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AN EXAMINATION OF THE FACTORS AFFECTING THE JUDICIAL
ASSESSMENT OF CONTINUITY OF INTEREST IN CORPORATE
REORGANIZATIONS

The University of Oklahoma

PH.D. 1983

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THE UNIVERSITY OF OKLAHOMA
GRADUATE COLLEGE

AN EXAMINATION OF THE FACTORS
AFFECTING THE JUDICIAL ASSESSMENT
OF CONTINUITY OF INTEREST IN
CORPORATE REORGANIZATIONS

A DISSERTATION
SUBMITTED TO THE GRADUATE FACULTY
in partial fulfillment of the requirements for the
degree of
DOCTOR OF PHILOSOPHY

By
MICHAEL DAVID 'DECELLES

1982

AN EXAMINATION OF THE FACTORS
AFFECTING THE JUDICIAL ASSESSMENT
OF CONTINUITY OF INTEREST IN
CORPORATE REORGANIZATIONS
A DISSERTATION
APPROVED FOR THE DEPARTMENT OF ACCOUNTING

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ACKNOWLEDGMENTS

The author wishes to express his appreciation to his dissertation committee for their assistance and guidance during the preparation of this manuscript. The committee was composed of Dr. Adele Humphreys, Dr. L.P. Williams, Dr. Travis P. Goggans and Dr. Bill G. Schumacher.

A special acknowledgment is made to Dr. Ted D. Englebrecht, Chairman, for his particular insight into the study. In addition, I would like to acknowledge the generous support that I received from the American Society of Certified Public Accountants during my doctoral work.

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CHAPTER I

INTRODUCTION

The problem of establishing "continuity of interest" as sufficiently present to warrant a tax deferral on any potential gain in a corporate reorganization represents a difficulty that has pervaded the United States tax system for many years. As the issue now stands, taxpayers involved in reorganizations cannot rely merely upon literal compliance with governing statutes. Rather, they must, in addition, satisfy a very subjective judicial assessment as to whether the legislative intent upon which the statutes were founded has been fulfilled. The basis for this judicial assessment, in turn, hinges upon the continuity doctrine.

Ideally, continuity of interest represents a tool with which the judicial system can accurately discern the substance of a reorganization transaction and thereby render decisions in accordance with the legislative intent. The doctrine was first utilized for this purpose in response to what the courts perceived to be sim-

plistic statutes governing the taxation of reorganizations. For instance, at one time, outright sales of corporations (events which clearly merit taxation) met the literal statutory requirements and thus qualified under the law as tax-free reorganizations. The courts, however, instead of blindly applying such obviously inadequate provisions, acted to preserve the integrity of the law by focusing on the substance of the transaction so as to distinguish between true reorganizations and mere disguised sales.

While the reorganization statutes have often been revised over the years, the courts' jurisdiction over continuity of interest has never been challenged. Thus, it remains the case today that a literal fulfillment of the statutes is not sufficient to guarantee tax-free status. Taxpayers still must demonstrate to the courts that a significant continuity in the ownership of the entities has been maintained.

It is with respect to this burden of proof placed on the taxpayers that the greatest perceived weakness of reorganization taxation exists. It is evident, a priori, that corporations are allowed to reorganize for a purpose -- primarily, to enable business entities to select that form of business in which they feel best able to efficiently conduct operations. Moreover, to the extent that any legislation prevents or unduly penal-

izes attempts to increase efficiency, that legislation does a disservice to society. Conversely, however, it is equally clear that taxpayers should not be allowed to disguise transactions which merit taxation as reorganizations solely for the purpose of evading taxes.

A cursory assessment of this dilemma might produce a feeling that this blend of legislation and judicial discretion might result in an effective and equitable balance of power among the contending parties. Unfortunately, a closer analysis reveals that such is not the case -- a result primarily due to the large scale of the finances involved in most reorganizations. Given the persistent inflation prevalent in recent decades, corporations considering reorganizations will almost assuredly possess net assets for which the fair market value far exceeds their basis. Consequently, if tax-free reorganization status is striven for and not achieved, a severe tax would result on the assets' appreciation. With such a significant "at risk" position, most corporations are naturally hesitant about taking chances and, accordingly, tend to structure their reorganizations so that potential conflicts with the Administrative position are avoided. This impasse prevents the hoped for balance of power and, instead, results in an inflated Internal Revenue Service authority. Rather than allowing firms to utilize the most efficient means of form-

ing what they perceive to be more competitive positions, corporations are impelled to proceed inefficiently according to possibly uneconomic criteria forced on them by the Service.

This dilemma within the reorganization area has resulted in substantial litigation involving continuity of interest in which the courts have been forced to decide what variables they consider important in a given set of circumstances in deciding whether continuity is present. While case law cites numerous factors which the courts have considered relevant, no definitive criteria or guidelines are apparent from the litigation.

PURPOSE OF THE STUDY

The purpose of this empirical investigation is to assess the judicial application of the continuity of interest doctrine in determining the tax status of corporate reorganizations. Since such determinations involve multiple and interactive variables, taxpayers have often been at odds with the Service with respect to the proper tax treatment. This controversy has resulted in a large body of case law relating directly to continuity of interest. Even though this should represent a source of considerable insight into the issue, little systematic analysis has been undertaken to identify which variables

or factors significantly influence judicial decisions. This study proposes such an analysis, involving four specific research questions.

Research Questions

Research Question #1: How does the Tax Court weigh various factors in making their determinations as to continuity of interest?

Research Question #2: How well does a model consisting of the Tax Court's key variables perform with respect to predicting determinations for internally generated hold-out samples of Tax Court cases?

Research Question #3: How stable is the Tax Court's assessment of continuity of interest over the approximately fifty year period during which the issue has been litigated?

Research Question #4: How well does the Tax Court model perform with respect to

predicting determinations of
continuity of interest for
District Court and Court of
Claims cases involving con-
tinuity of interest?

CONTINUITY OF INTEREST DATA

One hundred and fifty-six cases involving assessments of continuity of interest during the period 1932 to 1981 were identified through a Lexis search¹ and manual techniques. Of these, three cases failed to provide sufficient information with respect to the study's variables and were deleted from the analysis. All of the Tax Court cases (122 in total) that were analyzed in the study are listed chronologically in Table 6-1 and all relevant District Court and Court of Claims cases are similarly listed in Table 6-11. In addition, citations for each case and values for all of the study's independent variables are presented alphabetically in Appendix A.

Since the assessment of continuity of interest involves a question of fact, and since the court of original jurisdiction is the court for fact determination², each case was analyzed in the court in which it originated. Initial decisions can be overturned on appeal only if the decisions are based on significant errors of law³. Courts of appeal were utilized, however, for data-gather-

ing purposes when original courts failed to provide sufficient detail with respect to the variables.

RESEARCH METHODOLOGY

Research Question #1

The initial task in this study involved the identification of variables or factors which are intuitively interrelated with judicial assessments of continuity of interest. In the attempt to uncover these variables, the statutory and administrative regulations provided little assistance since, for the most part, determinations have been left up to judicial discretion. Qualitative discussions of corporate reorganizations, in general, are numerous and a significant number of these deal specifically with continuity of interest. These sources, in concert with key Supreme Court decisions relating to this issue⁴, provided the source for most of the variables. In addition, a careful review of all continuity of interest cases should have uncovered any previously overlooked factors.

After these variables were identified (the variables themselves are discussed in Chapter IV), the factors were used to develop mathematical models of the courts' decision-making processes. In addition, the study focused primarily on the Tax Court, for several reasons.

First, the Tax Court represents the court of technical expertise for tax issues in that only tax-related cases are heard in this forum and since Tax Court judges invariably are selected from tax practice backgrounds. Conversely, courts such as the District Court and the Court of Claims hear primarily non-tax litigation and, consequently, are generally less sophisticated with respect to tax issues. And second, since a large majority of continuity of interest cases are resolved in the Tax Court, it seems propitious to focus the decision-making model on that forum most likely to be encountered by the parties involved in a reorganization.

The model based on Tax Court cases was used primarily to identify important variables with respect to the judicial decisions and to use those variables to classify cases as either possessing or not possessing continuity of interest. The key variables are identified in the methodology utilized (the methodology is discussed in detail in Chapter V) by a stepwise procedure in which variables are entered into the model one at a time based upon the greatest resulting increases in the maximum likelihood function. This iterative process is continued until the increase from the next variable to be entered into the model is not significant. Thus, the ordered variables resulting in significant increases in the maximum likelihood function constitute the model.

Once the model has been so estimated, it can be transformed arithmetically to provide a predicted probability for a finding of continuity by the Tax Court. This probability, in turn, can be used to classify each case with respect to the presence or absence of continuity.

Research Question #2

In order to assess the validity of the Tax Court model produced in Research Question #1, a method was devised in which internally generated random hold-out samples (each consisting of approximately 10% of the entire Tax Court sample) will be withdrawn from the overall sample. Subsequently, the withheld cases will be classified by a model based on the retained cases (90%). Reiterating this process ten times, that is, until all Tax Court cases have been withheld once, and examining resulting cumulative classification accuracies should provide evidence concerning the validity of the original model.

This assessment of validity is particularly important since Research Question #1's model utilized a given sample of Tax Court cases to classify those very same cases. As a result, it is probable that the classification accuracy will be somewhat overstated. This inflated accuracy (referred to as "upward biasness") is caused by the model's incorporation of characteristics unique

to the sample which enables the model to more accurately classify outlying or unusual cases within the sample. By withholding sets of cases, the resulting models cannot incorporate potential idiosyncracies that may exist in the hold-out sets. Therefore, the resulting classification accuracies relating to the hold-out sets should provide an accuracy rate that has been adjusted for potential upward biasness.

