Several have been made, but comprehensive review of them would serve little purpose here. They were methodologically elaborate, but generally apologetic. Because of the enormity of available raw data, and the problems of organizing it, they tended towards sketchy comparison of selected data from widely scattered points in time. The most sophisticated, and most useful here, was one by Nelson, whose earlier merger study has also been extensively referenced. Using highly innovative techniques and a limited time span, he thoroughly explored the years from 1947 to 1954:

Between 1947 and 1954 the average level of concentration underwent little change. The average share of industry sales of the four largest firms, weighted by industry employment, increased from 34.6 per cent in 1947 to 35.3 per cent in 1954, for the 375 manufacturing industries that remained comparable in definition. Yet only a small minority of these industries showed little or no concentration change; only 72 showed a change of less than one per cent, while 161 showed a change of more than five per cent. Underlying the glacial movement in the average were many
relatively large movements in the concentration of individual industries.84

He added this highly interesting observation:

. . . taken alone, the movement in average concentration has little significance. What seems to be more important is the suggestion that the turnover among industries, and this is pronounced in a large industrial system, operates to limit the growth of concentration levels.85

If mergers did promote concentration in the first two merger waves, as they surely must have, his finding in the earlier mergers study that merger activity leadership "rolled over" among industries, even in the quiet years between the first two waves, introduce an interesting mechanism that may have tended to damp down concentration increases.

Widely cited in the literature is a general concentration study by Adelman, covering the years from 1931 to 1947. While noting that the effectiveness of his results was diminished somewhat by a tendency of large corporations to deflate asset values via writedowns during this period, thereby diminishing comparability of their capitalizations with those of smaller firms, he found no increase in concentration and a possible decrease. His essential finding:

If there has been any strong and continuing tendency since 1931 to greater concentration in manufacturing, it must be detectable in the corporate balance-sheet statistics for that period. These statistics do not show it. Therefore the tendency probably does not exist.86

84Nelson, Concentration, p. 9.
85Ibid., p. 10.
Also widely cited is the work by Nutter and Einhorn, expanding an earlier work by Nutter, embracing the entire period from 1899 to 1958. They compared selected output concentration data from the years 1899, 1937, and 1958 under one set of criteria; and 1937, 1939, 1954, and 1958 under another. Devoting three pages of their "Summary and Qualifications" chapter to summary, and the other three to qualifications, they concluded:

\[\ldots\] based on comparable criteria of monopoly, monopolistic industries accounted for 32 per cent of manufacturing income in 1899, 28 per cent in 1937, and 29 per cent in 1958. Under broader criteria of monopoly, the fractions rose to 39 per cent for 1954 and 1958.87

To the extent that these conclusions support anything, they support the notion that most of the Berle-Means 1929-1962 concentration growth did not occur during the earlier parts of that period. To some extent, they tend to indicate that the monopoly monster of the past several decades has been a bogeyman.

**The Conglomerate Years**

That the modern corporation is gigantic can be readily ascertained. That this corporate behemoth is still dramatically increasing its economic dominance, as widely feared, is less clear. Whether or not the conglomerate boom has added to large-firm concentration is still an unsettled point of rather severe debate.

87Nutter and Einhorn, p. 90.
If there was growth in concentration, it was clearly a lesser proportionate growth, relative to the growth in size of the largest corporations, than in earlier periods of prosperity. In 1963, the latest year cited in Berle and Means' classic book, the 500 largest industrial corporations as tabulated by *Fortune* had combined sales of $245 billion.\(^8\) Seven years later, at the apex of the conglomerate boom, the largest 500 had sales of $464 billion.\(^9\) As a percentage of total industrial sales, however, the 500 in 1963 garnered about 62 per cent; those in 1970, still less than 64 per cent.\(^0\) Unquestionably, this is dominance; but, during the largest economic spree in history, it is dominance at a largely curtailed rate of increase.

There is no consensus in the literature on the status of industrial concentration in recent years. If it has been resting on a plateau, it is a high plateau; existing concentration is unquestionably substantial. Galbraith has dramatized this with a factual compendium, as of 1962:

> Nothing so characterizes the industrial system as the scale of the modern corporate enterprise. In 1962 the five largest industrial corporations in the United States, with combined assets in excess of $36 billion, possessed over 12 per cent of all assets used in manufacturing. The fifty largest corporations had over a third of all manufacturing assets. The 500

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\(^0\) *Ibid.*
largest had well over two-thirds. Corporations with assets in excess of $10,000,000, some 2000 in all, accounted for about 80 per cent of all the resources used in manufacturing in the United States.91

Further:

In 1960 four corporations accounted for an estimated 22 per cent of all industrial research and development expenditure. . . . In 1965, three industrial corporations . . . had more gross income than all of the farms in the country. . . . The revenues of General Motors in 1963 were fifty times those of Nevada, eight times those of New York and slightly less than one-fifth those of the Federal Government.92

Any attempt to accurately measure "economic concentration" is, at best, a dubious effort. Mason points out that two types of such measurement are in common use:

The first, . . . general concentration, purports to measure the share of some economic activity accounted for by large firms, i.e., firms over a certain size, in the economy as a whole or in some large segment thereof. . . . The second type of concentration measure purports to indicate the share of an industry or product accounted for by the largest firms in the industry or producing the product.93

Once such measurement is taken, however, the widespread belief that a measure of monopoly power has been obtained is equally dubious:

General measures of concentration professing to indicate the share of the economic activity of some large segment of the economy, say manufacturing, controlled by the largest firms, have no necessary connection with monopoly [italics his], a market

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91 Galbraith, The New Industrial State, p. 75.

92 Ibid., pp. 75-76.

phenomenon. The largest firms may . . . generally . . . operate in large markets. If, despite their size, the share of the various markets occupied by these firms is relatively small, if collusions among these firms are absent, and if various other elements of market structure are favorable, it is conceivable that a high degree of general competition in manufacturing industries as a whole could be compatible with a high degree of competition in each manufacturing market.\footnote{Ibid.} [italics mine]

Market measures of concentration, on the other hand, may have some relation to monopoly— . . . but have no necessary connection with size of firms [italics his]. The shoe-string or dish-mop industry may be highly concentrated, but not in the hands of huge corporations. . . . the economy, or the manufacturing sector, might be shot through with strong positions of monopoly, even though the degree of general concentration is relatively small.\footnote{Ibid.}

At the time of this writing, there appears to be a growing view in the literature that conglomerate mergers are not monopolistic; rather, they may constitute a trend reversal. In contrast to internally generated diversification, by traditional corporate giants under vertical or horizontal integration patterns, diversification by conglomerate acquisition may actually increase competition in some industry sectors.

The most dramatic acknowledgment of this by a recognized institutional power has just come from the Federal Trade Commission. Earlier, that organization had strongly emphasized the dangers of cross-subsidization:

\footnote{Ibid., p. 18.}
\footnote{Ibid.}
... there is present in most conglomerate acquisitions a simple drive to obtain greater economic power. With the economic power which it secures through its operations in many diverse fields, the giant conglomerate corporation may attain an almost impregnable position. Threatened with competition in any one of its various activities, it may sell below cost in that field, offsetting its losses through profits made in its other lines ... the conglomerate corporation is thus in a position to strike out with great force against smaller business in a variety of different industries. 96

Following completion of a new in-depth empirical analysis of the operations of nine large conglomerates, this agency has now published an extensive review of arguments in both directions. Against the conglomerates:

Those who view conglomerate mergers an anticompetitive base their belief upon various conduct patterns ... [which] include predatory pricing, mutual forbearance, and reciprocal buying. 97

But, in their favor, is the "toe-hold hypothesis":

The "toehold" hypothesis asserts that conglomerate mergers can have a pro-competitive effect if small market positions are acquired in concentrated industries and then are expanded. 98 [italics mine]

Marshalling the various arguments and applying them to the nine corporations individually, the remarkable conclusion was:


97 "Conglomerate Merger Performance: An Empirical Analysis of Nine Corporations" (authors not given), reprinted in Mergers & Acquisition, VIII (Spring, 1973), 1. Though published without authorship credits, the research report was actually authored by Stanley E. Boyle and Philip W. Jaynes. See "Acknowledgements," Mergers & Acquisition, VIII (Spring, 1973), 41.

98 Ibid., p. 27.
While the conglomerates are widely diversified, most of their individual market positions are relatively insignificant. . . . From the standpoint of industry concentration, the conglomerates are participants in markets which, if anything, are slightly less concentrated than are manufacturing industries generally. They also appear to be moving, through their merger efforts, into even less concentrated industries than they were in initially.\[99\]

Under horizontal and vertical integration forms, diversification moves may have involved market concentration motives. On the other hand, they were at least based on conscious strategies for increasing intrafirm economic efficiencies through scale of plant economies; more effective use of human, technological, and capital resources; etc; i.e., they were based largely on real economic decision factors.

Under conglomerate integration forms, net economic consequences are an even less settled matter. While there is now a growing feeling these may not be monopolistic on balance, the in-firm motives also have a less purely economic emphasis. Much has been written about a quest for "synergism."

\textit{syn-er-gism} . . . \textit{n.} . . . The action of two or more substances, organs, or organisms to achieve an effort of which each is individually incapable.\[100\]

No effective measures of synergism in corporate diversification have as yet been devised. As to both fact and potential, however, doubts have been raised. Betty has observed:

\[99\textit{Ibid.}\]

"Synergy" in financial jargon has come to mean efficiency released through merger. ... with the release of synergy it is possible for management and stockholders to benefit through increased profits while society's resources are being employed more efficiently.

There is general agreement that the potential for synergy exists in many mergers; however, releasing it is another matter ... 

According to ... [a survey by Kitching] the synergy potential is least in the case of conglomerate-type mergers. Also, the ordinal rankings of synergy potential for the functional areas are, in this order, finance, marketing, technology, and production—a ranking which seems to contradict common sense. ... 

A possible explanation for the high ranking of financial synergy ... is that, in these areas, synergy is easiest to release. For example, greater borrowing potential of the parent company or excess cash flow could enable the newly acquired firm to immediately undertake profitable projects which they were unable to finance by themselves. ... 

... synergy release is the lowest for conglomerates in all categories except finance. That is, relative to other types of mergers, the release of marketing efficiencies, technology efficiencies, and production efficiencies is harder in the case of conglomerates. 101

In almost every meaningful respect, the conglomerate appears to be more a financial phenomenon than an economic one.

CHAPTER IV

DIVERSIFICATION: CONCEPTS

If the "diversified firm" is to be accounted for, it must first be defined. If accounting policy groups are to prescribe reporting guidelines, the nature of the phenomenon has to be considered. The subentity segmentation problem will be investigated in Chapters V through VII.

Analysis to this point has explored not the problem, but the basic nature of the phenomenon underlying the problem. Without knowledge of the evolutionary, institutional, and environmental forces which gave it birth, there can be no adequate understanding of the problem. And, in this case, the problem is highly sophisticated.

Conceptual Needs

The literature of accounting makes scant allowance for the possibility that differentiation of diversification risks according to intrafirm organizational fundamentals is operationally meaningful. Although Mautz has perceptibly identified the causes of the diversification reporting problem to include both managerial decentralization and operational integration, in addition to market diversification, there seems to be a widespread inference that, at the operative level of dealing with the problem, "diversification
is diversification"; i.e., it is expeditious to treat the diversification organism without reference to these causes. Proposals tend to be unidimensional: "market" diversification, measured by industry sector, views it simply from its field of exhibition, the marketplace; "product" or "production" diversification, from the internal viewpoint of physical facilities and cost allocations. More abstract, and more difficult of recognition, much less of measurement, the complex of internal organizational factors in the broader connotations of Mautz's definition tend simply to be forgotten. If any realistic form of solution to the segmentation problem is to be found via the route of centrally imposed regulations or guidelines, it will be necessary not only to identify and measure these less visible causal forces originating inside the firm, but also to group them into meaningful interfirm categories.

At the time of this writing, the FASB task force on Reporting by Diversified Companies is asking top management in approximately twenty-five traditionally diversified companies: "What decision criteria . . . [do you] employ for purposes of internal and external segmentation?"¹

This is needed. Additional questions, as yet largely unanswered, include:

1. (a) How much segmented information is actually reaching the investor; and
   (b) how is it being segmented?
2. (a) How much segmentation could realistically be provided by various firms, and by various types of firms; and
   (b) how could they realistically segment it, given individual variations in their product mixes, organizational structures, managerial philosophies, cost accounting systems, market structures, etc.?
3. How much segmentation, and in what form:
   (a) does the investor want?
   (b) does the investor need?
   (c) will the investor most beneficially use?
4. How can the providable information be optimally balanced against these investor wants and needs, given variations among:
   (a) different types of investor; and
   (b) different types of firm?

There may well be no way that any uniform requirements, or guidelines, can be enforced, implemented, or even defined. Until these questions are asked, no one will know. This dissertation can do very little toward answering these questions, and has accordingly adopted a much more limited scope. Perhaps it can contribute modestly toward refining some of the questions.
In accounting, many issues develop at the theoretical level and languish for years before finding practical implementation, e.g., price level adjustments, market valuations, etc. This issue has originated at the applied level, through felt need in practice; and has been almost violently thrust upon the profession from grass roots sources. Apparently, these forces were unanticipated. They remain largely unrecognized. The profession was caught off guard, ill prepared to deal with the matter. While a good deal of empirical research has now gathered a good amount of expert opinion, the problem still sits in a theoretical vacuum. Everyone wants to impose segmented reporting requirements, but nobody knows how the segments can and should be defined.

It may well turn out, across the spectrum of reporting units and user groups, that nobody is qualified to say. The first step in the search is to examine the sources of the problem.

"Traditional" Diversification

Throughout most of the twentieth century, U.S. industry has been dominated by large, traditionally diversified companies. These, in turn, have been effectively controlled by a concentration of wealthy families:

\[
\ldots 1.6 \text{ per cent of the adult population own at least 32 per cent of all assets, and nearly all the investment assets, and } \ldots 11 \text{ per cent of households own at least 56 per cent of the assets and } 60 \text{ per cent of productive assets as of 1965-1967.}^2
\]

As society has its "old wealth," industry has its "blue chips." For the most part, the latter are controlled by the former. They have endured through the decades. From 1937 to 1964 there were few modifications, beyond a few merge-outs, in either the list of 200 largest U.S. corporations or their ownerships.

The typical "establishment" corporation gained its original power through the consolidation form of merger. The majority of these power nuclei were formed in either the first merger wave, at the turn of the century; or the slightly smaller one of the 1920's. Their fundamental market concentrations were established at that time. In the decades since, they have simply attempted to maintain or expand that power through internal growth and development, and through the acquisition form of merger. They have diversified into additional market sectors; in some cases, substantially.

In the language of this dissertation, this growth and development has been evolutionary. "Traditional" integration patterns have been predominantly horizontal and/or vertical; during the primary formative and early developmental years.

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3 Ibid., Chapters Four and Five. Also, for 1937 and 1964 itemized listings of these corporations and their dominantly controlling families, see Lundberg, Appendix B, pp. 752-60.

4 Ibid., p. 200.

for these corporations as a group, entirely so. Diversification strategy has clearly emphasized ongoing product and market operations, with a view toward enhancing competitive advantages. If, and to whatever extent, the U.S. economy does have a "monopoly problem," as antitrust advocates vigorously believe it does, this type of firm is primarily responsible for it.

"Modern" Diversification

For about the past fifteen years, a "new form" of diversification has disrupted the established equilibrium in industry and finance. The "conglomerate era," two years past its apparent close as of this writing, has undergone abrupt reputation changes: from glamorous, in its prime; to infamous, a few years ago; with partial recovery toward a new, but unique, respectability today. The merger wave of the 1960's was enormously larger than its earlier-era predecessors. From it emerged a fundamentally different breed of corporate giant, the conglomerate. This is now in the process of blending into a restabilizing institutional environment. Though often complacently regarded in the public mind as "just another large corporation," the breed is genealogically unrelated to the "traditional" big-power corporation summarized in the immediately preceding section. It had a computerized conception, and an adult birth:

In the apt words of John C. Burton, chief accountant for the Securities and Exchange Commission, three forces propelled the merger wave: "The scientific
manager, the psychedelic accountant, and the go-go fund." The first provided the economic rationale for mergers, the second gave the enterprise the appearance of immediate success, and the third helped to produce the rising stock price that facilitated more mergers. "It was like trying to build a house from the roof down," says Burton. "But sometimes the roof actually stayed up." 6

The popular image of a conglomerate is, itself, conglomerated. There is little standardization. Concepts are almost as varied as the circumstances and backgrounds of the conceptualizers, much in the tradition of the classic tale about the blind men describing the elephant. In a recent 1,171 page symposium on the "conglomerate phenomenon" in the St. John's Law Review, seventy-eight distinguished authorities in various fields offered a wide array of definitions. To a metals executive, a conglomerate was essentially an enterprise that upsets competitive market conditions; 7 to an FTC economist, a financially based orientation and an instant-earnings-growth objective are definitive; 8 to a tongue-in-cheek business school Dean, "a conglomerate is a kind of business that services industry

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6 Beman, p. 144.


the way Bonnie and Clyde serviced banks."⁹ Some threads of uniformity were apparent among professors of finance and economics in the symposium. They tended to emphasize partitioned integration forms, in both production and marketing areas of operation. To Weston, for example:

Conglomerate companies . . . are companies whose diversification, either internal or external, involves products whose engineering, design, production and marketing functional capabilities requirements overlap to a very small degree.¹⁰

Joel Dean defines it as "... any company that operates in several different and unrelated markets; GE and GM would meet this test."¹¹

The phenomenon is new. A consensus "public image" does not yet really exist. The conglomerate is an immensely complex business form, embracing almost everything but standardization. A recent editorial in Mergers & Acquisitions interrogatively exclaimed: "Is it possible that we need specialists who can generalize in the area of conglomerate mergers!"¹²

More basically, the typical conglomerate corporation acquired its size and market power via the acquisition form of merger. It began with a small financial power base, relative to that of the "traditional" corporation, above. It developed and diversified rapidly, through a series of acquisitions based on sophisticated, but relatively speculative, financial mechanisms. In constrast to the "old wealth" backing the "traditional" firm, it can more aptly be described as credit based. While all merger movements have been dependent on the capacity of the capital market, the conglomerate merger movement was more immediately sensitive to that market's sustained condition; a drop in stock prices more severely inhibited the ability of conglomerate firms to maintain their growth objectives. Those goals tend to place less emphasis on "real" economic output, in deference to financial considerations; and to be referenced in more immediate time frames.

The typical conglomerate is of recent origin. In the language of this dissertation, its growth and development have been revolutionary.¹³ Operating in a larger number of less interrelated markets, and with a smaller financial power base, the conglomerate is less prone to dominate its markets. It is increasingly becoming recognized, on balance, as antimonopolistic for our present economy.

¹³See pages 22-24.
In corporate size, it is more volatile than the "traditional" large corporation. During prosperity booms, it acquires; in recession, it divests. As a diverse, modularly constructed entity, it is organizationally less integrated; and, accordingly, less coordinated as to its structure and underlying systems, including personnel relationships, communication flows, accounting systems, production facilities, etc.

Clearly, the conglomerate is a different breed.

Observations

Joel Dean's definition of a conglomerate can be expanded for clarification:

Conglomerate could be defined as any company that operates in several different and unrelated markets; GE and GM would meet this test. I use conglomerate here to refer to a company which in the 1960's has routinely acquired a large number of companies which operate in different markets. Thus the hallmarks of the companies I am discussing are (1) that they have grown importantly through acquisitions and (2) that their operating divisions are diverse and numerous.14

Dean is a most distinguished managerial economist and capital budgeting expert, widely renowned in both education and industry. Yet, his definition, though compatible with those of a good many other prominent economists, stands in sharp contradiction to the prevalent view of the operative world of finance, as expressed by Fishbein.15 To Fishbein, an investment banker, the "traditional" firm and the "conglomerate"

14 Dean, p. 15.
15 See page 27.
are clearly distinguishable, and need to be distinguished.

To him, "GE and GM" are specifically not conglomerates.

Part of the difference lies in the time frame, of course:
GM and GE were formed in the traditional mode, in earlier merger eras; but their 1960's expansion emulated some of the mechanisms of the conglomerates, in that they relied on acquisition; and, to a very modest degree, they expanded into fresh market sectors.

To the Federal Trade Commission, the two types of firm are distinct; yet, in the current time frame again, they exhibit some behavior similarities. With the market place as its object of inquiry, and the 1960's as the time frame, the new FTC "conglomerates" study associates them together:

While the sample conglomerates are spectacular examples of diversification, it should also be recognized that most large firms are diversified to some extent, and the degree of diversification for the 200 largest manufacturers has increased significantly from 1950 to 1968. Thus, the conglomerates are not unique, but are merely extreme examples of a trend that has occurred in manufacturing generally.16

According to this description, the two types occupy the extreme end points of a spectrum; yet, the continuum between is by no means smooth.

The key point in all this is the purpose for a given definition. These conceptions are all wholly valid, though conflicting. They suit the uses to which each proponent

puts them. If one is doing a market concentration study, or doing any type of study that researches trends of the 1960's from the frame of reference of individual market sectors, then "diversification is diversification." Unless the form of the firm is an object of inquiry, it matters not. For much economic analysis, including most market concentration analysis aimed at formulation of antitrust policy, this class of definition is appropriate. Any other would unnecessarily perplex the research.

If the definitional goals center around the type of firm, the reverse is true. To the investment banker, it makes a fundamental difference: the typical "comglomerate" has a much different capital structure, and a wholly disparate set of risks. To Fishbein, GE and GM are traditional. Their "old money" bases, solid financial structures, long histories of financial responsibility, basically economic orientations, seasoned managements, and eminent respectabilities mark them as highly preferred clients. The "conglomerate" bears the mirror image, and must be accorded a reception commensurate to its larger, more diverse bag of risks.

Types of Diversified Firms

In marketplace analyses, diversification can be treated as a homogeneous element; the type of corporation serving a particular sector may not be of interest. If marketplace
risk were the only real concern of the investor, an "industry" segmentation would nicely suffice. The Standard Industrial Code classifications could likely be made to serve with adequacy. Such segmentation would give him some indication of competitive risks; and, also, at least some notion of the extent of the firm's product and market diversification.

In financial reporting, however, it is conventional to value interperiodic consistency over interfirm comparability. The investor is investing in the firm, not directly in the market sector. There are myriad other risks, more vital to the interests of this investor, that such segmentation could not disclose.

For example, simple "industry" segmentation would not really provide the investor with what he needs to know about a firm's "conglomerateness," in the more comprehensive sense of that word. In preceding sections of this analysis, the "modern" form of diversified firm was shown to be a highly leveraged, strongly speculative corporate mutation, relative to the more "traditionally" diversified firms of earlier origins and development. As an investment, it is considerably more adventurous.

To make the point more directly, an oversimplified example will demonstrate this. Though they might compete head on in some markets, with products of equally high quality, it is obvious that a "traditionally" diversified firm (e.g., "GE or GM") and a "conglomerate phenomenon"
firm (e.g., LTV, Litton, Rapid American) do not entail the same investment risk variations, over time, with respect to (Mautzian): (1) rates of profitability; (2) degrees of risks, generally; and (3) opportunities for growth; in comparable time reference frames. Further, this has always been obvious, even in the heady days of the 1960's boom when both were exhibiting strong market action and attractive corporate performance characteristics.

Nor do they have the same segmentation problems, internally. To cite one instance, the former's accounting and communication systems were integrally evolved, under central design and coordination, as its diversification evolved gradually over a period of years. The latter's corresponding systems were developed independently, and simply sewn together, in a series of rapid tack-on successions, a relatively few years ago. To provide equivalent satisfaction of investor needs, should each be subjected to precisely the same centrally prescribed segmentation reporting requirements?

Conceptual Model

Figure 6 presents, also in grossly oversimplified form, a model of the two corporate extremes that exemplify the risk disparities commonly existent today. They are depicted in terms of: (1) type of diversified growth; (2) mode of diversified growth; and (3) "line of business" integration
<table>
<thead>
<tr>
<th>Type of Diversified Growth</th>
<th>Traditionally Diversified Firm</th>
<th>Modern Mutant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mode of Diversified Growth</td>
<td>Internal</td>
<td>External</td>
</tr>
<tr>
<td>&quot;Line of Business&quot;</td>
<td>Evolutionary</td>
<td>Revolutionary</td>
</tr>
<tr>
<td>Integration Pattern</td>
<td>Vertical or Horizontal</td>
<td>Conglomerate</td>
</tr>
</tbody>
</table>

Fig. 6--Types of diversified firms.
pattern; as conceptualized in Chapter II, and as employed in Chapter III. Since the word "conglomerate" is in itself so diversely defined, it has been avoided. For lack of a better unfamiliar phrase, the unique type of firm that has evolved so rapidly in recent years has been termed a "modern mutant."

For practical application, these two extreme forms may be viewed as the end points of a spectrum. Obviously, a given large corporation is unlikely to fit all of the respectively hypothesized characteristics precisely, for one end of that spectrum or the other. However, as to each of the three sets of diversification categories which define these end point "entities,"¹⁷ almost any corporation can be readily classified, albeit somewhat roughly and pragmatically, in accordance with its appropriate predominant characteristics.¹⁸ Much of the information is simple individual-firm history, readily obtainable. Some may be deceptively treacherous of diagnosis; the definitive concepts are more complex¹⁹ than simple terminology suggests. It is unlikely that the typical investor, large or small, now accords them an optimal role in computing his risks.

**Breeding**

As promulgated here, the notion that most forms of corporate diversification result from "corporate breeding"

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¹⁷Reference Figure 6; and definitions, pages 22-24.
¹⁸See pages 40-43.
¹⁹Pages 22-24.
is not simply metaphorically. It is offered as conceptual analogy, with a diagnostic orientation.

Corporate diversification exists in multiple types and forms. For financial reporting, these types and forms are not usefully homogeneous. Market forces have long been generally recognized as major factors causing investor-sensitive diversification problems. Increasingly, however, the problems caused by structural diversification internal to each corporation are now gaining greater recognition. The recent boom in acquisition mergers may have tended to slightly alleviate some of the principal market-diversification problems, notably monopolistic power and industry concentration; but it has sharply aggravated the structure-coordinational diversification problems internal to very large firms.

Viewing the "new breed" firms as "modern mutants," rather than as "conglomerates," shifts the analytical emphasis from the outside to the inside, where it now predominantly belongs. It further suggests the possibility that their report-sensitive effects might be susceptible to diagnosis, at least in part, through a genealogical analysis, i.e., through study of the evolutionary growth and development patterns which produced their present institutional structures.

A principal problem now facing the accounting profession is subentity classification for financially reporting the operational effects of these varied and complex structural
components. Without due recognition of these fundamental internal differences, among different firms, in no effective manner can this problem be resolved.

Table II underscores this. Five traditionally diversified firms, and five well known modern mutants, are arrayed with selected stock prices and price-earnings ratios. Since this is a demonstration, not a test, the companies were not scientifically selected; but neither were they chosen with premeditation toward a desired result. Each category contains, simply, "five names that came to mind." Among traditional firms, Dean's "GM and GE" are joined by three additional corporations with impressive pedigrees: Of the five, all but Minnesota Mining are components of the prestigious Dow Jones Industrial Average (DJIA);\(^\text{20}\) of those four, three were 1928 charter members;\(^\text{21}\) while Procter & Gamble was added in 1932.\(^\text{22}\) Of the five mutants, the three named spontaneously on page 105 have been joined by Fuqua and Whittaker; in the confusing semantics of the day, these are classed by Forbes as prominent "conglomerate multicompanies," in opposition to "multi-industry multicompanies."\(^\text{23}\)

\(^{21}\)Ibid., p. 13.
\(^{22}\)Ibid.
\(^{23}\)"Multicompanies—Belated Revelation: Conglomerates are Nothing Special. Like Other Companies, They are Individually Good, Bad or Indifferent," pp. 154, 156.
### TABLE II

SELECTED STOCK PRICE EXTREMES DURING SELECTED TIME INTERVALS, AND PRICE EARNINGS RATIOS AT SELECTED POINTS IN TIME, FOR FIVE TRADITIONALLY DIVERSIFIED CORPORATIONS AND FIVE MODERN MUTANT CORPORATIONS, 1968-1972

<table>
<thead>
<tr>
<th></th>
<th>Stock Prices</th>
<th>Price-to-Earnings Ratios</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1968-69 High¹</td>
<td>1970-71 Low²</td>
</tr>
<tr>
<td>Traditionally Diversified Corporations:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Electric</td>
<td>50 3/16</td>
<td>30 1/8</td>
</tr>
<tr>
<td>General Motors</td>
<td>89 7/8</td>
<td>59 1/2</td>
</tr>
<tr>
<td>Minnesota Mining &amp; Manufacturing</td>
<td>59 7/8</td>
<td>35 1/2</td>
</tr>
<tr>
<td>Procter &amp; Gamble</td>
<td>55 15/16</td>
<td>40 1/8</td>
</tr>
<tr>
<td>Westinghouse Electric</td>
<td>39 7/16</td>
<td>26 5/8</td>
</tr>
<tr>
<td>Modern Mutant Corporation:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fuqua Industries</td>
<td>47 1/2</td>
<td>7</td>
</tr>
<tr>
<td>LTV Corporation</td>
<td>135 3/4</td>
<td>7 1/8</td>
</tr>
<tr>
<td>Litton Industries</td>
<td>104 3/4</td>
<td>15 1/4</td>
</tr>
<tr>
<td>Rapid American Corporation</td>
<td>52 1/2</td>
<td>7 1/8</td>
</tr>
<tr>
<td>Whittaker Corporation</td>
<td>47 5</td>
<td>14 3/4</td>
</tr>
</tbody>
</table>

Further testimony to the "corporate breeding" concept of diversification is the existence of the DJIA, which serves as a form of social register. By measuring an elite few, it reports on the activity of the well bred class of diversified corporation. Though often not representative of market action as a whole, in relative contrast to several more broadly based indices, it remains the most prominent market indicator. To gauge performance of modern mutants, it is necessary to select a group of specific stocks and watch them individually. Consequently, comparison indices for use between the two classes are not generally available.

Before the recent market drop, the DJIA touched a cyclical intraday "extreme high" at 994.65 December 2, 1968;24 dropped to a cyclical intraday "extreme low" of 649.64 May 26, 1970;25 and again surpassed 994.65 November 8, 1972.26 In Table II, price-earnings ratios are shown at dates shortly following the two inflection points and the recovery comparison date. Price quotations show individual stock price extremes for the three swings, with the third arbitrarily truncated at


the end of 1972. Prices shown have been adjusted for stock splits.

Breeding shows. Among the pedigreed firms, price drops were moderate; for four of the five, recovery was to a point well above the previous high. Price-earnings ratios were quite stable, with one actually showing an almost 60 per cent rise during the market decline. For the mutants, both prices and price-earnings ratios were devastated; further, they showed little resilience in the recovery, while declines in reported earnings forced two of the five corporations into operating deficits.

Risk Factors

To the rational investor, a corporation is perceived simply as an assemblage of risks. He does not discern all of the myriad and detailed risks individually, much less measure them. Nor does he really try.

The accountant reports the results of various position and performance measurement efforts. These are seen as partially aggregated risk measurements. To some substantial degree, they are relied upon to help this rational investor.