Research Question #3

Since continuity of interest has been litigated over a considerable period of time, it is conceivable that independent variables in the model may have been applied inconsistently over time. Given the nature and development of the doctrine, it appears likely that a fair degree of temporal stability should exist since continuity of interest has served the same basic purpose, from the same general perspective of the Tax Court since its inception. While statutory changes have rendered it superfluous in some areas by detailing objective safe harbor requirements which guarantee reorganization status for certain transactions, such restrictions in its scope have never altered how the doctrine has been applied when still appropriate.

The temporal stability of the Tax Court model will be assessed by chronologically dichotomizing the Tax

Court sample cases into two subsets. The sets will be divided by an event which is perceived as potentially having altered the judicial assessment of continuity of interest. An investigation into possible changes in the subset models' significant variables and an analysis of the respective models' classification accuracies will provide the basis for assessing temporal stability.

Research Question #4

The primary focus of this study is the Tax Court for the reasons identified previously. However, it is at least interesting to consider possible differences between the Tax Court and other forums in which continuity of interest may arise (the District Court and the Court of Claims). For instance, it is feasible that where a relatively weak case might face almost certain failure under the expert scrutiny of the Tax Court, it could have a significantly better prospect for success in a less rigorous Court of Claims' examination.

To assess the potential variations between the existing judicial systems, the Tax Court model from Research Question #1 will process raw data from District Court and Court of Claims cases and classify each according to the model's output. Differences in classification accuracy from those observed in prior research questions would constitute evidence of structural differences among

the various courts. However, this analysis must be limited to the identification of possible differences, and no conclusions will be drawn with respect to the degree or direction of variations that may exist.

LIMITATIONS

This study identifies numerous variables that are thought to be relevant to the judicial assessments of continuity of interest, and then develops a model of the courts' decision-making processes. One aspect of this study's potential contribution involves some predictive application of the model towards future reorganization transactions. However, the certainty of being able to predict future assessments is shaken somewhat by the dynamic nature of the U.S. tax structure. That is, while it might seem reasonable to suggest that a model based upon data gathered over a fifty year time span will possess significant predictive capabilities, the possibility for the introduction of new variables via changes in the law or by the courts undermines such an assurance. Nonetheless, it should be strongly emphasized that this predictive capacity of the model is not viewed as the study's primary contribution and, therefore, this limitation is not critical. To the contrary, the primary goal is to identify those variables which the courts view as most important with respect to assess-

ing continuity of interest. One possible utilization of these significant variables involves an enactment of new legislation aimed at reducing the current reliance on the subjectivity of the courts. If this proves to be the case, then the predictive capacity of the model would assume only minimal importance.

At this point, several potential sources of bias suggest themselves and should be discussed before proceeding. First, a possibility exists for situations in which one side or the other possess such a strong case that litigation is unnecessary. Since a large majority of litigated cases will involve situations in which both parties anticipate reasonable probabilities of success, a model based on the characteristics of such "balanced" cases may provide a distorted perspective if blindly applied to "imbalanced" situations. However, even a slight modicum of rationality in the use of the model should preclude such a likelihood.

A second potential bias exists in that the source of data consists of the written opinions of ruling judges. This introduces the possibility that judges may (either consciously or subconsciously) report only those variables which tend to support their conclusions. This is a serious possibility but, fortunately, one which is lessened by the infrastructure of the U.S. court system. In order to minimize the likelihood of having decisions reversed

on appeal (a source of professional embarrassment), judges tend to disclose fully all factors considered in reaching their decisions so as to demonstrate, at the least, that all relevant factors were taken under judicial review.

A fourth potentially serious problem involves the prospect of missing data. It is almost certain that not all variables identified as potentially significant will be discussed in each written opinion. Having noted this as a general problem, a more detailed description of both the problem and implemented solutions to the problem will be deferred until the discussion of individual variables in Chapter IV.

Another potential limitation in the study involves the significant length of time during which continuity of interest has been litigated in the courts. Specifically, changes in the pertinent statutes over the years have altered the environment in which continuity of interest has been assessed. While these statutory changes have never altered how continuity of interest has been applied, they have changed the situations in which the doctrine is more commonly applicable. This change, in turn, could have indirectly influenced the relative importance of the independent variables. On the positive side, however, it is relatively certain that such temporal instability will be observed (in Research Question #3)

if, in fact, it does exist. Moreover, its existence is not necessarily destructive to the intended purpose of the study. Rather, it would necessitate a refocusing on only the more recent continuity of interest cases (which would, of course, reduce the size of the data base and consequently diminish the reliability of the study's results).

And finally, a last limitation of the study involves the generalizability of results. The empirical investigation focuses on an assessment of the Tax Court (to the exclusion of other possible forums in which continuity of interest may be litigated) and upon an assessment of the Tax Court model's validity. Assuming that the aforementioned limitations prove to be manageable, it seems likely that the model will be generalizable to a Tax Court environment. However, only a surface investigation into possible differences between the Tax Court and the District Court or Court of Claims is possible. Furthermore, no attempt at explaining or measuring possible variations is feasible. Consequently, no generalizability of the Tax Court model to other judicial forums will exist.

IMPLICATIONS OF THE STUDY

As a preface to this discussion, it should be noted that the tax research undertaken in this study falls

into a micro-level type of research in that the basic issue involves a definite and clearly identifiable pragmatic tax problem. Consequently, the contributions of the study will tend to be more practical and specific than one might associate with more purely theoretical research. Accordingly, the potential contributions of this study are perceived to be twofold. First, if the study is successful in identifying key variables which can produce an accurate classification model, then the balance of power between the Service, the courts, and taxpayers will be enhanced. That is, the inflated authority of the Service will be reduced to a level at which taxpayers may be more willing to litigate. And second, the utilization of a more sophisticated and justifiable research methodology (discussed in Chapter V) than those utilized by prior researchers represents a contribution of the study in itself.

To elaborate on the initial potential contribution, it is a widely accepted principle of taxation that revenues should be generated in a manner providing consistent, equitable and anticipatable results. Even further, it is desirable that any tax statute achieve these results without creating artificial constraints which might restrict the efficient flow of goods and services in the economy. To the extent that any statute can be demonstrated as lacking in these regards, the efficacy of

that law is clearly brought into question.

It appears that an analogous situation exists with respect to the taxation of corporate reorganizations. The various types of reorganizations are provided primarily to permit business entities to select a form of business in which they may operate most efficiently and competitively in world markets. Furthermore, the basic tenet of reorganization taxation requires that mere changes in business forms intended to enhance efficiency should not be burdened with taxation. However, an artificial constraint does seem to exist which often precludes the implementation of this concept. That is, the ambiguity inherent in the current legal environment of corporate reorganizations tends to render taxpayers unwilling to risk litigation. Perhaps the greatest potential contribution of this study, therefore, involves the identification of the process by which the Tax Court assesses continuity of interest. If this process can be adequately modeled, two beneficial scenarios could result. First, objective tax statutes (safe harbor rules) could be enacted which might achieve the equity of current judicial assessments without producing unacceptable subjectivity. And second, failing this, it is still possible that taxpayers may be more willing to risk litigation under the current statutes if they better understand the judiciary's decision-making process with respect to continuity of inter-

est. If so, the inflated authority now wielded by the Internal Revenue Service could be at least partially offset.

FOOTNOTES

1. Lexis is a computerized retrieval system which identifies all court cases in which specified words or series of words exist.
2. H.J. Berman and W.R. Griener, The Nature and Function of Law (Mineola, N.Y.: Foundation Press, Inc., 1972).
3. Supra, Footnote #2.
4. Minnesota Tea Co. 296 U.S. 398.
Cortland Specialty Co. 60 F.2d 937.
John A. Nelson 296 U.S. 374.
Pinella's Ice & Cold Storage 287 U.S. 462.

CHAPTER II

This chapter first reviews the basic tenet underlying the taxation of corporate reorganizations in the United States. Subsequently, the inception and development of the continuity of interest judicial doctrine are discussed -- with particular emphasis on the interrelationships between the objective statutes and the subjective judicial assessments of corporate reorganizations.

CORPORATE REORGANIZATIONS

The Internal Revenue Code specifies that "gains derived from dealings in property" should be included in gross income¹ and allows, in general, for the deduction of losses sustained in similar activities². The rationale inherent in this administrative position is that an event relating to the property which extends beyond any mere appreciation or depreciation in the value of the property should result in taxation for the parties involved. However, since transactions which may consti-

tute such taxable events can take extremely diverse forms, any purely rigid statutory approach will almost certainly fail to achieve equitable and consistent results. A more propitious statutory solution to this dilemma, nevertheless, does involve the utilization of a rigid approach that efficiently covers most related exigencies. In addition, however, to provide the desired flexibility, exceptions are allowed for events which, although they may literally fit the criteria for a taxable event, are inconsistent with the aforementioned rationale. Corporate reorganizations constitute one such exception.

Before discussing the specific interrelationships that exist between corporate reorganizations and continuity of interest, several general aspects of reorganizations should be noted. Initially, it is essential to focus on reorganizations as they are precisely defined in the Code and not upon possibly misleading connotations associated with the term. To many, corporate reorganizations elicit images of mismanagement and bankruptcy. However, while such conditions do fall within the Code's definition, a much more diverse group of corporate transactions are also covered by the reorganization statutes -- including mergers, consolidations, recapitalizations, corporate acquisitions of the stock or assets of other corporations, and changes in the form or place of corporations.

Confronted with such a diverse group of transac-

tions that potentially qualify as reorganizations, the legislature opted for a statutory definition which focused primarily upon the form (as opposed to the substance) of the reorganizations. As might have been anticipated, however, the application of such a rigid approach to a variegated set of transactions achieved little with respect to sorting out the economic consequences of the various transactions. The reorganization statutes themselves are, naturally, extremely complex since they attempt to prescribe the tax treatment for an amorphous group of transactions possessing little economic commonality. The complexity is heightened even further by regular amendments to the statutes (usually ad hoc, in nature) and by existing interplay with other statutory provisions³.