27 The DJIA closed 1972 at 1020.02, reasonably near the 994.65 comparison mark. It completed the recovery less than two weeks later at 1067.20, intraday. Given the nonrepresentative tendencies of this average for the market as a whole, and for the mutant half of Table II in particular, the dates used here are probably as useful as any.
evaluate the overall risk structure in a given firm. The investor supplies the rest of the needed corporate risk measurements subjectively, also in a partially aggregated form, relying on his private perceptions and on other information sources. To these, he adds his assessment of myriad external risk factors which he believes might impact either on the firm or on his personal investment facility. In the end, he envisions each corporation's hierarchy of investment risks as a highly simplified structure. This is comprised of just a few "big risks," in whatever form and of whatever degree levels are most meaningful to him personally.

He compares these to other simplified risk structures, similarly abstracted and aggregated, of other corporations. For each firm, the aggregation of the myriad individual risks and risk groupings into the few big risks is a personal process, dependent upon individual investor value systems.

The typical investor is less rational. At least subconsciously, however, he appears to employ essentially these analytical processes. His behavior is generally compatible with the theoretical pattern described to this point:

There is no such thing as a final answer to security values. A dozen experts will arrive at 12 different conclusions. . . . Market values are fixed only in part by balance sheets and income statements; much more by the hopes and fears of humanity; by greed, ambition, acts of God, invention, financial stress and strain, weather, discovery, fashion and numberless other causes impossible to be listed without omission.28

The results of the processes are extremely varied, largely because of the differences among the individual investor value systems. Unfortunately, the accountant must deal with a normalized investor stereotype when he attempts to determine the maximum-benefit services he can provide through classification and organization of his part of the provided information.

As noted, the final risk structure envisioned by such an investor for each corporation is comprised of a few big risks, aggregated to a relatively high degree in accordance with his personal classification scheme. For purposes of this discussion, it will be assumed that each of those aggregated risk entities retains these two principal risk dimensions: (1) form, or type; and (2) degree level. Additionally, the investor's evaluation of degree levels for each risk form can be projected over a third dimension, (3) time.

The notion of servicing a "normalized investor stereotype" poses further problems. It is generally impractical for the accountant, the manager, or the financial analyst to consider each investor and potential investor individually. However, it is common practice to subcategorize the investor stereotype into classes defined by common behavioral characteristics.

Wall Street has always had its "investors" and its "speculators." That dichotomy marks the end points of a
conceptual spectrum; but, again, the continuum is not smooth, since the differentiating risk factors not only have different evaluated degree levels, but also different perceived forms. If each corporation were viewed simply as "one big risk," the simple degree level of that risk would govern in deciding the investor's choice, subject to time projections.\textsuperscript{29} The continuum would be relatively smooth. But different forms of risk do remain within each aggregated risk structure, with each such risk form bearing its own degree levels; as each corporation is evaluated according to whatever structural and operational subcomponents each investor chooses to recognize and quantify, at least ordinally, in accordance with his own value system.\textsuperscript{30} Further, these conceptions are useful only over relevant ranges of the investment-speculation continuum. A riskless investment is a contradiction in terms. Investment is risk assumption. In essence, business is risk. At the other end of the spectrum, a firm with virtually no potential for speculative gain will attract virtually no speculators.

\textsuperscript{29}The relevant time dimensions shorten through the spectrum from investors to speculators; but time needs, among alternatives for a given decision by a given individual, tend to remain reasonably constant. They tend not to be a major problem in inter-alternative comparisons for a particular decision.

\textsuperscript{30}e.g., financial factors, marketing factors (internal and external), production factors, management skills, management depths, etc. An interesting question here might be: To each such investor, what is the meaning and significance of a "product line?" Or a "line of business?"
There is really no such thing as a "normal" or "typical" investor. Perhaps the most useful concept for distinguishing along the investor spectrum is the extent of speculative inclination. G. M. Loeb has long advised:

... the individual who does his own thinking must learn to question most mass movements of majority point of view, for they are usually wrong. It is for these reasons, and especially because I am personally completely convinced of the inevitability of loss when attempting to secure a safe income of small return, that I constantly suggest speculation rather than investment as the policy less apt to show a loss and more apt to show a profit.31

High risk-level firms, and especially financially leveraged firms, are certainly not new; they are conventionally speculative forms of investment. What has become recently significant to investor behavior, and has created the radical new need for more effective financial report segmentation, is the recognition of new forms of risk infused throughout the spectrum. These forms are generally acknowledged to be caused by increased levels of "diversification."

The spectrum from "traditionally diversified firms" to "modern mutants" tends to correspond with that from

31Loeb, p. 32.
Traditionally conservative firms, for investors, are becoming traditionally diversified firms. At the other end, for speculators, the modern mutant rather abruptly superseded the conventionally high-risk-level firm as a large new vehicle for superspeculation during the decade of the 1960's. Virtually all large corporations increased in diversification, with respect to at least some investor-sensitive risk forms, during that decade.

Whether the "new" investment factors are actually new forms of risk, or simply newly significant levels of pre-existing risk forms, is purely an academic question. What is needed, before adequate segmentation practices can be implemented, is a means to identify and evaluate these risk forms. The techniques for measuring and classifying their components, for optimal financial reporting, can be

32These two spectra also share a common semantic problem. "Investment" and "speculation" are both "investment," using the former term in a more comprehensive generic context. Similarly, "traditional diversification" and "modern mutancy" are both "diversification," using that term in a more comprehensive generic context.

The latter problem also existed prior to the conceptual developments of this dissertation, since "conglomeration" was really a type of diversification, as contrasted with the connotation of "all other" previously existing forms of diversification. These had no accepted collective name: technically, earlier references should have been to conglomeration versus "all other forms of" diversification; and not to "diversification versus conglomeration."

In each of these situations, the semantic classificational confusions tend to inhibit the layman from conceptualizing these factors into the mental formats of useful continua.
effectively developed only after these prerequisite needs have been satisfied. Given the apparent diversity of such diversification forms among different corporations, it is not yet clear whether uniform guidelines can be usefully developed. To this point, little progress has been recorded. Subsequent chapters will explore the matter further.

The diversification that causes these problems is a product of institutional structuring, in the broad sense of the term, "institutional." It derives from sources both external and internal. Institutional structuring in the product marketplace, and also in the capital markets, produces external diversification problems, long recognized as significant factors in investment analysis. Intracorporate institutional structuring contributes the internal diversification problems; though also long recognized in investment analysis, these factors are less uniform and tend to be less meaningfully recognized. Mautz has perceptively identified them as problems of "operational integration" and "management decentralization." They may turn out to be even broader in scope, and higher in level of abstraction, than those two terms generally connote. As indicated, they are products of the institutional composition within each individual corporation. Unfortunately, for accounting

33 In effect, this term refers to any recognizably structured behavior patterns or relationships which constitute a fundamental component in economic society.
purposes, they are not precisely definable, nor even distinctly and recognizably separable in an operative setting, given today's knowledge of such diversification types and their effects.

To the layman and the small investor, perhaps even the term "diversification" is misleading as an indicator of the nature of the problem. In most of its deliberate implementations, diversification is a minimax strategy. It spreads risks; and, accordingly, minimizes the maximum sustainable loss for a given group of risk factors. With respect to that particular group of individual risk factors, it is valid and generally succeeds. The problem arises at higher levels of risk-factor aggregation. From the overall viewpoint of the firm, or from the viewpoint at any level of risk-factor aggregation higher than that to which the diversification strategy was applied, it is a suboptimal strategy. While minimizing the maximum potential losses for a given set of risk factors, it may complex the overall planning, organization, and control functions, and many or all of the internal institutional relationships more generally, throughout the firm. This complexity may or may not yield an increase in the total net risk to the investor; but, almost surely, it will obscure his view of both that comprehensive risk and its component risk factors.

Though generally formulated by more informed accounting and/or management personnel, segmentation is itself an
inherently suboptimizing technique. It groups together, arbitrarily or according to some informed compromise scheme, various risk factors for financial reporting as one hypothetical subentity of the corporation. Obviously, a casual delineation of that subentity's bounds can be more detrimental than helpful to the investor's analytical efforts.

Discussion

Referring back to the demonstration in Table II, two questions beg answers: (1) Why did the mutants underperform the traditionals so miserably? And, (2) why did they not recover?

At this point in time, adequate answers are impossible. As yet, no one has really been able to sort out the conventional risk forces, long common to more conventionally speculative corporations, from the "new" diversification risks more uniquely common to modern mutants. Further, among stock price determinants, there are conflicts here between the ephemeral and the secular.

Like the more conventionally speculative firms, the mutants' financial structures were highly leveraged. Obviously, this was one major factor in the price declines. It is less obvious that this factor alone could account for the severe failure of price recovery. In that aspect, psychological factors come more strongly into play; and, there, it is more difficult to separate the transitory from the permanent.
For ascertainment of long term segmentation needs, appropriate in times of economic stress as well as prosperity, such determinations are badly needed.

Undoubtedly, a substantial component of the lofty pre-crash prices accorded these firms' stocks was a pure gambling element under the "greater fool" theory; a rank play that rides the stock price while it is going up, considering nothing but the odds that someone else will still be playing the game when the player adjudges it time to quit. As Lord Keynes described it:

This battle of wits to anticipate the basis of conventional valuation a few months hence, rather than the prospective yield of an investment over a long term of years, does not even require gulls amongst the public to feed the maws of the professional;—it can be played by professionals amongst themselves. Nor is it necessary that anyone should keep his simple faith in the conventional basis of valuation having any genuine long-term validity. For it is, so to speak, a game of Snap, of Old Maid, of Musical Chairs—a pastime in which he is victor who says Snap neither too soon nor too late, who passes the Old Maid to his neighbor before the game is over, who secures a chair for himself when the music stops. These games can be played with zest and enjoyment, though all the players know that it is the Old Maid which is circulating, or that when the music stops some of the players will find themselves unseated.34

Never before had such an opportune vehicle existed for playing these games.

Yet, from virtually all of the literature of the recent boom times, a distinct impression emerges that these new

diversification forms were also widely considered to have
genuine longer term performance potentials. Neither the
high degrees of financial leveraging nor the elements of
blatant stock market gamesmanship appear, of themselves,
sufficient to explain the extreme severity of the price
declines and the almost utter lack of resiliency since.
The stock market usually anticipates the future. Continuing
price depression is a sign that some of the longer term
performance expectations for these companies may now have
been written off.

Among the transitory factors that might additionally
account for this behavior, the mutants currently suffer
from severely damaged reputations generally. But perhaps
less temporary are deeper underlying doubts:

... a big question has been well put by Dr. A. F.
Rosenberg. ... "The conglomerate movement has created
market value," says Rosenberg. "Now can it create
economic value?" Can the conglomerates, to put it
another way, make good in the marketplace? The question
will take time to answer.

Among the firms in Table II, all can be considered
diversified by today's prevailing criteria. Yet, while the
traditionals also operate in many differnt markets,
interfirm structural differences are greatest among the
individual mutants. These all grew substantially during the
1960's via the acquisition merger mechanism; but, as to both

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35 See pages 32-35.

36 Burck, p. 161.
the details of their evolutionary development practices and their intrafirm organizational relationships, each mutant tends to be somewhat unique.

Related to their relatively financial orientations, as compared to the traditionals' more basically economic foundations, the mutants' present reputation problems derive partly from public disenchantment with their abuses of permissive accounting. James Ling, generally recognized in the literature as the prototype conglomerator for the era, defends and explains:

The conglomerates did not invent bookkeeping. This was done by the little shiny-pants accountants who, in 1950, came out with . . . the rule . . . that created pooling before people ever heard the word conglomerate. . . . The problem was, you get a high-priced security with maybe $1 book and 40 multiple and pool it with an undervalued stock, and all sorts of crazy things happen on an accounting basis.  

Yet, even with these financial orientations and techniques, the practices bear little visible relation to results. Of the five mutants in Table II, Ling's firm, LTV Corporation, probably experienced the greatest reputation shift among investors: from highest esteem, before the fall; to lowest, after. In Table II performance, its stock experienced the sharpest price drop; it recovered the least; and the

company recorded both the earliest and the deepest\textsuperscript{38} operating deficits.

It made relatively little use of the "pooling" technique, and maintained simple divisional and market structures.

Litton used the pooling concept most because they had a high price multiple for buying things with a low price multiple. . . . L-T-V generally used cash. So, for what it's worth, there was very little pooling involved in the growth of L-T-V.\textsuperscript{39}

The main problems stemmed from more fundamental forces. If diversification risks result from "corporate breeding," it might be observed that the blood lines did not mix well.

Again, in the opinions of Ling:

I think diversification added assets, added earning power, and I think perhaps created the Game: the Game of Building. Remember, L-T-V made only . . . five major acquisitions. . . . Four were extraordinarily good. And then there was the famous fifth. The steel company, which I think has been our major problem, defied the law of averages. For the last 20 years, they've had earnings every year, . . . But coincidental with our purchase of control, they lost their profitable posture. . . . There's no way to properly evaluate a

\textsuperscript{38}Two mutants showed deficits in Table II. Their deepest reported losses were as follows: Litton lost $.23 per share in fiscal 1972; LTV lost $12.73 per share in 1970. Both have since shown profits, and currently operate in the black; the other three mutants reported no operating deficits during or after the crash. At this writing, mutant stocks remain depressed; at the end of September, 1973, with the DJIA at 947.10, Litton and Whittaker were substantially below their 1970-71 lows on Table II; the other three were only moderately above theirs. Source: Standard & Poor's Stock Guide, October, 1973.

\textsuperscript{39}"The Conglomerates Will Come Back," p. 112.
company with the material furnished to the public. Often there are a lot of problems that don't come out until the time that a new management takes over. Thus, Ling used more financially conservative acquisition techniques; took less advantage of permissive accounting practices; bought four corporations that fit the relatively speculative end of the investment spectrum; caught the diversification spirit; and developed one of the earliest and, at the time, most highly regarded mutants. Yet, according to his own testimony, it was the addition of a large and respected company from the pedigreed "traditional" end of the breeding spectrum that did him in. He found that he was ill equipped either to evaluate it or to fit it into his basic operation.

There is inadequate information here to permit any substantial conclusions about the demise of this one company, much less to generalize it beyond the single example. As simple logic, however, the "breeding" analogies continue to hold. There are basic structural differences between

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40 Ibid.

41 Jones and Laughlin was the nation's fourth largest steel producer, broadly integrated through the industrial subclassifications of a single major industry. Among U.S. corporations, it ranked 86th in assets in 1937, and 80th in 1964; and attained its earlier growth and market concentrations on pedigreed money from the Laughlin, Horne, and Jones family fortunes. Sources: Standard & Poor's; and Lundberg, pp. 755-56.
traditionals and mutants; other than some product lines, they tend to have little in common. In their ancestry, they are disparate. On the diversification spectrum, they share few fundamental risk forms. On the investments spectrum, they attract different individuals with different goals, motivations, and stabilities. From this conceptual standpoint, there is little rationale for an expectation that they should successfully blend.

Betty has observed that "traditional valuation methods are not applicable to conglomerate companies" because "companies such as conglomerates could give the impression of being growth companies while, in reality, their actual productivity was declining." Though he attributed this prospect to ambiguous financial reporting, and though that observation has become general in the literature since the time of his study, Betty's 1969 analysis remains extraordinarily perceptive and cogent in 1973:

It is possible to define several sources of growth which are available to companies which engage in extensive acquisition activity. Among these sources are:

1. Size of acquisitions
2. Profitability of acquisitions
3. Rate of acquisitions
4. Synergy release
5. Internal expansion of income
6. Changes in the leverage position

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42 Betty, p. 196.
43 Ibid.
 Accordingly, earnings per share can be expected to change with a change in one or more of the preceding sources of growth.\textsuperscript{44}

Betty's listing demonstrates that these newer long term valuation problems are visibly a product of the complex evolutionary forces analyzed in this chapter. If more adequate valuation techniques are to be employed, these will need more extensive recognition and understanding than they generally receive today.