The importance of the reorganization concept for both corporate and estate tax purposes should be noted. That is, even though large corporate reorganizations may receive most of the public's attention, a significant majority of reorganizations involve more moderately sized firms. It has been estimated that two million closely-held corporations exist in the United States as opposed to only some 100,000 firms whose securities are listed on exchanges or traded in over-the-counter markets.⁴ Furthermore, due to the added potential for shareholder manipulation, the closely-held corporations may face

closer scrutiny by the Service in regard to both the letter and spirit of the statutes.

CONTINUITY OF INTEREST

The Code provides that the reorganization of a corporation need not result in taxation if the transaction "simply changes the form of the corporate holdings and that what was formerly a corporate business carried on by a particular corporation(s) is subsequently carried on by other and perhaps new corporations under a new corporate form"⁵. The rationale, herein, involves the aforementioned aim of reflecting the substance of an economic transaction as opposed to a mere contrived and artificial form. Extending this concept, it is equally clear that tax-free reorganization status should not be granted in cases involving acquisitions of one corporation by another (either through purchases of the corporation's stock or assets) even though the acquisition might literally comply with existing statutes. In accordance with this reasoning, the judiciary has tended to rely more on their perceptions of legislative intent than on the explicit wording of the statutes. Two judicial doctrines -- business purpose and continuity of interest -- have evolved from this process to such an extent that they, rather than the statutes, are the primary determining factors in reorganization litiga-

tion. As a result, taxpayers cannot rely solely on literal interpretations of the statutes but must also subjectively assess the impact that these judicial doctrines will have on their particular situations.

The first of these doctrines -- business purpose -- is widely applicable throughout the Code. Since business purpose hinges primarily upon the existence of tax avoidance motives, its assessment has been generally consistent and straightforward. Continuity of interest, on the other hand, pertains almost exclusively to corporate reorganizations and has resulted in little consistency upon which taxpayers may rely. To the contrary, a bewildering array of complications have arisen that virtually preclude any simple assessment of continuity of interest.

Thus, continuity of interest has evolved as a judicial doctrine in response to what the courts perceived to be simplistic and rudimentary statutes controlling the taxation of corporate reorganizations. This simplicity, in the early statutes, is illustrated by an absence of differentiation between acquisitions of corporations for cash and acquisitions through the issuance of new capital stock. In other words, outright sales of corporations (events which clearly extend beyond mere changes in property value) were not viewed as taxable under the early explicit statutes. Confronted with such inadequacy,

the courts imposed doctrines of their own to preserve the "spirit" of the law -- the essence of which involved a segregation of disguised sales of corporations from true reorganizations.

Throughout the ensuing years, the reorganization statutes have often been revised, but Congress has never removed from the Courts their jurisdiction over continuity of interest. Thus, it remains the case that the literal statutes are insufficient to guarantee the "spirit" of the law and the courts continue to apply continuity of interest wherever necessary. The recognition by the Service of the legitimacy and importance of this doctrine is explicitly stated in the Regulations⁶:

Under the general rule, upon the exchange of property, gain or loss must be accounted for if the new property differs in a material particular, either in kind or extent, from the old property. The purpose of the reorganization provisions of the Code is to except from the general rule certain specifically described exchanges incident to such readjustments of corporate structures made in one of the particular ways specified in the Code, as are required by business exigencies and which effect only a readjustment of continuing interest in property under modified corporate forms.

Requisite to a reorganization under the Code are a continuity of the business enterprise under the modified form. In order to exclude transactions not intended to be included, the specifications and their underlying assumptions and purposes must be satisfied in order to entitle the taxpayer to benefit from the general rule.

CASE LAW DEVELOPMENT

The earliest involvement of continuity of interest in case law entailed relatively straightforward transfers of assets that were, in reality, sales but which nevertheless met the letter of the applicable statutes. In the landmark Cortland Specialty Co.⁷ case, for instance, all of the property of one corporation was acquired by a second corporation solely for cash and short-term debt securities. While this transaction fulfilled the literal statutory requirements, the Supreme Court went beyond such a cursory analysis and, instead, sought to determine whether "a continuance of interest on the part of the transferor in the properties transferred" existed. Such a continuance was deemed not to exist and, consequently, the transaction was denied reorganization status. In a related decision, the Supreme Court elaborated on its Cortland ruling by specifying in Pinella's

Ice & Cold Storage Co. v. Comm.⁸ that "the seller must acquire an interest in the affairs of the purchasing company more definite than that incident to ownership of its short-term purchase-money notes."

The issue of continuity soon broadened to encompass transactions which were not obvious sales, that is, exchanges which did not involve the mere transfer of corporate assets for cash or quasi-cash. In these less straightforward cases, the courts focused upon what made particular interests significant enough to qualify transactions as tax-free reorganizations. In Minnesota Tea Co. v. Comm.⁹, the Supreme Court was confronted with a transaction in which substantially all of the assets of one corporation were acquired by another firm in exchange for certificates representing common stock worth approximately \$540,000 and \$425,000 in cash. The Court held that this transaction did qualify as a reorganization in as much as the "seller acquired an interest in the affairs of the purchasing company." In accepting this interest for reorganization purposes, the Court further specified that:

... this interest must be definite and material; it must represent a substantial part of the value of the thing transferred. This much is necessary in order that the result accomplished may genuinely partake of the nature

of merger or consolidation. The transaction here was no sale, but partook of the nature of a reorganization in that the seller acquired a definite and substantial interest in the purchaser.

With respect to these Supreme Court interpretations, it is significant that no implications are made concerning the volume of the interest in the acquiring corporation that is retained by the shareholders of the acquired corporation. Instead, the Court simply mandated that the shareholders of the acquired corporation receive a definite and material interest that constituted a substantial part of the value of the assets transferred. The importance of this point is that, if this were not the case, then mergers of small firms into larger corporations (which constitute a significant proportion of all mergers) would automatically be denied reorganization status. Naturally, this would be contrary to both the legislative and judicial intents.

An additional point should be noted. That is, no statute exists requiring that all, most, or even a substantial number of the shareholders of the acquired corporation receive stock in the acquiring corporation. Instead, the assessment focuses only upon the volume of outstanding stock of the acquired corporation and not on blocks of such stock owned by individual share-

holders. The inference here is that an exchange may constitute a direct sale for some shareholders without precluding reorganization status for others (providing, of course, that the other shareholders represent control over a significant proportion of the overall equity interest). Consequently, the presence of contentious minority shareholders does not eliminate or significantly impair the feasibility of a tax-free reorganization.

At this point in its evolution, continuity of interest had certainly not achieved any significant degree of uniformity. While the Supreme Court had identified some general characteristics for qualifying interests, many corollary issues remained unresolved and would require subsequent interpretations by the courts on a case-by-case basis. For the most part, these issues centered around two primary questions concerning the qualifying interest: (1) What types of consideration qualify for the purposes of continuity of interest?; and (2) What proportion of the total value of items exchanged in the transaction must consist of qualifying consideration?

THE NATURE OF THE CONSIDERATION

The first of these issues --the type of qualifying consideration -- is the less complicated of the two. The judiciary has universally held that only equity interests in acquiring corporations qualify for reorganiza-

tion purposes. While this interpretation does not entirely eliminate complications, the debt versus equity controversy has already been well-thrashed out for the purposes of taxation. As a result, it is a relatively simple task for the courts to rule on this issue in a consistent and uniform manner.

One consequence of this equity interest requirement is that all forms of debt securities are automatically excluded from qualifying consideration status. The rationale for this holding (as expressed earlier by the Supreme Court) is fairly intuitive, i.e., an exchange involving debt securities results in a creditor relationship and not in a proprietary interest. However, while this reasoning seems to be valid for short-term debt, it appears less sound when viewed from a context of longer-term debt. Long-term debt securities do result in greater degrees of continuity between the exchanging parties in regard to the timing of their relationships. Taxpayers have litigated whether, at some point, this enhanced continuity of longer-term debt equates itself with the acceptable continuity of equity interests. The Supreme Court, however, struck down any such hopes with its LeTulle decision¹⁰ by ruling that it "cannot be said that the transferor retains any proprietary interest in the enterprise". Instead, the transferor becomes a "creditor of the transferee" when long-term debt is

transferred for substantially all of the assets of a corporation. Furthermore, the Court specified that neither the length of the debt instruments nor the fact that the debt might be secured by assets of the acquired corporation would have any impact on the determination. Such a denial of proprietary interest for debt instruments has also been upheld for convertible debt¹¹, subordinated debt¹², and unusually long-term debt securities (200 year debentures, for instance)¹³.

In contrast to these consistently negative interpretations concerning debt securities, equity securities have resulted in much more favorable determinations. Even "impure" equity securities such as non-voting, non-convertible preferred stock and sinking fund preferred stock (each of which vary only slightly from long-term debt with respect to the rights accruing to their holders) have qualified in the courts¹⁴ and the Service's private rulings¹⁵, respectively. The justice in such disparate treatment accorded to essentially equivalent securities has been questioned and, in fact, it does seem that both the courts and the Service have relied excessively on the form of the contrivance as opposed to its substance. On the other hand, however, a justification for this interpretation can also be cited. Since the alternative forms of the securities do differ only slightly with respect to their rights, no major hardship seems to be

placed on taxpayers by essentially forcing them to structure the reorganization within the stated equity constraints. Concurrently, a significant advantage is gained in that the judicial assessment of reorganization transactions is greatly facilitated by the elimination of potentially complex and disguisive structures from consideration.

A further and potentially troublesome point should be noted with respect to the nature of a qualifying interest. The Supreme Court, in its Alabama Alphautic¹⁶ decision, ruled that the unsecured debt of a firm entering bankruptcy proceedings should be construed as equivalent to an equity interest for the purposes of continuity of interest. The strengths and weaknesses of this judicial position will be discussed in detail subsequently but let it suffice at this juncture to note that a potentially serious dilemma may result from undertaking similar assessments of two widely divergent situations -- the willing reorganization of two profitable corporations and the essentially forced reorganizations undertaken by financially troubled corporations.

QUANTITATIVE REQUIREMENTS AS TO CONSIDERATION

The second issue -- concerning the required proportion of qualifying consideration -- has resulted in considerably greater ambiguity than the first. As with

the nature of the consideration, the quantitative requirements issue has also been taken to the Supreme Court, and two cases, in particular, constitute the basis for judicial authority.

As noted previously, in Helvering v. Minnesota Tea Co.¹⁷, the Court stipulated that 56% of the consideration received by the shareholders of an acquired corporation consisted of equity interest (stock) in an acquiring corporation. The pertinent question, then, was whether that proportion constituted a "definite and material" interest and whether it represented a "substantial proportion of the value of the things transferred." In its determination, the Court literally interpreted the wording of the statutes so that negative indications (the existence of a sizable proportion of non-qualifying consideration) were not consequential. This liberal assessment appears to be equitable and in accordance with the legislative intent, particularly since the tax-deferring benefits of the reorganization accrue only to the qualifying shareholders. Naturally, it seems reasonable that the existence of positive qualifying evidence should carry more influence than the negative evidence of non-qualifying consideration.

In a related decision, John A. Nelson¹⁸, the Supreme Court rendered an even more liberal judgment concerning the minimum acceptable proportion of qualifying considera-

tion. In Nelson, from 38% to 41% of the consideration (depending on the inclusion or not of a contingent stock issuance) was deemed to constitute an equity interest, and the Court considered that proportion acceptable for continuity of interest purposes. Moreover, the Court explicitly stated that "neither a controlling interest nor even participation in the management of the acquiring corporation through voting rights" is essential for a finding of substantial equity interest.

The Court also addressed, in Nelson, the issue as to whether certain equity securities might possess less than pure equity characteristics which might require relatively greater proportions of qualifying consideration. In other words, where a 40% proportion might suffice for an exchange of common stock, some greater proportion could be required if the exchange involved non-voting, non-convertible preferred stock. However, any such distinction was ruled out when the Court held that all types of equity consideration should receive equivalent treatment for the purpose of assessing the adequacy of the proportion of qualifying consideration.

The Code and Regulations provide minimal guidance as to their interpretations of this proportion requirement. The only substantive reference to this issue is Revenue Procedure 77-37¹⁹ in which a guide to the proportion of qualifying consideration necessary for an ad-

vance ruling is offered. While this proportion (a minimum of 50%) does not strictly represent a matter of law, the Procedure does provide at least indirect evidence concerning the Service's position on the issue.

EFFECTS OF POST & PRIOR TRANSACTIONS ON CONTINUITY

Post-Acquisition Continuity

Revenue Ruling 66-23²⁰ imposes a minimum time period during which the shareholders of an acquired corporation must retain their proprietary interest in the acquired corporation. Specifically, the Ruling notes that "unrestricted rights of ownership for a period of time sufficient to warrant the conclusion that such ownership is definite and substantial" is necessary. In addition, the Ruling also notes that the Service will usually accept five years of unrestricted ownership as sufficient for continuity of interest purposes. However, this delineation is accompanied by the proviso that preconceived arrangements to dispose of the acquiring corporation's stock could result in an adverse determination.

An example of a post-acquisition attempt to circumvent the reorganization intent might involve an acquisition of a corporation through the issuance of the acquiring corporation's stock with an immediate redemption of the newly-issued stock for cash. Clearly, such an

arrangement merits treatment as an acquisition of the corporation for cash and not as a tax-free reorganization, particularly if the redemption is part of an overall plan. Nevertheless, any assessment of intent on the part of multiple parties in an extremely complex and amorphous environment is virtually impossible in a pure sense. As a practical matter, therefore, significant emphasis is placed on the presence or absence of more objective criteria that relate to intent. Several indicators suggest themselves, but the most easily discernable and measurable evidence is the mere passage of time between the transactions involved (as noted above in reference to Rev. Rul. 66-23): Indications other than time also exist as possible evidence of intent. For instance, the occurrence of some event between the related transactions which significantly altered the environment could certainly support a contention of no intent. It should be stressed, however, that intent itself is still the overriding determinant and the aforementioned objective criteria are merely circumstantial evidence of such intent. By extending this emphasis on intent, it has been held that arrangements calling for the redemption of stock on the occurrence of contingent events do not adversely affect continuity since the contingent event itself was beyond the control of the shareholders and naturally could not have been reasonably anticipated

with respect to intent²¹.

Prior to Acquisition Continuity

In addition to the post-acquisition period, events may occur prior to the acquisition that seriously affect determinations as to continuity. Two such events have occurred with sufficient regularity to merit discussion: (1) purchases of stock by acquiring corporations prior to a reorganization; and (2) redemptions of stock by the acquired corporation prior to the reorganization.

With respect to the first event, it is a general rule that when an acquiring corporation purchases stock of an acquired corporation prior to a reorganization, the purchased stock will be treated as part of the qualifying consideration if the purchase is deemed to be part of the reorganization plan. If this is the case, then the purchased stock will be treated as outstanding immediately prior to the reorganization and the consideration relinquished for the stock will be treated as though it were given in the reorganization. It should be noted that this interpretation extends beyond the "step transaction" (which focuses on the aggregate effect of transactions possessing an interdependent or causal relationship). Instead, the primary focus here is upon a subjective assessment of the parties' intent.

As in post-acquisition assessments of intent, the

time separating the transactions represents potentially persuasive evidence as to intent. While no direct authority can be cited, general guidelines of six months and two years as reasonable upper and lower bounds on the requisite time between transactions have been established in Rev. Rul. 78-27²². In other words, if less than six months have transpired, the transaction will almost assuredly be deemed part of the reorganization, but if more than two years have transpired, then shareholders can be reasonably assured that the transactions will not be linked into one plan.

As to the second event, redemptions of stock by the acquired corporation prior to a reorganization should be included in the measurement of shareholders' continuity of interest if the prior redemption represents an indirect purchase of stock by the acquiring corporation. This would be the case, for instance, if an acquired corporation redeemed a class of its own stock with funds obtained from the acquiring corporation as part of an overall plan of reorganization. Since such a plan would almost assuredly include the acquisition itself soon thereafter, any stock redeemed with the acquiring corporation's "laundered" funds would more realistically represent an acquisition of stock by the acquiring corporation.

Little explicit authority exists concerning such instances as they relate to continuity of interest. In

Revenue Procedure 77-37²³, disguised redemptions are mentioned but minimal guidance is offered with respect to a determination as to whether the redemption is part of an overall plan. Nonetheless, it seems reasonable to assume that the assessment should be similar to those discussed previously involving subjective determinations (bolstered by objective evidence) as to whether the redemption is part of an overall plan.

THIRD PARTY TRANSACTIONS

Some confusion exists as to whether sales of stock to third parties at or near the time of a reorganization may affect the continuity of interest determination. Before analyzing the ambiguity itself, a fundamental distinction should be noted between a sale of stock to a third party and those transactions discussed previously involving purchases and redemptions of stock by parties involved in the reorganization. The most pertinent characteristic of the previous transactions as they relate to continuity of interest was a cash purchase of stock by one party or the other in an attempt (as perceived by the courts) to disguise the true situation for the purpose of tax evasion. A third party sale, in contrast, involves no such collusion between parties but, instead, entails only a shift in ownership at the shareholder level. With respect to continuity of interest, the impact of a third

party sale of stock hinges upon whether the assessment is viewed as depending on a continuation of the acquired corporation's historic shareholders (which would necessarily be altered by a third party sale) or alternatively, upon merely the proportion of qualifying to non-qualifying consideration issued by the acquiring corporation in the transaction.

It appears that the Service adheres to the broader view (historic continuation) so that any sale of stock to a third party that is deemed to be part of the reorganization plan should be included in the continuity of interest assessment²⁴. In contrast, however, the courts' interpretations of this issue have generally been more in accordance with the proportion of qualifying consideration viewpoint²⁵. That is, the judiciary has indicated that it does not consider third party sales to be relevant with respect to assessments of continuity²⁶.

FOOTNOTES

1. Internal Revenue Code Sec. 61(a)(3).
2. Internal Revenue Code Sec. 165(a).
3. Interplay between reorganization statutes and provisions for cash and property distributions, stock redemptions, preferred stock bail-outs, partial and complete liquidations, and corporate divisions exist.
4. Standard Research Consultants, 1976.
5. Treasury Reg. Sec. 1.1002-1(c).
6. Treasury Reg. Sec. 1.368-1.
7. 60 F.2d 937.
8. 287 U.S. 462.
9. 296 U.S. 378.
10. 308 U.S. 415.
11. Rev. Rul. 69-91; 1969-1 CB 106.
12. Nelson; 296 U.S. 374.
13. Meyer; 143 F.2d 810.
14. Roebeling v. Comm.; 140 F.2d 347.
15. CCH IRS Letter Ruling Report No. 102.
16. 315 U.S. 179.
17. Supra, Footnote #9.
18. Supra, Footnote #12.
19. 1977-2 CB 568.
20. 1966-1 CB 67.

21. Southwest Natural Gas; 189 F.2d 332.
22. 1978-1 CB 111.
23. Supra, Footnote #18.
24. Rev. Rul. 68-285; 1968-1 CB 147.
25. Ralph Heintz; 25 TC 132.
26. Southwell Combing Co.; 30 TC 487.

CHAPTER III

The objective of this chapter is to review past literature concerning the continuity of interest judicial doctrine as it relates to corporate reorganizations. Although numerous articles have been published on the topic of continuity of interest, none of the previous articles have undertaken systematic analyses of the judicial assessment of this issue. To the contrary, these articles typically have involved qualitative and general discussions of individual aspects of the doctrine, usually failing to achieve an overall assessment of continuity of interest.