There are problems of time perspective. The "conglomerate era" is still too recent to permit proper evaluation of the manner in which the forces it has loosed will ultimately blend into future industrial equilibria. The fact that we are still too close to so disrupting a period may account for some of the extreme urgency being accorded the segmented reporting issue today. It may also account, in part, for the severe confusion levels now prevalent as to how that issue might be resolved.

In time the disparities may tend to diminish, as traditional and modern mutant corporations cross breed. Some of the financially weaker mutants are now going out of business, or are merging with stronger firms of either type.

\textsuperscript{44}Ibid., pp. 196-97.
Some of the sounder ones are adopting more traditional operating emphases, as the new FTC study testifies.\textsuperscript{45}

During the 1960's boom, traditional corporations heavily augmented their internal-growth policies, as sources of diversification, with their own use of acquisition mergers.\textsuperscript{46} In fact, as the merger waves analysis of this chapter shows, they have placed no small reliance on this technique since the 1930's. In doing so, they exercised greater restraint and more prudent judgment than did the more recently developed mutants, who also had less impressive bargaining power in the merger marketplace because of their less convincing financial circumstances. Further, the traditionals had pre-existing structures of gigantic size and smoothly integrated complexity. A given acquisition had relatively little effect on these structures, and produced diversification problems with relatively less impact and abruptness.

To a given mutant, a given acquisition could potentially wreak structural changes both radical and fundamental. These pre-existing institutional instabilities, relative to

\textsuperscript{45}Federal Trade Commission, Conglomerate Merger Performance: An Empirical Analysis of Nine Corporations, p. 27. See also profiles of eleven leading conglomerates in "2 + 2 = ?", Forbes, CXII (September 15, 1973), 43-54.

traditional firms, produced the wide structural variations now displayed among the mutants. As noted earlier, each of them tends to be more unique as to visible investor-sensitive characteristics. Their relatively greater interfirm structural variations also produce a wider range of diversification risk forms to be accounted for, severely complicating the problem of optimal financial report segmentation.

Thus, it was abuse of the acquisition device, and the lack of a solid power base to start with, that primarily differentiated the mutant in these respects. They began as highly leveraged entities, often under the command of unseasoned managements inclined toward speculative policies. The real phenomenon was that they grew rapidly, under the permissiveness of an unprecedentedly inflated capital market, while the longer term soundness of their underlying properties did not. They achieved instant adulthood through the merger mechanism, but never matured.

Predictably, in the aftermath of the 1960's merger boom, "conglomerates" have been divesting. They are finding that a weak bargaining position in the merger marketplace cuts both ways:

Myths die hard sometimes, and synergism may be no exception. Out the window is that famous formula which equated the whole with more than than the sum of its parts; ironically... the sum may have counted for less... what they're peddling (for obvious reasons, marketability being one) usually is the best they have... many of the de-synergizers are dealing from weakness.48 [itals mine]

In the course of all the activity during the past fifteen years or so, they have fundamentally altered the structure of the American industrial system. There is immensely greater product, market, and organizational diversification throughout that system today than there was in the 1950's. In large measure, this diversification appears to be here to stay. As has been noted, each merger boom is typically followed by "quiet years," wherein merger activity remains flat and unresponsive to economic and financial stimuli. However, in the present "quiet years," the traditional firm remains moderately active in the acquisitions market, and continues to diversify further:

Now that conglomerates have been felled, conservative, less diversified outfits are going the merging... Buying has become more prevalent among conservative, little-diversified companies who can now pick up partners for less money than when the conglomerates were bidding up prices.49

Ironically, the Watkins "retardation hypothesis," thoroughly debunked by Nelson decades ago,50 may be at work. To cite an example:

48 Dana L. Thomas, "Greater Than the Whole: Conglomerates are Busily Selling Off Their Best Parts," Barron's, LI (February 22, 1971), 3.

49 "Mergers: A New Type Plays the Acquisition Game," p. 22.

50 See pages 54-55.
... R. J. Reynolds and American Brands ... see acquisition as a way to diversify beyond the troubled tobacco business. But profit erosion is [also] prodding outfits in other fields to diversify.\textsuperscript{51}

At this writing in 1973, the "quiet years" merger activity is still declining:

Merger announcements for the first six months of 1973 numbered 2,197, an 11 per cent drop from the 2,478 reported for the first half of 1972. ... The 983 transactions in the second quarter, down 21 per cent from the comparable period of 1972, were the lowest number tabulated in any quarter in the last four and a half years.\textsuperscript{52}

These are not FTC figures, and do not compare directly with others presented, from other sources, to this point.

It is important to note that merger activity, while declining sharply, continues at a remarkably high rate relative to any pre-1960's standards. To the investor concerned about diversification, current merger activity is still of great interest. A crude, but useful, perspective can be acquired by noting the 1972 level, comparative to historical trends, on Figure 3; then subjectively applying the percentages in the indented quotation, immediately above, to that level.

Academia tends to dichotomize, and to polarize. Pedagogically, and for purposes of theoretical development, these practices facilitate useful conceptualization. As a form of

\textsuperscript{51} "Mergers: A New Type Plays the Acquisitions Game," p. 23.

\textsuperscript{52} "Lack of Confidence Cited in Decline of Merger Rate," Financial Trend, IV (July 16-22, 1973), 10.
abstraction, however, polarity has decided pros and cons. By focusing attention on the opposing extremes of a conceptual scheme, it tends to push deliberative inquiry into newer and more neglected areas of exploration. On the other hand, relative to more conservative abstraction devices, it tends to distort more severely from reality.

This chapter has dealt largely with conceptual extremes of polarized corporate diversification, as exemplified by the real world corpora of the "traditionally diversified corporation" versus the "modern mutant." Though the layman may tend to think of them simply in terms of "blue chips" versus "conglomerates," these concepts have been defined in this chapter to embrace more comprehensive entity structures. Considerably greater of both breadth and depth, each embraces a well rounded collection of component characteristics. They are organisms with evolutionary and genealogical formative roots that, it is hoped, will prove meaningfully traceable and identifiable to behaviorally diagnostic ends.

This is a hypothesis. Testing it will require research well beyond that which can be undertaken in this dissertation. The characteristics exemplified here, as potentially investor-sensitive and appropriate for beginning such diagnostic research, are simply crude examples. They may represent useful starting points. Much more elaborate and detailed

53 See pages 22-24, and 105-107.
conceptual structures, followed by scientific testing, should produce more sensitive and sophisticated diagnostic frameworks. The purpose here is to validate the need, and to point out the direction. For the investor, arbitrary segmentation is fraught with hazards. Without adequate prediagnosis of his real risk-information needs, it can potentially prove to be a major disservice to him.

Realistically, it is essential to keep in mind that these concepts have here been polarized. As presented, however, they are not too seriously unrealistic; as has been illustrated, many existing corporations fit the definitive characteristics assigned to each of the two concepts fairly smoothly. But the vast majority of existing corporations, depending upon the extent of detail and rigor with which such definitional structure traits and components are to be refined and applied, will fall somewhere along the continuum between traditional diversification and modern mutancy. That continuum is not smooth. It is not a true continuum, in the sense of a single, straight-lined spectrum. The greater the number of interacting definitional criteria that are to be introduced, the more complex the diagnostic task will be.

Future research methodologies, to adequately handle this large and intricate task, must yet be divined. They

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54See pages 107-112.
should probably include more extensive Veblenian institutional
analysis into the evolutionary and genealogical roots of the
various corporate organisms; behavioral accounting analysis,
for exploring investor impacts; and rigorous logical
analysis, for reconciliation of the complex and conflicting
results that are inevitable from the first two.

Nor is it easy to sort out the "diversification" risks
from "other" investor-sensitive risks. In many cases,

55 Potential examples of these could be readily cited
almost without limit. Some corporations are partly, but
materially, owned in various degrees by a single investor,
group of investors, or corporation; such part owner(s) may or
may not be a major supplier, customer, managerial consultant,
provider or providee of other financial sustenances, etc.,
and may or may not be active as a participant in, or influencer
of, management. Some product lines are stable, others fad;
some are technological, heavily dependent on continuing
research, internal or external; some are high in volume and/or
profit markup, others low. Customers may be few or many;
large or small; negligible, substantial, or dominant as a
factor in a company's market or in a given one or more of
its market sectors. Some corporations retail, some distribute,
some manufacture; some operate in various combinations of
the three activity sectors. Some are more heavily involved
than others with various more generally influential external
power structures; e.g., governments, labor unions. Etc.

Present reporting practices provide partial, but nonuniform
information about each such risk. Each such risk derives
from institutional structures in economic society.

Questions: To what extent might each of these "other"
risks also incorporate "diversification" risk elements, or
interact with any of the newer risk forms now generally
accorded the distinction of being classed as "diversification"
risks? To what extent might any or all of these "other"
risks either aggravate or moderate the investor-sensitive
effects of those newer risks, which have now emerged so
prominently as products of the recent "conglomerate era"?
these "other" risks include diversificational components; diversification is, fundamentally, a spreading of risks. Some of these "other" risks have always received relatively adequate reporting emphasis, by virtue of their conspicuously fundamental importance, with detail provided sufficient for the investor to sort out at least some of their diversification impacts for himself. For example, financial functions, proper, have generally been accorded a priority emphasis, to include at least some prominent detail of their component makeups on both sides of the position statement; this is, obviously, a priority risk factor in "financial" reporting. Other of the "other" risks typically vary more widely as to adequacy of publicly provided information.

This suggests some additional questions, of fundamental nature. Though they are not immediately answerable, they should at least be raised before turning to the segmentation question per se in the next chapter.

The present segmentation problem is generally recognized as a product of the recent explosive increases in corporate diversification during the decade of the 1960's. If the accounting profession is to deal with it via the mechanism of prescription for public practice, should it deal only with the recently developed symptoms? i.e.; should segments be employed to resolve only those recent manifestations of the larger issue, on the venerable principle that the squeaky wheel gets the grease? Or should the view of this
issue be both broadened and deepened, to embrace all of the investor-sensitive risks in the firm, with due regard for all of their institutional causal forces, regardless of when and how they were originally derived, but with explicit recognition of the importance to segmentation procedure of those institutional origins?

There is obvious conflict here between the practical and the ideal. As yet, little or no technology exists for servicing the issue on the broader basis. However, there is also little indication that the more temporally localized approach can be usefully implemented, given today's knowledge and general understanding of the issue.

Currently, there is heavy pressure for immediate action. As the analysis of Chapters II through IV has shown, it comes largely from institutional power forces of ulterior motivation. The current "emergency" atmosphere stems from antitrust concerns and considerations; ironically, these increasingly now appear invalid. Further, at least some of the actual segment implementation schemes offered to date are tailored to accommodate marketplace research interests. There is a grave danger here of responding to the wrong stimuli, and of permanently institutionalizing practices and procedures that service the wrong objectives. In the long run, these could actually prove detrimental to the interests of the investor, by depriving him of information classified in a manner which he has customarily found useful,
and by substituting narrower, suboptimized data compilation categories that he is ill equipped to understand, to beneficially modify and interpret, or to effectively use.

Corporate structures will continue to change metamorphically. Over the longer term they may diverge further, or they may converge toward unity. In all probability, structural diversification will remain at high levels relative to pre-1960's experience. History suggests that "merger waves" will be an ongoing phenomenon. There will be diversification ebbs and flows, but net secular increases are likely to continue. There remains a great need for additional research into the nature and causes of the diversification risks now present, and into their probable changes in form and level for future years and decades. The need for much more advanced theoretical development is readily evident.
CHAPTER V

SEGMENTATION: FUNDAMENTALS

Financial report segmentation is a process of subentity definition. Conceptually fundamental, it is independent of the corporate business form. Moonitz has observed:

... accounting is and always will be closely identified with wealth and with entities. Specifically, every single example of accounting in actual or potential use deals with some aspect of wealth—its creation, its form, its consumption, its safeguarding, its magnitude, its augmentation, or its diminution. Any aspect of this wealth is assignable or attributable to one or more entities.¹

Entity definition is socioeconomic units classification. To permit meaningful measurement and reporting, entities are subjected to subclassification. Classification schemes define subentities. Subentities are segments.²

Basic Accounting Entities

To Moonitz, an accounting entity is an economic and social organization. He defines the term illustratively:

Economic activity is carried on by human beings interacting with their environment. This type of interaction of human effort (labor) and natural resources takes


²Not to be confused with subclasses of the wealth, itself. As the term is used here, these are not "segments"; rather, they are "assignable or attributable to" segments, under the Moonitz entities concept.
place through the medium of entities which are used as organizing units for the purpose of producing goods and services.\textsuperscript{3} [italics mine]

Jurisdictionally, they can be defined in various ways.

Hendriksen has synthesized two basic approaches:

One approach to the definition of the accounting entity is to determine the economic unit which has control over resources, accepts responsibilities for making and carrying out commitments, and conducts economic activity. . . . An alternative approach is to define the entity in terms of the area of economic interest of particular individuals, groups, or institutions. . . . Both approaches may lead to the same conclusions, but the user-oriented approach may lead to a selection of different information than the economic activity approach; and it may extend the boundaries of the entity to include some environmental activity, such as attempts to improve sociological relations within the enterprise of the community and information regarding the social responsibilities of the enterprise.\textsuperscript{4}

Again, the accounting entity is both a social and an economic being.

In precorporate times, segmentation tended to be a relatively simple matter:

The proprietorship viewpoint . . . is that the unit considered, instead of being regarded as something distinct from the proprietor, is the proprietor himself.\textsuperscript{5}

This was the ultimate nonsegmentation. Although the firm was a proper subset of the owner's economic and social life, it was not separately reported.

\textsuperscript{3} Moonitz, p. 51.


\textsuperscript{5} Louis Goldberg, \textit{An Inquiry Into the Nature of Accounting}, American Accounting Association Monograph Number Seven (Iowa City, 1965), p. 116.
In contrast is the entity theory, which makes precisely that first fundamental segmentation. As classically stated by Paton and Littleton in 1940:

The business undertaking is generally conceived of as an entity or institution in its own right, separate and distinct from the parties who furnish the funds, and it has become almost axiomatic that the business accounts and statements are those of the entity rather than those of the proprietor, partners, investors, or other parties or groups concerned.\(^6\)

Evidence suggests that the entity concept is inherent to the double entry system of keeping accounts, and found employment as early as available records of that system can document.\(^7\)

As conscious formulation, however, Goldberg points out:

\[\ldots\] there appears to be little evidence that accounting writers before the twentieth century deliberately and consciously adopted the entity viewpoint in presenting their theses to their readers. However, it began to be specifically adopted early in the twentieth century.\(^8\)

Conceptually, entity theory extracts the ownership's economic and social manifestations from the firm and leaves an essentially financial relationship. This process yields two segments of the proprietorship, to be accorded independent recognition for accounting purposes. One is to be reported on, and must somehow be measured; the other is to be reported to, and needs only to be identified.


\(^7\)Goldberg, p. 111.

\(^8\)Ibid.
Although entity theory is unilaterally independent of the corporate business form, the reverse relationship is less detached. Corporations tend to be entity embodiments. To the extent that ownership is divorced from operating control of the firm, the proprietor's economic and social relationships to that firm are shifted from internal to external; in large corporations today, such divorcement tends to be great. The assets of the firm then are no longer as directly controlled by, and the liabilities are less fully obligatory of, the proprietary capitalist. Further, the relationships he does hold with the firm are generally shared, in varying degrees and arrangements, by bondholders and by other classes of stockholders. The resultant shift in accounting philosophy has been summarized by Hendriksen:

The entity theory stresses the importance of the firm as a distinct organization separate from the activities of the owners. The fundamental equation becomes $\text{Assets} = \text{Equities}$ rather than $\text{Assets} - \text{Liabilities} = \text{Proprietorship}$. The assets represent rights accruing to the firm or entity, and creditors stand in a position with stockholders as having rights in the firm or equities in the assets.

Several theoretical modifications of entity theory have been proffered recently. These need not be reviewed here.

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9A more fundamental discussion of these contrasting emphases can be found in William Andrew Paton, Accounting Theory, With Special Reference to the Corporate Enterprise (New York, 1922), pp. 481-85.

10Hendriksen, p. 31.

11Excellent summaries appear in Goldberg, Chapter 9; and Hendriksen, Chapter 17.
Investigational Requisites

The entity is an intangible housing. Compartments within that housing should be partitioned with due concern for relevant human value systems. Current research needs are both theoretical and philosophical:

**Theory.**--". . . a proposed explanation whose status is still conjectural, in contrast to well established propositions that are regarded as reporting matters of actual fact."\(^{12}\)

**Philosophy.**--". . . the rational investigation of the truths and principles of being, knowledge, or conduct . . . a system of principles for guidance in practical affairs.\(^{13}\)

As to both theory and philosophy, the report segmentation issue is still in crude, early stages of development.

The following sections will briefly examine selected concepts, theories, and philosophies, as evidenced in the literature to date. Within subjectively limited bounds of scope and expectation, further conjectures and rationales will be posited.

Segmentation is principally a problem of the large corporation. Except where otherwise specified, "entity theory"\(^{14}\) is assumed throughout this dissertation.

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\(^{12}\)Random House Dictionary of the English Language, p. 1471.

\(^{13}\)Ibid., p. 1082.

\(^{14}\)As contrasted with "proprietary theory" in the discussion immediately preceding.
Functionally, accounting entities exist in various forms to service assorted activities and ends. Unless otherwise designated, the form of entity reference will be the profit seeking, corporate, business entity.
CHAPTER VI
SEGMENTATION: ENTITY RISKS

As theorized in Chapter IV, the investor sees the entity as an assemblage of risks aggregated into a number of major-risk substructures. Each substructure bears the essential properties of (1) a perceived risk form, assigned by the investor to each aggregated substructure in toto; and, (2) perceived degree levels, variant over investor-relevant future time intervals.

Investor-sensitive risks of the entity are generated by structural and operational factors: (a) internally, within the entity; (b) externally, within such relevant other institutions as its industry marketplaces and the capital market; and (c) arising from both internal and external relationships, as created by interactions among these institutional bodies.

The risk forms so assigned to a given investor's version of these entity-risk assemblages may not discernibly correspond

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1 See pages 112-20.

2 On page 118 an "institution" was informally defined as any recognizably structured behavior pattern or relationship which constitutes a fundamental component in economic society. The entity is here presumed to be one such institution.
to the specific structural and operational factors which actually produced them, since each investor really aggregates only his personal perceptions of the risks; and since he aggregates them only in accordance with his individual value systems. Such value systems tend to be shaped by numerous personal factors, e.g.: his relevant formal knowledge; his evaluative skills; his psychological makeup; his financial and social circumstances; his past investment experiences; etc.

Diversification risks result from risk-spreading activities within, and among, institutional structures. This is generally a process of altering structural components, and their interrelationships, to achieve a spreading of more basic risk forms. The altering process generates new structural stresses, which in turn create either "new" risks, or intensifications of "old" risks.4

Obviously, the task of sorting out these various risk forms, risk-form components, and risk-form behavior patterns, including isolation of "diversification" risks from "other" risks, for purposes of developing meaningful theoretical and philosophical analysis, will be formidable. This dissertation

3As viewed by a hypothetically omniscient and unbiased analyst.

4This distinction is essentially a matter of viewpoint, and of the practicalities of sorting out the "new" risks for assignment as specific intensifications of expressly designated "old" risks. See especially page 118, and appropriate discussions adjacent thereto.
makes no pretense of expecting to substantially achieve that accomplishment.

R. K. Mautz

In accounting research for diversified companies, R. K. Mautz has set the standard. While preparing for his monumental empirical study sponsored by the Financial Executives Institute, he formulated identificational criteria. His definition has been widely accepted.

Other leading researchers into the broader issues of corporate diversification, as well as many authors in related subject areas, have tended to follow Mautz's lead. At least implicitly, his definition appears further to be foremost in the minds of authoritative groups now working with the segmentation problem, including relevant subunits of the SEC and the FTC. In these applications, however, there appear to be problems which are not as yet adequately recognized, much less resolved.

The definition is remarkably perceptive. It explicates the generalness of the present diversification problem, in contrast to the various narrower interpretations more commonly apparent in the popular press. While it does not connote all of the ingredients, root causes, and behavior patterns of that problem, this was neither Mautz's purpose nor his intent. It is a clear and substantial theoretical advancement over

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previously publicized conceptions, and is now widely recognized as the definitively authoritative statement on the nature of corporate diversification for accounting analysis.

It is less clear in the literature that all of the connotations which the Mautz definition does offer are fully comprehended by all who use it.

To repeat for convenient reference, that definition reads as follows:

.. . a conglomerate company is one which is so managerially decentralized, so lacks operational integration, or has such diversified markets that it may experience rates of profitability, degrees of risk, and opportunities for growth which vary within the company to such an extent that an investor requires information about these variations in order to make informed decisions.\textsuperscript{6}

Figure 7 depicts it in a schematic format.

As quoted, this definition purports to identify the "conglomerate" company. In undertaking his study, Matuz first set out to define such corporations per se. After formulating the definition, he concluded that it was applicable to the diversified corporation more generally, and applied it accordingly.\textsuperscript{7} Others have generally followed suit.

\textbf{Logical Examination}

In accounting analysis for financial reporting by diversified companies, the premiere need currently is for

\textsuperscript{6}See page 28.

\textsuperscript{7}For specific details, see page 28.
Fig. 7--Anatomy of the R. K. Mautz definition of a diversified corporation.
specific identification of the individual diversification increments to be grouped for partitioning as segments.

According to the mechanisms postulated by the Mautz definition, such increments are created by the presence of one or more of three source factors (s-factors), in sufficient magnitude to affect three consequence factors (c-factors), by an amount sufficient to influence the investor's decision, relative to an absence of each respective one of the three s-factors. The s-factors are designated as managerial decentralization, market diversification, and inadequacy of operational integration; the c-factors as profitability rates, growth opportunities, and risk degrees. The three s-factors are each assumed to affect the same three c-factors; and the three c-factors are assumed to interrelate mutually, though not necessarily in constant manners and degrees.

Any explicitly measurable determination of segmentationally significant diversification under this definition would require an independent analysis for each s-factor. Both logically and pragmatically this is impossible. Though intangible, the three s-factors are all genuine institutional structures, capable of generating accounting-significant diversification increments. But the three c-factors are not definitive measures; although they are all affected by the presence of one or more of the three s-factors, they are not exclusively consequent of them. Typically, in fact, they are more heavily influenced by other institutional structures,
excluded from the Mautz definition, located elsewhere in the firm. Nor, even if they were viable criteria for measurement of diversification increments, defined exclusively as those produced by the three s-factors, could they differentiate among the individual contributions of each of the s-factors; all three c-factors are commonly consequent, to individually varying extents, of each s-factor.

In formal logic, the Mautz definition is perfectly sound. For purposes of determining segmentation criteria, it is also indeterminate.

**Informal Analysis**

As a foundation for segment definition, the Mautz conception offers much needed underlying support. For identification of actual segmentation criteria, it will need further development. More specific interpretive refinements must be devised, based on additional reference frames not yet clearly ascertainable.

The primary goal of segmentation is to provide more useful information to the users of financial statements. By Mautz's definition, the paramount user is "the investor." The critical determinant of requisite segmentation extent is whether or not the investor needs the segmented information to make "informed decisions." If it will affect his decision, i.e., either cause him to invest when he would not have otherwise, or vice versa, a given report segmentation can be assumed to be critical from the investor's frame of reference.
The definition specifies broad criteria for identifying diversification. It does not translate them into explicit segmentation terms of product lines, market sectors, etc. These are implementation vehicles. They should be adequately designated to accommodate both the diversification characteristics of each individual reporting corporation, and the information comprehension needs of each objective recipient. The primary goal of segmented financial reporting is to communicate the relevant nature and consequences of these characteristics in whatever manner will best satisfy these needs. With respect to both the characteristics and the needs, there is, obviously, a conceptual problem in aggregating myriad and diverse individual units to meaningful norms that will optimally typify "the" diversified corporation, and "the" report user, for purposes of segmented financial reporting.

As noted, the designated need criterion is investor sensitivity. According to Mautz, in diversified corporations the specific structural risk factors that can cause a segmentation need are three: (1) managerial decentralization; (2) lack of operational integration; or (3) market diversification.

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8As noted, in the Mautz definition these recipients have been postulationally subsumed under the collective heading of "the" investor. This aspect is further explored shortly.

9With respect to both characteristics and needs, of course, this problem pervades all financial reporting. It is drastically aggravated by increases of diversification in the reporting companies.
In practice, among individual reporting firms and report users, the actual investment-sensitivities of these factors will depend partly on influences external to the Mautz definition.\textsuperscript{10} At the more highly aggregated level of conceptual norms, where "the" diversified corporation reports to "the" investor, these individual divergencies are less visible; however, they are by no means irrelevant. With respect to each of the three Mautzian causal factors enumerated here, for example, the traditionally diversified firm and the modern mutant are severely disparate;\textsuperscript{11} full aggregation, into a simple normatized concept of "the" corporation, may well be operationally meaningless. Before adequate segmentation technologies can be developed for general application, some form of intermediate-levels conceptual aggregation theory will be requisite. The "spectrums" analysis of Chapter IV provides one possibility.

Thus, according to Mautz, the need criterion is investor sensitivity; the potential causal factors are one or more of the three enumerated above. The measures that determine whether or not these factors will actuate that need are variations in: (1) rates of profitability; (2) degrees of risk;

\textsuperscript{10}Such as, for example, variations and complexities, in and/or among: a given user's value system, and concomitant investment policies; the reporting company's broader structure of investment-sensitive risks; and the risk structures of alternative potential investments.

\textsuperscript{11}See pages 103-12.
(3) opportunities for growth. Again, according to
analysis in Chapter II, the traditionally diversified firm
and the modern mutant tend extremely to differ.¹²

For simple identification of the diversified firm,
application of the definition is straightforward. According
to its criteria, however, virtually all of the large American
corporations today are diversified. An investor will, indeed,
need specific information about the status of the three
Mautzian measures. By and large, he is probably already
receiving it; but he may not be getting enough either of it,
or of adequate interpretive analysis which discloses the
causes. The need criterion is not really simple, i.e.,
whether further segmentation would affect his decision. Rather,
it is complex: How would it affect it? The sophistication
of being able to ascertain whether his decisions would be
altered for better or for worse, both in consequence of the
specific additional information provided and also in terms
of the sheer volume of information he will effectively absorb
and utilize, is probably still some distance away from
operable implementation.

Although both need-criteria and design-criteria, for
segmented reporting, are beginning to come under conscious
investigative scrutiny and development, both the extent and
the form of desirable segmentations are still very open

¹²See pages 103-12.
questions. At the time of this writing, both regulatory agency reporting requirements and voluntary professional practices are progressing well in advance of commensurate levels of theoretical, technological, and evaluative developments relating to actual segment definitions.

Today, the question being most widely asked is still simply: "Will segmentation help the investor?" Given the complexity of today's corporations, the inevitable consensus answer will be, "obviously." Beyond this, the logical next question is: "How should segments be defined?" Here, as yet, there is little to go on.

Thus far, the benchmark has been provided by Mautz. By his gauge, segmentation should be designed in the manner that will most clearly delineate, to the investor, the effects of the Mautzian three causes; such effects to be determined by the Mautzian three measures.

The problem is to develop the requisite interpretive devices. Without them, it is logically impossible to centrally prescribe effective criteria for defining the most effective reporting segments. If such interpretive devices are impossible of adequate development, the central prescription effort can be abandoned. As the analysis of this dissertation so far has documented, the subject corporations are entirely too diverse to permit an effective, uniform application of the Mautz criteria without them.
Evaluative Summary

The "Mautz definition" has provided a badly needed conceptual breakthrough. It is logically consistent, structurally sound, and vitally perceptive in content. Although it does not provide specific segmentation criteria for applicational uses, nor even a realistic basis for divining them given the present state of the reporting art, it is a highly significant contribution in prelude to further theoretical development.

It is not literally a "definition of diversification," though it is often viewed as such. It is not a strict definition, in the technical sense of that word; nor is it a comprehensive identifier of all material diversification elements, in the pervasive reality of those entity-structural forces. Nor was it intended to be:

This is a conceptual, as opposed to an operational, definition, and one peculiarly pertinent to the responsibilities and needs of the financial management of business corporations, to financial analysts and investment counselors, and to institutional and individual investors.¹³

Thus, as a definition, it is not "operational." Nor is it secular, either temporally or institutionally. It may not accommodate future mutations of prevailing corporate structure, nor can it directly identify which specific forms of risk an individual company should use for differentiation into reporting segments today.

These are not shortcomings. It simply was not designed to serve those purposes. For analysis of the segment definition problem, it provides a strong conceptual underlay. The further needs now are both theoretical and technological.

Mautz formulated this definition for use by the investment community.\(^{14}\) It reflects the reporting deficiencies created by the so-called "conglomerates," as perceived by that investment community, in the late 1960's. The study of which it is part is still the largest single source of empirically tested knowledge about an unprecedented phenomenon in American industry. This is the substantial foundation for more advanced developments to come.

To facilitate exposition of the Mautzian contributions, the prospect that additional institutional source-factors might produce diversification risk increments, material to financial-report-entiry substructuring, has here been ignored. His definition designates three specific source-factors, in enlightened contrast to the relatively superficial views of corporate diversification that have popularly prevailed. Analytically, the discussion here has simply taken Mautz's three source factors as postulational givens.

**User Group Needs**

In his definition, Mautz presumed the demand recipient of segmented financial reporting to be the equity investor. In

\(^{14}\)Ibid., and Mautz, *Financial Reporting by Diversified Companies*, p. 145.
American accounting research and practice, this assumption is traditional. Its rationale is rooted in orthodox neoclassical economics. As explained by Backer:

A private enterprise economy relies upon the financial markets as a means for directing the flow of capital into those enterprises which can use it most effectively. In countries where public financial reporting is relatively undeveloped, owners of capital are notably reluctant to take risks which they cannot evaluate in the absence of information.\(^\text{15}\)

But while he embodied these premises implicitly into his definition, Mautz was fully and explicitly aware of the practical unrealities inherent to specification of any single group for exclusive reporting-goals orientation.

In his larger study, he devoted a substantial section to a concept of "balanced blending":


to a disruption of relational equilibrium among these groups when radical changes, such as segmentation, are first innovated.

That other groups besides investors, most notably including intrafirm managers, need also to be served, is not an uncommon recognition in the literature of segmented reporting. It finds particular recognition when the supply side of the information to be presented is under consideration. But few authors appear to write with a broad range of user group interests in mind, as measured by the wider assortment of economic decision makers who inevitably will use most such information reports. Fertig, Istvan, and Mottice have summarized this range of substantial users and uses concisely. In their model, they include:

A. Managerial users at various levels of responsibility and authority who use accounting reports for:
   1. Measuring performance
   2. Planning

B. Nonmanagerial users, who include:
   1. Financial investors (and their advisers)
      a. Owners
      b. Lenders
   2. Those who are not financial investors
      a. Those with a beneficial relationship
         1. Customers
         2. Suppliers
         3. Employees
      b. Those with an overseer relationship:
         1. Taxation agencies
         2. Regulatory agencies
         3. Statistics collectors

In practice, the problems introduced by the existence of this diversity are immense. And, while these problems do

pervade all financial reporting, they are particularly aggravated by increases in the presence of user-group-decision-sensitive structural risk factors, e.g., by increases in "diversification."