LITERATURE REVIEW

While the past literature does not relate particularly well to the methodology utilized in this study, such a review, nonetheless, does offer the following substantive and important contributions to the overall project. First, the frequency with which publications relating to continuity of interest that have occurred over a considerable period of time emphasizes both the relevance and longevity

of the issue with respect to corporate taxation. Second, the articles themselves provide an excellent source for the identification, clarification and justification for the variables selected in the study as pertinent to continuity of interest. Third, the review provides for an assessment of the general strengths and weaknesses inherent in the corporate reorganization area of taxation. Particularly important with respect to this contribution will be the establishment of both a strong inference of judicial competence in dealing with continuity of interest and the existence of a structural inhibition (resulting from the subjectivity inherent in the judicial assessments) that tends to render taxpayers unwilling to risk litigation. And finally, the review demonstrates that a relative degree of consistency appears to exist in how the courts have applied continuity of interest over the period of time since the doctrine's inception.

Brookes

Brookes' analysis¹ of the continuity of interest doctrine was undertaken during a time in which the debt versus equity issue as it relates to continuity of interest was under review by the courts. Naturally, then, much of his analysis pertains to that aspect of the issue and isn't particularly relevant to this study. Elsewhere in his analysis, however, Brookes very lucidly describes

the objectivity/subjectivity dilemma that pervades the taxation of corporate reorganizations.

As a preface to this description, Brookes undertook an exhaustive discussion of the key Supreme Court decisions in the area. Since these cases (Pinella's Ice & Cold Storage², Cortland Specialty Co.³, Minnesota Tea Co.⁴, John Nelson⁵, LeTulle v. Scofield⁶, and Alabama Asphaltic Co.⁷) have been thoroughly analyzed in Chapter II, further discussion here in connection with various authors' articles would be repetitive. More to the point is Brookes' perception of a structural weakness inherent in the reorganization legislation, as indicated in the following quotation:

Since these provisions were deliberately intended to prescribe a precise statutory formula which business could read and follow and thereby predetermine the tax consequences which would follow from thoughtfully evolved corporate readjustments, certainty of meaning was of the essence. Through an oversight, however, . . . the courts were simply unable to believe that that particular provision meant what it literally said, and in order to close the loophole that omission opened, they erected a barrier in the form of the continuity of interest test. The primary implication herein is that the judicial

response to inadequate legislation altered the reorganization environment to such an extent that very little certainty remained upon which taxpayers could rely in making sound economic decisions. Furthermore, one direct result of this uncertainty was a considerable expansion in the scope within which continuity of interest was deemed to be applicable (which even further increased the uncertainty). That is, continuity of interest assumed "an extent and form wholly unforeseeable at its inception ... resulting in sufficient uncertainty over their meaning to make it virtually unpredictable in reorganizations". The irony in this result is that the original reorganization statutes were fostered for exactly the opposite purpose, i.e., to instill a degree of certainty into the area.

The primary conclusion of Brookes' analysis consisted of a clarion call for steps (either by the legislature or by the courts) which would instill a significantly greater degree of objectivity into the area. Unfortunately, some thirty-six years later, his call remains unanswered for the most part.

Griswald

Griswald's analysis⁸ was undertaken concurrently with Brookes' and, therefore, many parallels exist between the articles. Griswald strongly endorsed the concept

of an absence of certainty with respect to the application of continuity of interest and the idea that the uncertainty had led to an unanticipated and inflated scope for the doctrine. Also, analogously, Griswald analyzed the debt versus equity issue in considerable detail.

In addition, however, Griswald extended his analysis of continuity of interest to include instances of corporate bankruptcy -- an exigency of considerable importance to this study. As noted earlier, certificates of debt do not generally qualify as equity interests for reorganization purposes. Nonetheless, as the author notes, "if the creditors become proprietors by taking steps to enforce their demands against their insolvent debtor", a qualifying basis for the continuity of interest requirement is established.

Maxwell

As his discussion relates to this study, Maxwell⁹ draws out one very important point with respect to continuity of interest. Throughout most of his article, Maxwell discusses the legislative changes in the 1934 Act and the 1954 Code with particular emphasis on the impact that these events had on the continuity doctrine. Primarily, these changes entailed the enactment of express provisions which superseded the court-imposed continuity of interest requirement (for instance, by establishing

objective safe harbor statutes as in "B" and "C" reorganizations). However, as Maxwell notes, the mere availability of objective alternatives that bypass the continuity dilemma does not assure economic efficiency. That is, the inherent rigidity within the "B" and "C" reorganizations may still impede desirable corporate adjustments necessary for a flexible and healthy economy.

In contrast, Maxwell argues that "A" reorganizations (statutory mergers) are more conducive to supplying the desired flexibility. Furthermore, to the extent that the Service and the courts force taxpayers to bypass the "A" reorganization (which offers the greatest potential for flexibility), artificial constraints are imposed on the free flow of goods and services in the economy. By inference, consequently, any measures which increase the taxpayers' willingness to utilize more efficient avenues should be perceived as positive influences on the economy.

Wilson

Wilson's¹⁰ article represents the first of several quite recent articles concerning the continuity of interest issue. Perhaps the most important inference to be gleaned from his article involves the consistency with which the doctrine has been applied both in the past and in the present. The recent flurry of continuity of interest articles has been prompted, in large part, by the

recent issuance of an Internal Revenue Procedure (77-37¹¹) in which the Service agreed to offer rulings on an individual basis for instances in which the continuing stock interest is in excess of 50% of the value of all items transferred in the exchange. This does constitute a significant event with respect to continuity of interest in that, for the first time, the Service has offered a fairly objective indication of its perception of the issue (a development for which the Service should be commended). Nonetheless, striking similarities exist between the application of this procedure and prior assessments of the issue. For example, the percentage refers to the total volume of items transferred in the exchange and does not relate at all to any mere proportion of shareholders retaining interests. Furthermore, the new stance does not require the retention of voting stock, i.e., "the stock which must be issued to stockholders of the transferor corporation to satisfy the continuity of interest requirement may be common or preferred, voting or nonvoting." And finally, the new stance still recognizes the distinct possibility for the occurrence of dispositive transactions either prior or subsequent to the transaction that may obscure the true substance of the event. The maintenance of these fundamental tenets relating to the doctrine allow for a strong inference of consistency in the application of continuity of interest over the duration of its existence.

Jacobs

While Jacobs' treatise¹² addresses the entire area of corporate reorganizations, his brief discussion of continuity of interest and the impact that legislative amendments in this area might have on the tax environment offer pertinent insights into the potential contributions of this study. Jacobs cites, as a rationale for amending the present statutes, the idea of certainty of treatment -- a concept which has divergent meanings within the tax environment (easing of complex tax provisions and equivalent treatment for similar situations are two prominent versions). Jacobs stressed the former definition since he noted that, for tax practitioners dealing with sophisticated transactions such as corporate reorganizations, tax simplification should center upon the need to ascertain, with reasonable certainty, the tax treatment to be accorded a given transaction. The absence of this certainty with respect to reorganizations clearly constitutes the aforementioned dilemma which has tended to impede taxpayers' willingness to litigate continuity of interest cases.

To instill a greater degree of certainty, Jacobs averred that the controlling statutes must not only be simplified but also be designed so as to accord paramount or exclusive emphasis on the form of the reorganization transaction. Furthermore, Jacobs speculated on the impact

that such a simplification might have on different areas such as the degree of corporate amalgamation that might occur and on the revenue production ability of the Service in this area. With respect to the former, Jacobs discounted the likelihood of a flood of mergers and consolidations since "larger American corporations, to whom concerns of economic concentration are most often directed, presently engage a sufficiently expert battery of tax advisers to achieve the acquisitions and concentrations desired by their managements." Jacobs' inference is that simplification of the statutes would produce similar results and, at the same time, would avoid such an unproductive misuse of the firms' expertise. And finally, since major corporations do tend to achieve tax-free status under the present system, simplification would have a minimal impact on revenue production.

McGaffey & Hunt

McGaffey and Hunt¹³ provide an excellent summary of the evolution of the continuity of interest doctrine, with particular emphasis on its current relevance. The authors note that the doctrine's importance has grown in recent years in that taxpayers have begun to shy away from the rigid "B" and "C" reorganizations and, instead, have devised more imaginative transactions involving sizeable cash payments. Naturally, the size of the cash pay-

ment is inversely proportional to the retained equity interest necessary for continuity of interest purposes. Consequently, particular caution must be exercised by the taxpayers with respect to the judicial assessment of this issue. It should be noted that the authors stress that the guidelines which must be met are essentially the same as those that have been offered in the past.

In addition, the authors reaffirm inferences supported by those researchers previously discussed. For instance, the impact that transactions involving the reorganization parties occurring either prior or subsequent to the transaction is reaffirmed as crucial to any continuity decision. In addition, Revenue Procedure 77-27¹⁴ is minutely analyzed and inferences similar to those of Wilson are offered.

And finally, as did all of the previous authors, McGaffey and Hunt attach considerable importance to the concept of certainty. The authors note that "although perhaps simple in concept, the continuity of interest requirement presents the practitioner with a formidable set of uncertainties, particularly with respect to the effect of contemporaneous transactions, in terms of planning transactions likely to be presented by cash-option mergers." The primary inference, here, is that under the present statutes, there may be no other way to deal with this dilemma than to incorporate a sufficiently large

"cushion" of qualifying consideration into the transaction. Clearly, such a remedy is far from efficient.