Chapter IV of this dissertation has argued that the true essence of reporting-requisite corporate diversification is a process which alters such structural risk factors, by nature and in magnitude to influence the economic decisions of the report users. By implication, the Mautz definition also conceives this as the general nature of reporting-sensitive diversification; but, there, the range of such factors to be accorded segmental consideration are designated as an explicit set of three. Even with a strict investor orientation, it seems probable, a priori, that other such factors may also be relevant and material. If the list of report users and uses is realistically expanded as in the above listing, the segment definition problem assumes enormous further dimensions of both scope and complexity.

As yet, no practical consensus is anywhere apparent as to segment classification systems for use in public reporting. There may never be one. Demands for information arrayed by subentity classification schemes are forged from the needs of conflicting power groups in economic society. When formally imposed requirements result from such demands, they inevitably reflect multiple compromise. At the time of this writing, no definitive guidelines have as yet been issued by competent authority within the accounting profession. Those requirements
which have been implemented have been imposed by authorities in classification B.2.b.2., above, i.e., by regulatory agencies. They are the object of widespread dissatisfaction.

For example, The Wall Street Journal has editorially criticized a currently pending proposal by the Federal Trade Commission:

One has only to read the "statement of purpose" of the Federal Trade Commission's proposed "Line of Business Report Program" to see where the government is headed. The gist of this FTC program . . . would require that the top 500 corporations break out cost and profit figures on every line of product each of them makes, as well as a breakdown for each product on assets, sales, advertising, promotion, research and development and intracompany transfers.

The FTC's rationale is that "free enterprise" is inefficient when corporations are permitted to keep secrets, . . . Maybe, but somehow American capitalism has flourished all these years without a chance to look at the other fellow's books.

But that's not what the FTC is really after anyway. The chief impetus comes from its antitrust division, which has been breaking its pick lately trying to find trusts to bust. It figures if it can get inside industries, by forcing industries to turn themselves inside out, it will have better luck. More likely, they would only find support for imaginative rationales to try to fracture, atomize and restructure American industry. In other words, more work for lawyers.18

The editorial presents a triple indictment: (1) that the FTC is surreptitiously trying to serve ulterior ends, under the guise of the traditional accounting goal assumptions; (2) that the proposal is detrimental to the economic welfare of the subject corporations, their investors, and the nation; and

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(3) that the requirements to be imposed are infeasible in light of today's accounting technologies.

In accounting, consistency is traditionally valued over comparability; i.e., when interfirm, intra-industry comparability of published financial data is in conflict with intrafirm consistency of such data over a series of reporting time periods, the former yields to the latter as a priority consideration in selecting the methods, techniques, and formats to be used for gathering, processing, and presenting the reported information. Attempts by an investor to compare published reports among different firms can mislead him when different accounting procedures, generally accepted within the profession but not productive of similarly based information, are employed but not disclosed in detail. The orthodox view is that reported data should assist the investor primarily in his efforts to evaluate the reporting corporation; but that he should stress more general sources, and a broader perspective, when he reviews its external competitive environment.

In reality, each user may subject a report to multiple legitimate uses. This further complicates segmentation analysis. Just as "the investor" is often assumed to be the user group, direct analysis of the reporting firm is customarily presumed to be "the" use. Other uses may be fully legitimate; but, should a theoretical model make such an assumption, all other uses are ulterior insofar as development of that model is
concerned. For purposes of theory construction, the rigors imposed by strict logic processes may demand exclusive focus on a single user group, with a single purpose. This enhances developmental feasibility, but at the expense of applicational realism.

To the extent that interfirm comparability is enhanced by segmented reporting, the investor will benefit from it in that usage, even though it is of subordinate priority to his direct evaluation of the single corporation in isolation. As a general rule, however, the technological inadequacies which impede comparability among traditionally nonsegmented reports can only be aggravated by the more highly refined presentation formats introduced by segmentation, unless correspondingly refined technologies can first be developed to facilitate implementation of the segmentation at a level of procedural quality at least equivalent to that which obtains in the traditional, nonsegmented reports.

To the extent that segmentation is actually designed to serve purposes ulterior to those intended by a given user group, of course, that group's interests will likely be disserved. Hence, enforced segmentation, of a format designed to accommodate analysis of economic concentration, with anti-trust activities as the intended goal, will likely tend to disservce the interests of the conventional investor, whether equity or debt, should he attempt to use them for his customary purposes. Provision of such information is a legitimate
function of the accounting profession; but, preferably, it should be presented in auxiliary formats additional to those which are certified for intended primary investment uses.

Throughout this dissertation, where not otherwise specified, the equity investor is presumed to be the principal statement user. His needs are deemed the priority object for segmentation theory and practice. The needs of other user groups, as delineated above by Fertig, Istvan, and Mottice, are acknowledged. Further, as regards the investor, the need to directly evaluate the reporting corporation is presumed to be his priority use. His secondary needs, for comparative evaluation of that corporation as against other publicly reporting corporations, are acknowledged.

Semantics

Conceptual problems are often affected by terminological inadequacies. Commonly used terms may not well describe specific technical applications. Words may have extrinsic implications, or carry multiple connotations, distracting from more limited intended meanings. Phonetic attractions may affect a concept's popularity, especially in the social sciences vis-à-vis the physical. When a new concept is first introduced, it may become known by improvised terms of spontaneous origination; these tend particularly to be influenced by ephemerally sensitive considerations, such as popularity and phonetic attraction, as well as by such
inappropriate forces as competitive instincts among individuals, and power groups, attempting to customize concepts to their own credits. In some fields, as in marketing and politics, terms may be psychologically selected or designed to effect deliverated behavior patterns and concept usages. And any term in common use may have obsolesced due to gradual changes in the concepts to which it has historically referred.

With the exception of obsolescence, each of these factors may to some degree be operative in the segmental reporting literature.

**Terminological Limitations**

Through projection from various conceptual areas of application, the term "corporate diversification" has traditionally carried diverse, but specifically narrow, meanings to various individual minds.\(^{19}\)

Not until popularization of the Mautz definition did these concepts become properly generalized; even there, the degrees of generalness they have achieved may prove inhibiting. Mautz propounded the task as reporting the effects of diversification, as created by three specific source factors. If there are other source factors additionally to be reckoned with, the problem is still broader; it requires still higher degrees of conceptual abstraction, and of theoretical reasoning.

\(^{19}\)See, for example, pages 26-32, and 97-105.
The lay practitioner, and the routine investor, can readily cope with the overt symptoms of diversification, as visibly expressed in such familiar forms as geographical market sectors and market-defined product lines. They are less prepared to assess, communicate, and assimilate the investment-risk effects, of diversification, as derived consequences of such abstract, though specific, causal forces as managerial decentralization, lack of operational integration, etc.

Today, they lack even an adequate mode of communicative expression for this.

If these higher order concepts of diversification are to receive enlightened theoretical development, breaks from familiarity will be necessary. Some exploratory "new starts" are needed. The spectrums analysis of this dissertation is one candidate for an investigative beginning.

If theory must be upgraded, so must linguistics. If concepts must be broadened and generalized, to include the more complex and the less familiar, then so must related terminology. At the outset of this study, the patterns and characteristics of corporate diversification were identified only broadly, in an essentially conceptual mode. "Diversification" was specifically defined, but generalness was emphasized. The term "line of business" was introduced, but explicitly left undefined pending further analysis.

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21 See pages 22-23.
22 See pages 24-25.
By connotation and implication, the term "line of business" is inappropriate for universal service to this topic area. It is suggestive of "product" lines, and perhaps of "industries." At theoretical levels of research and development, it tends to limit investigative thought, and to direct it into mundane channels of exploration, to the exclusion of such broader, and more abstract, conceptual schemes and approaches as are implied by the Mautz definition, and further advocated and developed in this dissertation. At applied levels of report segmentation, it tends to limit the range of segment types that usefully might be employed, e.g., it tends to exclude segmentation by organizational units, such as divisions.

As a working vehicle, the term which so far functions best, in thinking and communicating about the subentity definitional problems of report segmentation, is the tautological, but contentually pure, term, "segment." These problems involve reporting the effects, for investment decision making purposes, of "diversification"; but the salient characteristics of diversification are not yet known. The need is to report these characteristics by "segments"; but the appropriate form and characteristics of the segments are not logically determinable until these salient characteristics, of the diversification effects to be reported, are first ascertained.
In other words, the accounting entity must be subdivided according to some criteria, the nature and characteristics of which must yet be divined through study of the investment-decision sensitivities of various subdivisioning schemes. But the subdivisions are only vehicles of communication; they are transmittal. Until the message to be transmitted is known and meaningfully formulated, an adequate transmission system is impossible to design and construct.

The process has three stages: (1) formulating the message, i.e., diagnosing the relevant "diversification," or structural risk factors, and assessing their potential investment-decision effects, for transmittal; (2) transmitting it, i.e., designing and operating the vehicle of transmission, in this case the segmentation system for the financial reports; and (3) receiving it, i.e., properly assimilating and interpreting the information for maximum potential assistance in the investment decision.

In no way can these three stages be smoothly and harmoniously interlinked, for effective operation as a unit, without a common and efficient language. If this language has a lower order of sophistication at stage two than in stage one, it cannot communicate the full message to stage three. In no way can the "proper" classification basis for segmenting financial reports be specified today, without further research and development, both theoretical and pragmatic,
in stages one (diagnosis) and three (utilization). And these must be compatible efforts.

According to Mautz, the need is to report the investment-sensitive effects of certain structural factors within the corporation. In this dissertation, his notion has been further broadened and generalized, and has been conceived as productive of an aggregational hierarchy of perceived decision risks. When viewed in these highly abstract terms, as operational investment risks, produced by the forms and behavior patterns of various structural risk factors within corporate entities and related socioeconomic institutions, with variations of prominence and investor-decision sensitivities for various specific types of structural risk factors as they are found among different corporate entities, diversification can only be said to be generally reportable in forms classified by "subentity units"; or, more terminologically conveniently, by "segments."

For theoretical reasoning, at least, no other term yet to appear in the literature of this subject area will suffice. Impure terms, with connotations and implications appropriate only to narrower definitions of diversification and/or lower order concepts of it, are harmful. Predirection of the transmittal stage, without adequate diagnosis in stages one and three, is not only futile; it is actively detrimental.

23 Reference page 112, and discussion ensuing there.
The institutionalization of analytical inhibitions, in the form of methodologically inadequate or erroneous conceptual constructs, impedes subsequent inquiry into the most genuinely needed research areas, and directs them into subutilitarian channels. For example, if one is preconditioned to focus his interests on geographical market regions, or on a given industry-defined product line, he may direct his inquiries only into the directly related subconcept areas of stages one and three. If he seeks, instead, to simply research the most useful "segment" structures for stage two, he will tend to research the entire relevant diversification-production function of stage one, and all related information needs for stage three.

**Prevailing Nomenclature**

As noted earlier, the word "line" carries definitions sufficiently numerous and varied to endow it with a substantial degree of generality. Hence, although "segment" is the purest term appropriate to entity subdivisioning for reporting the financial effects of corporate diversification, "line" is also, inherently, reasonably free of contamination.

When used in these applications, however, "line" tends to carry restrictive inferences. These derive largely from two subtle sources: (1) the connotational properties of

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24 See pages 24-25.

25 Cited in discussion on page 166.
additional terms, which almost invariably accompany the word; and (2) synergistic popular impressions which arise from the applications themselves, as opposed to the definitional substances, of phrases which combine "line" with one or more additional terms.

Thus, a "line of business" is a considerably broader concept than a "product line." The latter term suggests allusion to either production characteristics or market industries. The former, by literal definition, is almost a synonym for the ultimately permissive term, "entity segment"; for purposes of this dissertation, at least, an "entity" is a business entity.\textsuperscript{26}

Yet, in actual usage, the term "line of business" tends to convey a substantially more restrictive classificational image. For probably several of the reasons articulated above,\textsuperscript{27} the general public tends to assign it the connotations of a "product line." Further, individuals in various specialized professional lines\textsuperscript{28} likely attach a variety of commensurately specialized interpretations, since the word has many and varied specialized uses throughout daily life.

Thus, though "line" and "segment" both define formally with adequate conceptual breadth, "line" is entirely too

\textsuperscript{26}See page 143.

\textsuperscript{27}See pages 163-164.

\textsuperscript{28}Spontaneous use of the word here, by this student, serves inadvertent testimony to the point being made.
familiar a word, with its innumerable and diverse specific applications. The value of "segment" lies in its general anonymity.

In contrast, "divisional reporting" is a specific term. It refers clearly and exclusively to segmentation by defined components of corporate organization. It lacks conceptual generalness, but possesses the virtues of uniqueness and applicational precision.

In segmentation practice today, all of the terms discussed in this section, thus far, are in common usage. Unfortunately, they tend to be used indiscriminately, apparently for lack of a suitable standardized name with which to reference the phenomenon of subentity reporting segments.

Such usage breeds classificational confusion. Although lines of business, production-defined product lines, markets-defined product lines, and organizational divisions conceivably could all coincide in a rare reporting situation, the terms tend to conflict semantically. However, none of them conflict with the term "segment"; which has adequate logical capacity, or generalness, to embrace the substantive meanings of each or all of the others, either exclusively or in any combination.

As a practical matter, the term "line of business" has gained wide acceptance. It has been institutionalized into both theory and practice by formal specifications of regulatory agencies, notably the SEC and the FTC. As reflected
by periodical literature, it also seems to be gaining substantial acceptance in the accounting profession.

Despite the abruptness with which this issue has emerged, and the confusion that has accompanied it, the American Institute of Certified Public Accountants has maintained a cautious openness toward both the diversification reporting problem and its terminologies. When APB Statement No. 2 was issued in late 1967, it avoided any specification of diversification reporting-mode criteria. The essence of the Statement was a concise, but thorough, summary and partial assessment of the then current status of the diversification reporting issue, with examples of then current reporting practices.

The issue was analyzed wholly from the standpoint of an "industry" rationale. No terminology was assigned for identification of reporting segments, though such words as "lines," "segments," "business," etc., were widely used in generic contexts. The problem was defined as:

... the question of whether published reports of conglomerate companies should contain supplemental

29 APB Statement No. 2 is not a binding "opinion" to practitioners, but it does constitute an official viewpoint of the Accounting Principles Board.

30 Like Mautz, the Board explicitly assigned the terms "conglomerate" and "diversified company" the status of practical synonyms. See pages 28-29 of this dissertation for details, and Chapter VII for an argumentative challenge.
financial information concerning the activities of those segments of the business which are clearly separable into different industry lines.\textsuperscript{31}

The entire Statement discussed the issue in terms of "industry diversification." The operational meaning of an "industry" was not addressed, but the examples cited were of mixed criteria:

. . . as to industry segments of the business . . . specific examples of supplemental disclosures . . . being made by some companies at the present time are as follows:

(a) Revenues by industry activity, or type of customer
(b) Revenues and profits by separable industry segments
(c) Separate financial statements of segments of the business which operate autonomously and employ distinctly different types of capital structure . . .
(d) Revenues by type of industry activity and type of customer, together with a general indication of the profitability of each category
(e) Information that the operations of a segment of the enterprise are resulting in a loss, with or without disclosure of the amount of such loss.\textsuperscript{32}

There are only minor conceptual inconsistencies here, but the terminological details of this Statement tend to illustrate the semantic difficulties which surround this issue. The Board saw it as an "industry segments" problem, and overtly thought of it wholly in those terms and within that context. It was actually looking at a somewhat broader issue, whose parts cannot be resolved in isolation. As


\textsuperscript{32} Ibid., p. 2.
evidenced by their examples, the use of "industry" here was semantically ambiguous in the larger context of the discussion.\textsuperscript{33}

At the time Statement No. 2 was written, the diversification issue was newly emergent.\textsuperscript{34} Nomenclature in the literature was non-standardized; in fact, specific literature was still scarce. That the Board was able to capture the essence of the problem without greater terminological difficulty is remarkable.