SUMMARY

A review of the past literature relating to continuity of interest emphasizes both the past importance and the current relevance of the continuity doctrine. In addition, the review enhances and supports the previous discussion of the legislative aspects of the issue and the assessment of its evolution within the judicial system. And, perhaps most importantly, the review unequivocally emphasizes the importance of the concept of taxpayer uncertainty with respect to the judicial assessment of continuity of interest and adds further insight into the inferences that may be drawn from the concept (primarily, that the resulting taxpayer unwillingness to litigate the issue inflates the Service's authority beyond the point envisioned by the legislature).

FOOTNOTES

1. Brookes, "The Continuity of Interest Test in Reorganizations -- A Blessing or a Curse?", California Law Review, 1972, pages 237-246.
2. 287 U.S. 462.
3. 60 F.2d 937.
4. 296 U.S. 378.
5. 296 U.S. 374.
6. 308 U.S. 374.
7. 315 U.S. 179.
8. Griswald, "Step Transactions in Corporate Reorganizations", 27 Journal of Taxation 253-260 (1967).
9. Maxwell, "Reorganization Provisions", Tax Law Review -- Volume 35 (1980), pages 314-324.
10. Wilson, J., "Reorganization Guidelines Problems", Taxes -- The Tax Magazine", December 1967, pages 894-912.
11. 1977-2 CB 568.
12. Jacobs, "Reorganizing the Reorganization Provisions," 35 Tax Law Review 415-427 (1980).

13. McGaffey & Hunt, "Continuity of Shareholder Interest in Acquisitive Reorganizations", Taxes -- The Tax Magazine, October 1981, pages 681-694.

CHAPTER IV

In this chapter, those factors perceived as potentially influential on judicial determinations as to continuity of interest are identified. The assessment of these variables includes: (1) discussions of the sources for the variables; (2) definitions and specified coding for each variable; (3) potential problems with respect to insufficient data; and (4) various assumptions and adjustments that can be made to offset data deficiencies. In addition, the data problems posed by the quantitative independent variables in the model are specifically discussed in regard to the dual coding that these variables are accorded. And finally, significant emphasis is placed on the implications of controlling bankruptcy and non-bankruptcy reorganizations with the same judicial and legislative strategy.

CONTINUITY OF INTEREST VARIABLES

The initial task with respect to the implementation of the study's research questions involved the identification of those variables or factors which are intuitively

tively interrelated with judicial assessments of continuity of interest. In the attempt to uncover these factors, the statutory and administrative regulations provide minimal assistance since, for the most part, continuity determinations have been left up to judicial discretion. Numerous qualitative assessments of corporate reorganizations exist (cited in the Bibliography) which provide ample background for the overall reorganization area. Furthermore, a substantial number of these deal specifically with continuity of interest and provide a broad source for pertinent factors. These articles, in concert with several key Supreme Court decisions (Cortland Specialty Co.¹ and Minnesota Tea Co.²), should provide a source for most if not all of the important factors. In addition to these sources, a careful review of all continuity of interest cases should uncover any previously overlooked factors.

The variables identified for input into the model are perceived as providing evidence with respect to three general areas: (A) the nature of the consideration exchanged in the reorganization transaction (continuity of interest requires that a definite and material interest must be retained by the equity-holders of the acquired corporation that represents a substantial proportion of the value of the items transferred); (B) the possibility of transactions occurring prior or subsequent to the reorganization that merit substantive treatment as part

of the reorganization transaction; and (C) the existence of items which, although not directly related to the reorganization, may predispose a court for or against a taxpayer.

In total, thirteen variables were identified as potentially important with respect to continuity of interest determinations. As detailed in Exhibit I below, four of these variables related to Area A, six to Area B, and three to Area C. However, information concerning two of these variables (Variables 10-B and 11-B) was not consistently available from the courts' written opinions. As a result of this only intermittent availability, these two variables were excluded from the model.

EXHIBIT 4-1

Variables	Description
1-A	Nature of the equity interests surrendered by shareholders of the absorbed corporation.
2-A	Nature of the equity interests retained in the surviving entity by shareholders of the absorbed corporation.
3-A	Proportion of the total value exchanged

in the reorganization that was transferred in exchange for equity interests.

- 4-A Existence of a plan among the absorbed corporation's shareholders to dispose of equity interests retained in the surviving entity.
- 5-B Existence of a transaction related to the reorganization occurring between the reorganization parties prior to the actual transaction.
- 6-B Existence of a transaction related to the reorganization occurring between the reorganization parties subsequent to the actual transaction.
- 7-B Existence of either Variable 5-A or 6-A.
- 8-B Existence of a transaction related to the reorganization involving an independent third party.
- 9-B Nature of the absorbed corporation -- closely-held or publicly traded.
- 10-B Nature of the acquiring corporation -- closely-held or publicly traded.
- 11-C Existence of a sound business purpose

for the reorganization (as opposed to tax avoidance motives).

12-C Continuation of operations subsequent to the reorganization by the absorbed corporation in substantially the same manner as before.

13-C Existence of an event which fundamentally altered the environment in which the absorbed corporation had operated.

Detailed explanations relating to these variables (including the two excluded from the model) are presented below.

Variable 1-A. The nature of the equity interests held by the shareholders of the acquired corporation prior to the reorganization that are surrendered in exchange for equity interests in the surviving corporate entity.

Variable 2-A. The nature of the equity interests held by the surviving shareholders of the acquired corporation as a result of the reorganization transaction.

Continuity of interest, in its most basic form, requires that a significant equity interest in the reorganized corporate entity be retained by shareholders of the acquired corporation. However, the diversity of forms that such equity interests can assume (particularly with respect to the divergent rights associated with common

and preferred stock) complicates any assessment of continuity of interest. While reorganization statutes have somewhat simplistically declined to differentiate between varying equity interests, it is quite possible that the relatively sophisticated adjudicators of the Tax Court may incorporate the economic substance of the equity interest form into their deliberations -- even if only subconsciously.

This issue is even further complicated in regard to the prior equity interest of the acquired corporation's shareholders in that a condition of bankruptcy (a circumstance not infrequently associated with reorganizations) may completely distort all normal conceptions of equity ownership. That is, if a corporation is in a state of bankruptcy, no positive net assets exist in which stockholders may hold ownership interests. The courts have held, in such instances, that holders of debt which are not secured by specific assets of a bankrupt firm are essentially equivalent to stockholders and should be so treated for the purpose of determining continuity of interest³. As a result, the retention of equity interests by such debtholders in the surviving entity is sufficient for continuity of interest purposes as long as the other requirements are fulfilled.

While the treatment prescribed for insolvency reorganization situations is quite straightforward, the underlying rationale and effectiveness of the treatment is

far from assured. In fact, one of the primary aims of this study involves an investigation into whether such homogeneous treatment should be accorded to such diverse situations. The implications and interactions of this potential controversy with several subsequent variables will be discussed as those variables are detailed.

A final complication relating to Variables 1-A and 2-A involves the possibility of a distribution by the acquiring corporation of the stock of a directly controlled subsidiary. The pertinent legal question herein deals with whether such a "once-removed" continuation of ownership suffices for continuity of interest purposes. In general, it appears that the courts will not accept the exchange of an equity interest in a subsidiary corporation as sufficient for continuity of interest.⁴

Variables 1-A and 2-A will be coded as follows. Since Variable 1-A represents equity interests that are surrendered in the transaction, the diverse rights associated with preferred stock (cumulative, participating, convertible, etc.) assume a lesser degree of importance. Hence, this variable will be designated as qualitative and will be multichotomized as:

- | | |
|---|------------------------------------|
| 0 | Only common stock. |
| 1 | Only preferred stock. |
| 2 | Any combination of 0 and 1. |
| 3 | Unsecured debt of a bankrupt firm. |

With respect to Variable 2-A, the rights of preferred and common stock will still exist, representing part of the economic substance of the resulting entity. Furthermore, it is possible that the transferred equity interest may represent ownership in a corporation apart from the acquiring party in the transaction (such as a controlled subsidiary corporation). Therefore, this variable (also designated as qualitative) will be coded as:

- 0 Common stock of the acquiring corporation.
- 1 Preferred stock of the acquiring corporation.
- 2 Any combination of 0 and 1.
- 3 An equity interest in a corporation other than the acquiring corporation itself.

Variable 3-A. The proportion of the value of the items transferred in exchange for the equity interest in the acquiring corporation to the value of all items transferred in the reorganization.

This variable relates to the requirement that the interest acquired represent a "substantial part of the value of the items transferred." The values will be assigned as of the reorganization date.

The coding of this variable is complicated by an existing inconsistency in the manner in which various Tax Court judges have reported information concerning

this factor. Specifically, judges quite often have felt no compulsion to report precise proportions relating to this variable -- particularly, when the proportion was substantial. Instead, judges often merely noted that the proportion was substantial and demured from reporting specific percentages. Thus, the research dilemma here involved a selection between maintaining this variable as quantitative (which would necessitate an arithmetic adjustment to the data) and dichotomizing the variable into easily identifiable categories (which might involve a loss of information content).