There has been modest evolution of related language in the seven years since, but vocabulary standardization today is still slight. This is an urgent need.

Following release of the Statement in 1967, the AICPA's Accounting Trends and Techniques annual report survey service began monitoring actual practices. Results were initially presented under the heading, "Presentation of Information by Division, Product Line, Etc."\textsuperscript{35} In 1970, the title was changed to simply, "Product Line Reporting";\textsuperscript{36} and, in 1973, "Business Line Reporting."\textsuperscript{37} Though these changes are

\textsuperscript{33}Within the quoted examples, the word was used in a more specific subset application, and contrasted with such other criteria as "type of customer." This sort of set-and-subset semantic duality seems to be a recurring phenomenon for the subject matter of diversification. For more fundamental examples, see footnote on page 116.

\textsuperscript{34}See pages 43-46.


subtle, they appear to reflect a gradually broadening concept of the issue, as experience was gained via the monitoring of actual reporting practices. As changes, they are purely titular. The classifications actually used for tabulation of the segmentation, itself, have remained unchanged since the monitoring began. These segment classifications are conceptually mixed.

At the time of this writing, the FASB is composing a discussion memorandum on financial reporting for diversified companies, for circulation preparatory to public hearings.\textsuperscript{38} The terminology which emerges from these activities may well foster a more standardized vocabulary.

Source Factors

The sources of corporate diversification have been variously conceived, at different abstraction levels.

Abstraction

According to the theoretical framework of this dissertation, diversification is a product of activities which spread investor-perceived structural risks of socioeconomic institutions, both within and externally relational to reporting corporations. According to Mautz's definition, it stems from managerial decentralization, lack of operational

integration, and market diversification of the reporting firm. Others see it as simply a matter of lines of business, product lines, formal organization units, geographic market sectors, types of customer, etc. The differences are both conceptual and semantic, but preeminently abstractive. They are probably less substantive than they seem.

Mautz's three source-factors are adaptable as examples of the risk-spreading activities in the dissertation definition. In turn, lines of business, etc., tend to fit reasonably well into one or more of the categories in Mautz's definition. These various concepts are not necessarily in basic conflict.

Analytically, they need conceptual synchronization of their characteristics, to provide reasonable mechanical compatibility; then classification into an abstractional hierarchy, where increasing levels of abstraction increase classificational breadth and contentual permissiveness. The dissertation definition is highest in level of abstraction; then comes Mautz. As analyzed in the immediately preceding section, lines of business are more abstract than product lines. And so on.

Abstraction is not always a virtue. In excessive quantities, it can be damaging. Too often, theory and application fail to interrelate; theorists and practitioners tend not to speak the same language, or to think in the same conceptual modes. Generally, an increase in abstraction levels facilitates theory, but impairs application; and vice versa.
For analysis of a given issue, ascertainment of appropriate abstraction levels is an important task, but difficult. Unlike many current problem areas in accounting, the diversified reporting issue has been dealt with, so far, almost entirely at applied levels, with a minimum of theoretical and conceptual guidance beyond developments by Mautz and a very few others. Since the most vital current needs are obviously conceptual and theoretical, this dissertation has tended to stress higher levels of abstraction. If future research should reveal the problem essentials to be other than those currently perceived via severely pragmatic perceptions, a framework will be needed that can accommodate radical concept innovations. Little is known, as yet, about the best way to segment financial reports. At this point, there is merit to an open mind.

For example, research in this dissertation suggests that not only types of diversified growth, but also modes and integration patterns, may be diagnostically significant to investor decision making. Current conceptual frameworks adopted by both Mautz and the APB preclude this possibility, even as to the types. This matter will be examined in the next section.

Abstractive tendencies impart directionality to research. In this dissertation the Mautz definition has been analyzed, in isolation, with closed logic. The value of his abstractive insights was readily apparent, and suggested the need for
even further generalization of his three diversification concepts. Continuing widespread adaptation of that definition, by others, reinforces the value of his abstractional progressiveness.

Yet, Mautz ultimately concluded that the abstraction levels in his own definition were distractingly excessive. He had formulated it preparatory to his FEI study. In the study itself, his efforts to apply it were frustrating. He defended his creation conceptually, but admitted practical failure:

theoretically, any of the [three source-factors] could cause internal variations in any one or more of the investment variables. As the study progressed and information was obtained from corporate management, financial analysts, and others, it became evident that although the definition appeared sound conceptually, some weaknesses in practical application were inevitable.39

Following a two page rationalization of his applicational difficulties,40 he concluded:

For all practical purposes the type of diversification of significance for financial reporting purposes can be viewed as industry diversification. The tentative conceptual definition noted the possibility of internal diversification resulting from either management decentralization or non-integrated operations, and of external or market diversification because of differences in customers or products or because of geographical distribution of its assets. Conceptually these are all possible; practically, with the exception of industry diversification, they are either unlikely to exist or extremely difficult to identify.41

40 Ibid., pp. 8-9.
41 Ibid., p. 9.
He seems to be concluding that his definition is a practical failure. This student emphatically disagrees. Mautz has demonstrated the difficulties inherent to the validation of theory by applying it to practice. He has also demonstrated that what he refers to as "internal" diversification is harder to isolate than "external." He has not invalidated the abstractional essences of his definition, nor has he effectively obviated the need for analysis at those abstraction levels.

The tenor of the FEI study was classically practical. The data collected was empirical. It represented only the expressed opinions of mostly practical men, who were individually intimate with various component parts of the problem, and whose personal value systems were naturally influenced by the suboptimalities of their respective involvements.

By no means has he alleviated the need for more comprehensive risks analysis, beyond that possible within the limited scope confines of his "industries" conclusion, even assuming a broad definition of that ambiguous term.

The business firm operates as an entity. Subentities, however defined, must be evaluated in context of the entire system of subentities which comprises the entity. Accordingly, they must all be defined in some rational manner, permissive of intersubentity risk evaluations. An "industry" analysis, exclusively and in isolation, is incomplete. It may suffice
for certain subproblem investigations, e.g., for simple improvement of certain current reporting practices, subject to currently practical scope restrictions. For analysis of the larger diversification disclosure issue, without impendence from such localized restriction, it is invalid.

Identification

If industry diversification really were the only form significant for financial reporting, as expressly concluded by Mautz and excerpted above, there would be no investor-sensitive differences between the traditionally diversified firm, as a class, and the modern mutant. Other relevant types of diversification risks do tend to group together in usable patterns. Before segment definition policies can be optimally formulated, these need also to be considered.

Mautz has demonstrated that specific classificational constructs are troublesome, at any level of abstraction. He found two of his three source-classes inappropriate for practical application. Beyond empirically tangible uses, however, they retained at least some of their original value utilities. They are still conceptually viable. In the final sentence of the last excerpted passage, above, Mautz viewed some of the diversification potentially caused by managerial decentralization and by a lack of operational integration as "unlikely"; the rest was simply difficult to identify.
Though difficult to identify, these forms of diversification must still be perceived, somehow, by the investor; and, in the real world, they are so perceived to substantial degrees. They may be difficult to incorporate into a financial report, but they are nonetheless valid. To the investor, the difference between traditional diversification and modern mutancy is both severe and decision determinative. This difference does not lie primarily in industry diversification.

Mautz and the dissertation definition aside, various notions are popularly prevalent as to investor-relevant sources of diversification. A further distinction of importance to segment definition is that of relatives versus absolutes. To a given investor, a given source of diversification within a given corporation will be more decision-significant than another given source, or than will that source to another given investor. The problem is not simply to identify which diversification increments are significant; but, rather, to determine which ones are relatively more significant, and how much more. To the extent that financial reporting is an art, this is a judgmental determination. Again, the normatized notions of reporting financial results to "the" investor, and/or to other user groups, present a problem which is common to all financial reporting; but as corporate fractionalization increases through subentity segmentation, this same problem also grows in magnitude and complexity on the data supply side of the reporting process.
Diagnostics

The most critical key to judgment of diversification-risk effects is the distinction between true sources and perceived sources. Regardless of the realities of the former, the investment decision is actually predicated upon the latter. Regardless of whatever risk spreading activities might actually occur through structural modifications, the investor responds to his own perceptions. He may or may not need to know the realities; a "black box" type of message transmission is sufficient. If he can adjudge future effects from surrogate data, or even if he only believes that he can, he will be influenced by whatever risks and risk alterations he detects as decision significant.42

At this time, the entire issue of segment definition for financial reporting by diversified companies is in a state of enormity, ambiguity, and complexity. It is at a low stage of conceptual development. Yet, implementation needs are urgent. To facilitate the development of more adequate underlying theory, two separate types of analytical research activity are now appropriate and recommended here:

1. Actualities research, designed for diagnosis of the actual risk-spreading modification patterns of

42 As a corollary observation to this point, it should be noted that "black box" transmissions will modify, but not eliminate, the language requirements. Although the message received is in terms alien to that transmitted, the message is still perceived, albeit via alternate and indirect channels. Both technically and structurally, the semantics may assume a different form; but they are still subject to the consistency requirements of a stable encoding framework.
structural risk factors in relevant socioeconomic institutions more generally, and in publicly reporting diversified corporations specifically; and of the potential effects of those patterns, according to orthodox financial investment theory; and

2. Investor-sensitive behavioral research, with relative emphasis on a free-style mode, for detection of the true diversification-based criterial perceptions which actually do influence financial investment decisions; and of the specific manners in which such influences are realistically manifested.

Type (1) is aimed at diagnosis of true diversification sources, and at evaluation of their rational investment-decision implications. Type (2) is aimed at diagnosis of decision process realities.

Via research type (1), it is possible: (a) to theoretically identify true sources of diversification, even though they may be impossible of practical validation; (b) to reason from these theoretical identificational formulations, for development of rational behavior schemes on both sides of the investment equation, i.e., within the reporting corporation, and also in the investor's decision activities; and (c) to then conclude that the whole process was devoid of practical relevance.
This may be what happened to parts of the Mautz definition,\textsuperscript{43} with effective omission of step (b) under the press of an elaborate, institutionally sponsored, but pragmatically oriented duty project. If so, this is unfortunate; output from step (b) can endure, and provide a foundation for later research efforts of various natures and substantive directions.

Research type (2), though more difficult of methodical execution in the absence of stable preconceptions and firmly prestructured designs, is potentially the more fruitful of the two types when the issue is as large and ambiguously structured as the one under specific consideration here. It is essentially a search for authentic decision variables, without concern for cause-and-effects rationality. The key guideline criterion is simply how the investor reacts to stimuli, in spite of why. Methodologies and external resource references are open.

The spiritual essence of type (2) research is the colloquial "black box" of communications theory, applied in context of incomprehensively large, complex, and ill defined message structures. The goal is meaningful transmission of useful information about relevant components of diversificational presences, in spite of comprehensional inadequacies as to their specific forms and compositions. To the investor, these forms and compositions are of less interest than are

\textsuperscript{43}See pages 178-80.
their behavior patterns and their consequences. The information that needs to be transmitted to him concerning corporate diversification is "whatever turns him on," and thereby influences his own behavior patterns; or, should the objective be a more prescriptive form of behavioristics, whatever can turn him on, and thereby will influence his behavior patterns in a given desired manner.

As conceived here, this approach is effectively gestalt; the whole of the diversification problem, for example, is probably impossible of treatment in any realistic manner via a single, centrally designed, organized, and directed research effort, no matter how ambitious the project might be. Rather, the approach advocated here is a search for solutions to semiaggregated components ("segments"?) of the total problem, as it actually impacts upon the investor, with at least a moderate degree of semantic uniformity to facilitate the interchange of conceptual developments and research findings among independent research projects.

In fact, since the diversificational reporting issue does not naturally partition into subsets which are mutually

44Gestalt: "a unified whole; a configuration, pattern, or organized field having specific properties that cannot be derived from the summation of its component parts." Random House Dictionary of the English Language, unabridged, page 594.

45This is notably consistent with the semiaggregational nature of risk factors, as conceptually developed in pages 112-20.

46Among mechanisms for accomplishing this, it is a proper function of scholarly and professional journals.
exclusive, and universal-set exhaustive, there is no need for additivity of different projects to equate with the issue as a whole. Gaps and overlaps among research provinces are not only acceptable, but desirable.

A free-style mode further incorporates a number of more specific gestalt traits and characteristics. The term implies that there should be less concern for orthodoxy in selection of research techniques; for psychological "conditioning" forces, either in the research problem environment or in larger society; for any "establishment" pressures of intellectual or procedural conformity; etc., i.e., for thought-process inhibitors, not essential to the subject matter under examination, which might tend to repress analytical freedom.

As delineated above, these are two separate and disparate types of research. Type (1) attempts to determine what exists, using conventional research modes and methodologies. Type (2) seeks only effects, and tries to ascertain their investor-manipulative properties, using whatever approaches and techniques appear potentially to be most fruitful. Though operationally conservative, type (1) is more liberal with respect to the individual investor's decision perquisites. Type (2) is radical, and carries a higher research productivity risk. Attendant to that risk, it is potentially capable of producing more powerful research outputs; but introduces a higher order of ethical consideration, since it tends more
designedly to manipulate the investor's input perceptions and decision sensitivities.

Though disparate, the two types should be pursued concurrently and in tandem. When a problem area is as large, ill defined, and undeveloped as diversificational disclosure is today, both are urgently needed. Substantive communication among projects would obviously be beneficial, though not essential, to overall development of the broader issue. No effective clearing house for details of work still in progress exists, however, nor is it likely to come into existence soon, for obvious security reasons; the only real way to get interproject coordination on a generalized basis is central direction of the projects themselves. In any case, as evaluated earlier, there is a severe need for at least semantic collaboration.

The task of identifying investor-sensitive diversification source factors, and of evaluating and transmitting their effects via financial reporting, is formidable.

If transmission is to be implemented on a centrally guided and required basis, via report segmentation processes, the identification and evaluation stages of the task are prerequisite. They have not yet been adequately accomplished.

If this task is to be performed, a responsible professional capability must first be developed. For optimal service to

47 See pages 163-75.
the investor, it should be based on substantial conceptual and theoretical development, at substantially higher levels of abstraction than now prevail.

**Demonstration**

This dissertation is semiformal type (2) research. A period of general study on the broad issue of financial reporting by diversified companies indicated that the topic had been comprehensively explored by others to a point of apparent redundancy; but that efforts to extend orthodox research to development of specific segment definition criteria had been few and futile. Viable criterial schemes to service that need did not exist, nor was there any reasonable consensus as to how one might be developed. Urgency was obvious, as evidenced by pressures from regulatory agencies to implement specific reporting requirements.

As observed from the popular literature, certain patterns seemed germane. Mautz and others had briefly alluded to types, forms, and integration patterns of corporate growth, but had summarily dismissed them as noncorrelative and irrelevant. Further, their views appeared broadly influential in guidance to professional and regulatory thinking.

Against the reference frame of experientially derived perceptions, manifested in this student's individual values system, the conclusion seemed hasty. These perceptions have been subjected to free style exploration in this dissertation, at various intercoordinated levels of abstraction.
Mautz's FEI study is essentially Type (1) research. It aimed at ascertainment of tangibly expressible true diversification sources, and at detection of professed investor wants. Preliminary concepts were soundly based, on rationally preconceived premises. Research techniques were formal, orthodox, and methodically designed. The study dealt with that which can be scientifically studied at the practical level; e.g., expressed investor wants, as contrasted with true investor-perceived wants, versus subliminally actual investor wants, versus unperceived investor needs.

At practical levels, segmental reporting tends to give the investor what he says he wants, to the degree corporate power holders are willing to provide it. Ideally, he should get what will cause him to best attain his investment goals. Between practical and ideal is a broad range of potential professional achievement for the accounting arts. Again, research is needed at various levels of abstraction.

Type (1) research is the accumulational mainstay for a formal body of knowledge. Output is scientifically generated, reliable within ascertainable tolerances. It builds structure, one brick at a time, from the ground up.

Type (2) can provide architectural guidance, by coordinating independently derived components of larger theory structure, and by pointing to potentially useful new areas to be investigated by more substantial orthodox research.
Research outputs can conflict. Theories tend inherently to differ. More particularly, potentials developed from free style thinking tend to conflict with establishment conceptual parameters. Such parameters derive, in part, from the presences and prominences of substantive bodies of knowledge, conventionally the product of orthodox research activities. In large part, they are commonly imposed not so much by the knowledge itself, assuming validity, as by generally accepted interpretations of content and implications.

In any given instance, the nature of the conflict may not be readily apparent. This can be readily illustrated with an example from this dissertation inquiry.

Argumentative Nucleus

Relatively free style research in this dissertation has generated conjecture that different types, modes, and integration patterns of growth in corporate diversification might be diagnostically significant to investor behavior.¹

¹For technical definitions and distinctions among types, modes, and patterns concerning diversified growth, see pages 22-24. These distinctions are critical to the discussion which follows.
Both R. K. Mautz and the Accounting Principles Board have acknowledged that the diversification disclosure issue has been aggravated by changing types, modes, and patterns of corporate growth. But both, essentially without revelation of substantiated reasoning, have concluded that any actual differences among diversification increments which might have originated in correspondence to these sources are non-existent, irrelevant, or not material, in context of investor decisions. Apparently, these factors are viewed as accelerators, and perhaps as catalysts, for diversification. They are not seen as originating sources of differentiable diversification risks.

Explication

R. K. Mautz.—In his FEI study, Mautz delineated the distinction between internal and external growth:

Two quite different types of movement have resulted in diversification within companies. The former is the so-called merger movement, so popular in recent years. Business acquisitions of one kind or another may result in combining into one company either disparate activities or harmonious and related activities. . . . The second source of diversification is found in internal growth and expansion. Through their own research and development efforts, companies discover products or processes which lead them into activities somewhat alien to their established operation. This internal growth and expansion may involve a sharp break with past practice or may be a very gradual creeping sort of development.²

As to practical consequences, he found no difference between these two types of diversified growth.

²Mautz, Financial Reporting by Diversified Companies, p. 10.
Mode differences, acknowledged in the final sentence of the above quotation and in other passages not cited here, were discounted as transitory:

Diversification may be temporary or permanent. . . . Ultimately, however, all [diversified activities] are intended to fit together in a single unified operation. . . . A number of writers have pointed out that immediately upon acquisition any added component is likely to be unintegrated, to be decentralized in its operations relative to the rest of the company, and may appear to be somewhat disparate. The longer it remains a part of the total corporate family, however, the more integrated it becomes and the tighter its control by the top administration of the company.3

Among these mode impacts, only the time element retained his recognition as a potential segmentation influence:

. . . on any given date, one might have difficulty in identifying those companies which have diversification as a continuing part of their policy and those companies for which the apparent diversification of the moment may disappear as the company becomes more integrated. Such a difficulty, it is argued, has implications not to be ignored in the consideration of possible reporting recommendations.4

But even with respect to this absorption time, Mautz did not endorse the notion that modes of diversified growth are investor-significant considerations. The references to "a number of other writers" and "it is argued" are contextually meaningful, since the passage appeared among others whose clearly intended purpose was refutation of popular misconceptions.

Newness of recent integration patterns, alluded to in the first of the three Mautz quotations above, was acknowledged

3Ibid., pp. 10-11.
4Ibid., p. 11.
as a simple historical fact. Neither modes nor patterns were envisioned as correlating significantly, either to each other or between the two basic types of diversified growth.

Mautz also denied the existence of correlations between diversification and corporate size:

To some writers, large companies and diversified companies apparently are equivalent. This is not so, either in concept or practice. Size and diversification are separate characteristics. A number of large companies operate almost completely within a given industry, although they may have a substantial number of plants and marketing outlets. At the same time, a number of fairly small companies may operate in quite disparate activities. As a homely example of the latter, one can cite the local company which handles fuel in the winter and ice in the summer. Although these mesh together usefully, they are certainly disparate in nature, perhaps more so than the activities of some large companies which find it desirable to add to their main operations a number of ancillary activities to provide additional services essential to the easy marketing of their primary product.\(^5\)

By concept and by definition,\(^6\) the FEI study was conducted under the basic premise that diversification risk is homogeneous with respect to corporate growth factors.\(^7\)

\(^5\)Ibid.

\(^6\)See pages 28-29.

\(^7\)Although he occasionally spoke of "types of diversification," Mautz used that phrase in a less formal sense than this technical analysis permits, e.g., he used it to connote "temporary" versus "permanent" increments of diversification. In the defined terminology of this dissertation, he appeared to acknowledge two "types of diversified growth," i.e., internal versus external; but only one real "type of diversification," the product of the three specific sources in his definition.
Accounting Principles Board.--In APB Statement No. 2, the Accounting Principles Board of the AICPA viewed the consequential characteristics of diversification similarly:

The term conglomerate is used popularly to describe a company that diversifies into distinctly different industries by acquisition or merger. The Board believes, however, that there is little distinction between industry diversification which arises by this method and industry diversification resulting from a company's own internal development and expansion efforts. All of these companies will be referred to in this statement by the more descriptive term diversified companies.\(^8\)

This statement of conceptual belief is essentially the same as that evidenced by Mautz.

The Board explicitly summarized the "background" of the diversification issue via concepts of the different types, modes, and integration patterns of diversified growth:

Unlike earlier merger movements, which were largely characterized as horizontal . . . or vertical . . . , the current merger activity has produced a significant number of business combinations which are neither horizontal nor vertical. Instead they represent the bringing together of companies in industries which are unrelated, or only slightly related. . . . Many companies, also, have accomplished industry diversification through internally generated activities, including the acquisition of comparatively small companies in other industries as a means of obtaining specialized industry knowledge. Some companies have broken away from an industry pattern with which they were previously identified and have entered entirely different fields to reduce dependence on a single market.\(^9\)

In the APB view, therefore, investor sensitive corporate diversification is homogeneous with respect to the types,

\(^8\)See page 29; repeated here for convenient reference.

modes, and patterns of diversified growth; but the current disclosure issue does stem, in part, from "significant" changes in those characteristics.

**Summary.**—According to Mautz, from text and context:
(1) Both types of diversified growth occur, but modes and integration patterns are not readily associable with each of the two types on a discriminatory basis; (2) mode effects are relevant during an acquisition's absorption, until such time point when temporary diversification can be clearly distinguished from permanent; (3) integration patterns are obviously relevant to any industry analysis, but are not discriminative since they cannot be correlated to types of diversified growth; and (4) there is no meaningful relationship between diversification and corporate size.

According to the APB, "there is little distinction between industry diversification which arises by this [acquisition] method, and industry diversification resulting from a company's own internal development and expansion efforts." But, at the same time, it indicated that this issue was generated, at least in part, by changes in types, modes, and integration patterns of diversified growth.

**Discussion.**—These two presentations effectively constitute one view. **Statement No. 2** was issued in 1967; the FEI study was published in 1968. The **Statement** withheld prescriptive opinion, pending the results of additional "substantial research."
When expressed by such eminently respected authorities, such views are broadly influential. These were the original authoritative pronouncements to the worlds of academia and professional practice, respectively, at a time when the entire subject existed largely as an undefined confusion. Virtually all accounting literature on corporate diversificational disclosure has appeared since these two sources became available. During these seven years, periodical literature in accounting has tended to incorporate the premise of investor-sensitive diversification homogeneity without challenge.

**Analysis.**—Interpreting further from Mautz: he acknowledged the sources of diversification to be multiple. Not all increments were presumed to stem from one source, since he explicitly identified them as the products of three institutional structural forces.\(^\text{10}\) However, they were presumed to exhibit similar influences on investment decisions, regardless of institutional source. These conclusions are evidenced most clearly: (1) in Mautz's designated intersource commonality of investment-risk translational vehicles, i.e., rates of profitability, degrees of risk, and opportunities for growth; and (2) in the fundamental subject-firm definitions of both Mautz and the APB, where "conglomeration" is specified.

\(^{10}\)These sources were later simplified to one for practical purposes, namely market industry diversification. See quotation on page 178.
for practical purposes, to be indistinct from "diversification," in service to investor purposes.

As to both commonality of diversification influences regardless of source, and conception of conglomerates as practically synonymous with traditionally diversified firms, the analysis of this dissertation conflicts.

Reconciliation

The conceptual differences here are fundamental, and probably incapable of full reconciliation. The Mautz/APB contention has enjoyed popular acceptance for seven years, and is an entrenched component of establishment doctrine. The dissertation conjecture has stood up under multiple analyses, none of which were formal, major, scientific, or designed for legitimate validation. It has also fit well into substantial theoretical development, at moderate levels of abstraction, in this dissertation. Neither premise has been adequately tested to achieve a status of indisputable verification.

Concepts can legitimately differ, when used for different analytical purposes. To this point in time, the homogeneity premise has served well in its designated uses. The FEI study was pragmatic by nature. Virtually all of the other research to date on this issue has shared these characteristics of extreme practicality, though none have attempted to duplicate Mautz's comprehensiveness of scope, elaborateness
of empirical documentation, and attention to detail. Research subproblem areas of principal interest, to this point in time, have tended to be intercoordinative throughout the firm. For this type of analysis, stabilizing assumptions are appropriate and necessary.

For such analyses, the diversificational homogeneity premise can serve as a partial ceteris paribus type of stabilizing device. If the goal is to analyze accounting subproblems of transfer pricing, central cost allocation, or the practical partitional boundaries of one unique segmentation scheme into which such allocations can be directed, it is analytically useful, at first, to assume that the diversification is a homogeneous element and that its reporting is to be apportioned into one universal set with disjoint and exhaustive partitions; e.g., a given company's "industry markets," defined with component mutual exclusivity.

For other purposes, such as determining which segmentation schemes actually need to be used, in whole or in part, alone or in combination with others, the analytical underpinnings need to be more flexible, more sophisticated, and more analytically advanced.

Here there is a further paradox. Regardless of form and purpose, the ultimate proper goal of any analysis is applicational realism. But the larger and more complex the problem is, the more abstract must be the interim processes of analysis used to get there. Mautz began at a moderate
abstraction level. It served him well in all applications, short of practical implementation; but his empirical information sources forced him to lower his abstraction levels, to a point of near elimination. He ended up at the level of a single set, with additive partitions; i.e., market industries.

The answer to the paradox may lie in the specific form of application. Outwardly, it appears that sheer pragmatism forced him to the uniset level; his empirical data was wholly practical, comprised of opinions offered by those actually involved in providing such information, and of those who use it. But, for this, nothing can be more practical than the reality of actual report segmentation, which further eliminates a good deal of personal bias still present in Mautz's data. Even a cursory scrutiny of actual reports published by segmenting corporations reveals a decidedly mixed assortment of segment criteria is used.

Perhaps the real distinction influencing Mautz's decision was a matter of internal versus external sources. The two sources of diversification which he concluded were either unlikely, or impractical of diagnosis, were managerial decentralization and lack of operational integration. Both are a matter of intrafirm structure. The one he went to, exclusively, was market industry diversification. This is basically derivative from external institutional structure. Diagnostically, its basic partitioning is segregable from
that of internal organization structure with relative ease, compared to the task of partitioning selected companywide variables from others which interact with them in volatile and ill defined patterns.

Thus, Mautz was forced to simplify his conceptual definition of diversification sources, because of practical considerations. But the practical considerations were highly complex and sophisticated. He kept the simple one, because he could not, as a practical matter, handle its sophisticated sisters.

Both simplifications were forced by practical considerations; but, in both cases, the rationale was avoidance of the complex: (a) the homogeneity premise simplifies research of various problem areas within the diversified reporting issue, up to but excluding the development of segment definitional criteria; and, (b) the sources of diversification can be handled more easily when confined to the externally oriented one, because the two internally oriented ones are too complex to handle.

The alternative to such simplifications is development of more adequate conceptual and theoretical tools. But unless the problem areas to be analyzed require such tools, the simplifying assumptions may be preferred.

Both conventions have served well to this stage of development. Neither is suitable for the next step. The need now is for analysis at higher levels of abstraction, with
the crutches removed; and for development of broad, competent theory to deal with a substantially broader, and more complex, set of determinative variables. Following such development, it will again be time to consider the mechanics of applicational pragmatics.
CHAPTER VIII

SALIENCIES

As developed in the preceding analysis of diversification risk factors and their sources, selected conceptual essences are briefly recapitulated here.

Corporate diversification stems from investment-risk-spreading changes in institutional structural factors. These forces originate within the reporting entity, within related external socioeconomic institutions, and among interinstitutional relationships. They generate additional structural stresses, which either initiate or aggravate other relational risks.

Diversification source factors individually exist; but are difficult, or impossible, of individual detection and identification. While they are analytically worthy of detection and identification, this is not essential to the investment process. In fact, provision of information so derived, at the individual risk level, may hamper the investor more than it might help him, since he may not have the ability and/or the capacity to evaluate the mass of untreated data.

In his actual activities, the investor relies on semi-aggregated data. He sees a corporation as comprised of various risks; but each risk, as he perceives it, is actually
a semiaggregated compilation of less highly aggregated risk subcompilations. Further, different types of investors rely upon differently aggregated risk structures, constituted according to various criteria.

As a practical matter, the investor does not necessarily address diversification risks directly, even in appropriately semiaggregated formats. In practice, he relies mainly on his perceptions, rather than on the actualities. Thus, there is no absolute need to identify individual risks, or to consciously aggregate them into direct compilations.

At least in many cases, the investor evaluates diversification risks by means of surrogate identificational factors. Anything he can perceive, which will consistently act in a manner commensurate to the actions of an idealistically derived specific-risk aggregational structure, will suffice as a surrogate for that structure. Thus, his concern is not necessarily for the specific identification and compilation of information about the risk factors, themselves. Rather, the demand is for an indicator, of some sort, which will convey a message to influence his behavior as if he had received the information directly, and in a purely rational form.

For development of the segmentation issue, there is need for radical departures in research modes and methodologies.
There is probably no feasible manner in which financial reports can be segmented to present diversificational actualities to a broad spectrum of investor types, to say nothing of other report users. There may be ways in which they can be segmented to beneficially influence his decision processes as though he were receiving, assimilating, and using such information.

The current need is for a substantial quantity of research, of varying types. While orthodox inquiries are needed, and likely to form the basis of long run knowledge accumulations in this area, there is an immediate need for more purely behavioral research, of a free style nature. This may point out new directions, to be further tested by more orthodox means.

Underlying all this is the need to break away from tradition, and from some aspects of the accumulated mass of knowledge that has been growing over the past seven years. The issue is new. This knowledge is early in the learning cycle. It is useful, and has served its purposes well. But some of it may be inappropriate to certain new purposes.

Development of actual segmentation criteria is a different type of effort from those that have preoccupied analysis of this issue to date. It requires different perspectives, and different analytical variables.

The preeminent advocacy of this dissertation is for a general raising of abstraction levels, in accounting research
for determination of segment definitional criteria. The need is for conceptual development, and for theoretical formulation. Practice comes later.
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