A crucial factor in making this decision involved what was viewed as a primary potential contribution of the study -- the development of "safe harbor" regulations which may achieve the equitable results of judicial assessments without resulting in concomitant severe levels of subjectivity. With this in mind, dichotomizing the variable into categories within which it is likely that the courts will assign consistent degrees of importance appears to be more appealing. If a variable so coded proves significant, then a strong inference might be made that such "safe harbor" statutes are a practical alternative. Furthermore, the manner in which the courts have utilized this variable in making their decisions seems to lend itself to an efficient dichotomization. That is, it appears evident (from the key Supreme Court decisions discussed previously and from the Service's Revenue

Procedure 77-37⁶) that any value for this variable in excess of 50% constitutes persuasive evidence to the effect that continuity of interest is present. In fact, this variable seems to be so persuasive that any increases beyond the 50% level would probably not significantly increase the probability for a finding for continuity. As such, it is intuitively reasonable to assign all variables within the 50% to 100% range a uniform classification. Furthermore, from the same sources, it appears that any proportion less than 35% results in a very weak taxpayer position. Similar reasoning supports another assignation of a uniform classification. And finally, the remaining intermediate range (35% to 50%) represents essentially indifferent evidence which results in a probability that other variables will determine the outcome. Therefore, Variable 3-A will be designated as qualitative and will be coded as:

0	If \leq 35%.
1	If $>$ 35% and $<$ 50%.
2	If \geq 50%.

However, it does not seem propitious to merely dismiss the quantitative coding of this variable without at least attempting to assess the potential loss of information content. Therefore, a model will also be produced in which Variable 3-A remains quantitative, after necessary data adjustments are made. Since the level

of this factor is almost invariably ascertainable as generally high, medium or low, the variable is very conducive to such an adjustment. To accomplish this, cases in which the level is ascertainable as highly significant will be assigned a proportion equal to the average of all known proportions from cases in which a qualitative value of 2 has been assigned. Similarly, cases in which the level is ascertainable as indifferent or as low will be assigned values equal to the averages of all known proportions from cases in which qualitative values of 1 and 0, respectively, have been assigned. Finally, the comparison of the dichotomized and quantitative versions of the model will include assessments of: (1) the variables entered into each version of the model; (2) the magnitudes of the coefficients entered into each version of the model; and (3) the relative classification accuracies of each version. If substantial differences are observed among these criteria, a strong inference of lost information content will result.

And finally, both practical and theoretical problems are posed with respect to this variable by the aforementioned bankruptcy controversy. From a practical perspective, it has been the case in a large majority of the insolvency reorganization litigation that the unsecured debtholders ultimately retained 100% of the equity interest in the surviving corporate entity. Consequently, it is at least possible that the consistently high result-

ing proportions may distort the true significance of this variable. And theoretically, it appears potentially inconsistent to combine non-bankruptcy proportions resulting from actual exchanges of ownership certificates through arms length dealings with what might be perceived as "negative" exchanges of debt for equity stock. That is, the two contrasting situations may be so diverse as to preclude any effective and realistic codification of this variable.

Variable 4-A. Whether a preconceived plan exists among the equity interest holders in the acquired corporation to dispose of the equity interests retained in the acquiring corporation.

In order for the retained interest in the acquiring corporation to qualify under the reorganization statutes, it must be "definite" in nature. The presence of a plan to dispose of otherwise acceptable retained equity interests constitutes evidence to the contrary. This variable will be binary in nature and will be coded as:

- | | |
|---|--------------------------|
| 0 | The existence of a plan. |
| 1 | The absence of a plan. |

Variable 5-B. The presence of a transaction related to the reorganization occurring between the reorganization parties prior to the actual transaction.

Variable 6-B. The presence of a transaction related to the reorganization occurring between the reorganization parties subsequent to the actual transaction.

Variable 7-B. The presence of either of the two previous variables.

The types of events that are characterized by Variables 5-B and 6-B are perceived as having a dual impact on reorganization determinations. First, they alter the quantitative assessment as to the "definite and material" nature of the retained interest. And second, they tend to increase the likelihood that some courts will psychologically react to circumstantial evidence of manipulation by scrutinizing cases more closely -- possibly even to the point of requiring more definitive evidence before rendering a favorable decision.

With respect to this second point, it is quite possible that the psychological aspect of these variables may prove more influential than the quantitative aspect. As a result, since Variables 5-B and 6-B both possess the same potential for taxpayer collusion, Variable 7-B is included so as to focus more closely on potential psychological reactions without regard to the timing of the events. To avoid probable multicollinearity, two models will be generated -- one including Variables 5-B and 6-B while excluding 7-B and the second including only Variable 7-B. This arrangement should provide for an assessment of each individual event in one model and for an assessment of the collusive aspects of the variables in the second.

In addition, it is with respect to Variables 5-B,

6-B and 7-B that the bankruptcy dilemma is viewed as posing its most formidable difficulties. That is, the very nature of premeditated and manipulative taxpayer actions infers a degree of flexibility that is inconsistent with reorganizations impelled by economic necessity. Thus, it is so unlikely that manipulative action will exist in insolvency litigation (which comprises approximately one quarter of this study's Tax Court sample) that what would logically seem to be an important factor in non-bankruptcy cases may be obscured and underwhelmed by its marked absence in the unrelated litigation.

All three of these variables are binary and will be assigned a qualitative value of 0 if present and 1 if absent.

Variable 8-B. The presence of a transaction related to the reorganization involving a third party who is independent of the reorganization parties.

As noted previously, the impact that independent third party transactions have on reorganizations is something of a controversy from the perspectives of the Service and the courts. It is generally accepted, however, that the courts are not significantly influenced by this variable⁷. Therefore, if this variable proves to be significant, then serious questions would be raised about the consistency that should exist between court rationales and their subsequent related actions. This variable is also binary and will be coded as 0 if present and

1 if absent.

Variable 9-B. Whether the corporation absorbed in the reorganization is a closely-held or publicly-traded corporation.

Variable 10-B. Whether the acquiring corporation in the reorganization is a closely-held or publicly-traded corporation.

Precedents exist to the effect that the publicly-traded nature (as opposed to closely-held) of corporations can affect how tax statutes are applied to particular transactions. For instance, the courts have held that accumulated earnings statutes (which are designed to force corporations to distribute earnings to their shareholders) are not relevant with respect to publicly-traded corporations⁸. The courts' reasoning therein is that the public nature of such entities reduces the potential for tax evasion through manipulative action by a coordinated group in control of a corporation. Since manipulation aimed at beneficial tax status is a distinct possibility in reorganization situations, it is reasonable to expect that analogous reasoning may apply to corporate reorganizations. Even though sufficient information does not exist to allow the inclusion of these variables in the statistical analysis, this discussion of the variables' implications is presented here as potentially useful with respect to the development of safe harbor regulations.

Variable 11-C. Whether the reorganization is based upon a sound business purpose or upon tax avoidance motives (as determined by the courts).

It appears reasonable to surmise that the existence of a valid business purpose for a reorganization could have a positive impact on a judge's decision -- primarily in that a business purpose would tend to decrease the likelihood of purely manipulative taxpayer actions. Conversely, by analogous reasoning, mere tax motives could well have a detrimental effect on the judicial assessment. Furthermore, to allow for the possibility of both a business purpose and tax motive occurring simultaneously, this variable will be designated as qualitative and will be coded as:

- | | |
|---|-------------------------------------|
| 0 | Existence of business purpose only. |
| 1 | Existence of tax motivations only. |
| 2 | Existence of both of the above. |

Variable 12-C. Whether the acquired corporation continues operations subsequent to the reorganization in substantially the same manner as before.

While such a continuation is not required by the statutes, its presence or absence could subjectively influence the courts' determinations as to continuity of interest. This variable is binary and will be coded as

0 for a continuation of operations and as 1 for a discontinuation.

Variable 13-C. The presence of an event unrelated to the reorganization that significantly alters the environment in which the acquired corporation has operated.

This variable is perceived as an offsetting influence to the adverse effects of previous variables. An alteration in the basic environment (political, legal or economic, for instance) could provide a justification for inter-party dealings between reorganization parties that otherwise might be construed as manipulative. This variable is binary and will be coded as 0 if a change has taken place and as 1 if no change has occurred.

Missing Data Assumptions

It is highly unlikely that all court decisions involving continuity of interest will discuss all of the aforementioned variables and, furthermore, it appears that the qualitative and quantitative variables pose somewhat different problems with respect to missing data.

With respect to moderating data problems for the qualitative variables, it will be assumed that variables not discussed in particular court briefs had negligible impacts on the court decisions. Since failure to consider relevant information constitutes grounds for reversal in the Tax Court, judges are strongly motivated

to record their consideration of all relevant information in their written opinions. Consequently, it appears reasonable to infer that variables not so recorded were minimally influential on the courts.

To implement this assumption, binary variables will all be coded as 0 if the variable is present and as 1 if the variable is specifically noted as absent or if the variable is simply not mentioned in the judges' written opinions.

FOOTNOTES

1. Cortland Specialty; 60 F.2d 937.
2. Minnesota Tea Co.; 296 U.S. 378.
3. Alabama Asphaltic 315 U.S. 179.
4. Western Massachusetts Theatre Corp.; 24 T.C. 331.
5. Treas. Reg., Sec. 1-368-1.
6. Rev. Proc. 77-37 1977-2 CB 568.
7. May B. Kass; 60 T.C. 218.
8. Colconda Mining; 54 F.2d 429.

CHAPTER V

This chapter first reviews prior research efforts in the area of empirical analyses of tax issues. Subsequently, the strengths and weaknesses of the methodologies utilized in these studies are assessed -- particularly with respect to their appropriateness for this study. And finally, an overview of the broad area of Log-Linear Analysis and the more specific area of Logit Analysis (which constitutes the primary methodology utilized in this study) are presented.

Background

The concept of a precedent (which involves a generalization of a legal tenet illustrated in a particular case to a wider set of cases) constitutes a cornerstone upon which legal research (tax and otherwise) has been undertaken in the past. The accurate assessment of such precedents, however, is often a very complex matter -- particularly when multiple and interacting factors are involved in the determination of a case. One method of efficiently analyzing complex precedents involves the

use of mathematical models which can incorporate the interacting effects of the pertinent factors.

Perhaps the earliest use of these techniques involved analyses of Supreme Court decisions. For instance, Fred Kort (1957)¹ assigned numerical values to qualitative factors relating to Supreme Court right-to-counsel cases and summed the values to obtain a "score" for each case. He then used these scores to establish a cut-off point above which an affirmative Court decision would be anticipated. This methodology successfully categorized a 14-case hold out sample of cases. Subsequently, Kort (1963)² utilized regression analysis to analyze Supreme Court involuntary confession cases as well as right-to-counsel cases. The resulting two regression models correctly categorized 23 of 26 involuntary confession cases and 29 of 35 right-to-counsel cases, respectively.

A second Supreme Court researcher, Sidney Ulmer, analyzed decisions of Justice Felix Frankfurter concerning civil liberties for the period 1959 to 1962³. By developing a discriminant model based on six factors for the 1959-60 period, he correctly classified 5 of 7 related cases from 1960 to 1961 and 6 of 7 from 1961 to 1962. While both of these studies were useful in that they broke the ice for future research, the quality of both studies' results was quite limited by the narrowness of the sample set.

Related quantitative research has been greatly advanced in the area of taxation by recent dissertations involving mathematical models. The first such study (by Ted D. Englebrecht) utilized a multiple regression model to assess the Tax Court's application of Internal Revenue Code Guidelines, the Regulations, and Revenue Rulings to the valuation of closely held stock⁴. Englebrecht's results indicated that the IRC Guidelines explained approximately 87% of the total variance encountered in his study's cases. In addition, he determined that a simplified compromise valuation scheme (which simply averaged the proposed IRS and taxpayer valuations) explained approximately 97% of the variance.

In 1977, Joseph L. Boyd utilized a similar technique to investigate the issue of reasonable compensation for owner/managers of closely held corporations⁵. Boyd used twelve independent variables identified by the Tax Court in the landmark Mayson Manufacturing Co. v. Commissioner case⁶. A multiple regression model incorporating these twelve variables explained 87% of the variance that existed within seventy-five Tax Court cases involving the reasonable compensation issue.

Another tax issue which has been analyzed by empirical research involves the accumulated earnings tax. Sylvia Madeo utilized discriminant analysis to investigate the application of guidelines from the Regulations and from the Service's Audit Manual in Tax Court cases

involving this issue⁷. A discriminant function based on the Audit Manual classified Tax Court cases with substantially greater accuracy than did a similar function based on the Regulation's guidelines. It should be noted that Madeo's study differs fundamentally from the previous dissertations in that her dependent variable was binary in nature whereas Englebrecht's and Boyd's were both continuous. Consequently, Madeo was forced to utilize a different statistical methodology which was not perfectly suited to her particular study (the inadequacies will be discussed later).

James Bond utilized both linear and nonlinear forms of discriminant analysis to investigate the Tax Court's assessment of the debt versus equity issue⁸. Bond's linear discriminant function (consisting of two variables) correctly classified 93% of the Tax Court cases in his study and 88% of the cases in a hold-out sample. The nonlinear discriminant function (quadratic) did not provide improved classification results. As with Madeo's study, discriminant analysis was not entirely appropriate for the purpose of Bond's study.

Stewart utilized discriminant analysis to study the distinction between employee and independent contractor status with the aim of identifying factors that, if enacted into legislation, could reduce the uncertainty surrounding the common law definition of employee for fed-

eral tax purposes⁹. His study produced five variables that were significant with respect to related judicial decisions in the Tax Court, the District Court and the Court of Claims. In as much as his study concluded that consideration should be given to the possible codification of his variables into the Internal Revenue Code, Stewart's study is closely related to the objectives of this study.

Sandra Kramer utilized discriminant analysis and other methodologies (not pertinent to this study) to assess the problem of determining the fair market value of assets when no arms-length transaction has occurred between parties¹⁰. Kramer's discriminant model (based on 75 Tax Court cases) incorporated 10 variables (although the addition of the last eight variables did not significantly increase the model's classification accuracy) and correctly classified 78% of the sample cases. A second model, incorporating 18 variables, correctly classified 79% of the cases. Kramer tested for upward biasness in her discriminant model by utilizing a jackknife procedure and achieved only slightly lower accuracies (72% and 71%, respectively). Since Kramer's primary goal did not involve the production of a parsimonious model reflecting the Tax Court's prior assessments, the comparative insight to be gained from her study is reduced.

Prior Research Methodologies

The nature of the dependent variable of interest in a study is critically important to the selection of an appropriate methodology. The dependent variable in the primary research question in this study involves whether continuity of interest is deemed to be present in cases heard by the Tax Court. This variable is determined by a binary decision which can be represented by a "0" for the presence of continuity of interest and by a "1" for its absence.

Binary choice models assume that the decision-making entities choose between two alternatives and, furthermore, that the choice is a function of the respective alternatives' characteristics. If sufficient information is possessed concerning both the decision-making entities and choices they have made in the past, then it may be possible to estimate the decision-making process with a model which can be utilized to predict future decisions of entities outside of the sample group. While such a model would not produce conclusive findings, it could nonetheless enhance the analysis and understanding of a particular issue. Primarily, this added insight would involve predictions concerning the likelihood or probability that an entity will make a particular decision given information concerning the independent variables.

Linear Discriminant Analysis

Linear Discriminant Analysis, as noted, has been utilized by several researchers (Bond and Madeo) to estimate models involving discrete binary dependent variables. However, theoretical problems exist with respect to such and application in that serious doubts exist as to whether the theoretical assumptions which underlie the methodology are met in situations involving discrete dependent variables. Specifically, the critical assumptions in question are whether the variables used to characterize the subjects are multivariate normally distributed and whether the group dispersion matrices are equal across all groups. Although some researchers contend that discriminant analysis is sufficiently robust to overcome these violations of its assumptions (Kazan and Gilbert), others have forcefully argued that such violations severely impair its utility when dealing with discrete independent variables. Eisenbeis, for instance, holds that deviations from the normality assumption bias the tests for significance and estimated error rates and that relaxation of the dispersion matrix equality assumption affects the significance test for differences in group means.

Thus, the theoretical assumptions upon which linear discriminant analysis is based are clearly violated when discrete variables are utilized as independent variables. Furthermore, considerable doubt has been cast on the meth-

odology's robustness to the assumptions which are violated in this case. Consequently, it appears reasonable to conclude that, if serious questions exist with respect to appropriateness of linear discriminant analysis, then other estimation techniques that result in better and more justifiable approximations should be utilized if available.

On a more intuitive level, an inconsistency can be demonstrated with respect to the use of linear discriminant analysis in conjunction with binary dependent variables. That is, if the presence of a particular factor is so strong in a particular case that a favorable decision is virtually inevitable, then changes in other variables will only minimally affect the outcome probability. Conversely, if the previously important variable is less strongly present, then the same changes in the other variables will probably result in a significantly greater impact on the probability. It is precisely such interaction among the independent variables that cannot be incorporated into linear techniques.

Linear Probability Models

An alternative methodology involves describing the probability of the outcome of a binary dependent variable by using a linear probability model. The regression form of such a model is:

$$Y_i = \alpha + \beta X_i + \epsilon, \text{ where}$$

X_i represents the value of an attribute for the i th individual;

Y_i equals 1 for one decision and 0 for the alternative and ϵ represents an independently distributed random variable with a mean equal to 0.

This model can be interpreted in regard to a linear probability model by solving for the expected value of the dependent variable Y .

$$E(Y_i) = a + bX_i.$$

Furthermore, since the dependent variable has only two possible values (0 and 1), the probability distribution of Y can be described by assigning:

$$P_i = \text{Probability } (Y_i = 1), \text{ and}$$

$$1 - P_i = \text{Probability } (Y_i = 0).$$


As a result,

$$E(Y_i) = 1(P_i) + 0(1 - P_i) = P_i.$$

The inference, herein, is that the regression equation describes the probability that a decision-making entity will make a particular decision, given known information about the independent variables. The Linear Probability form of the regression equation is generally written as:

$$P_i = \begin{cases} \alpha + \beta X_i, & \text{when } 0 \leq \alpha + \beta X_i \leq 1 \\ 1, & \text{when } \alpha + \beta X_i > 1 \\ 0, & \text{when } \alpha + \beta X_i < 0 \end{cases}$$

Moreover, this results in the following probability distribution:

	e_i	Probability
$Y_i = 1$	$1 - \alpha - \beta X_i$	P_i
$Y_i = 0$	$\alpha - \beta X_i$	$1 - P_i$

A problem exists at this point with respect to the Linear Probability model in that it can be shown that the variance of the error term is not constant for all observations. Instead, observations for which P is approximately 0 or 1 will have lower variances than will observations for which P is approximately $1/2$. This condition (known as heteroscedasticity) results in a loss of efficiency in the model.

A more serious problem with respect to linear probability models involves predictions outside of the unit interval. The possibility exists that a sample's observations may excessively reflect values associated with the two extreme choice probabilities (0 and 1). If such is the case, then a specification bias (illustrated graphically below) will exist in the regression line which is not amenable to adjustment by nonlinear procedures.

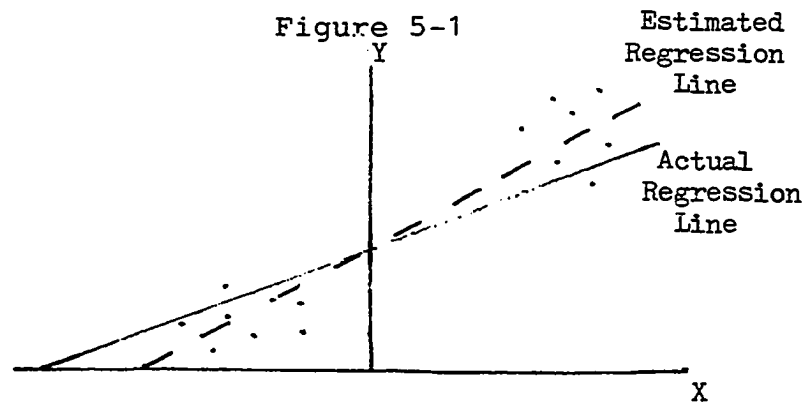


Illustration of Specification Bias.

The implication of a specification bias is that when a dependent variable is artificially constrained into a binary mode, the possibility exists for bias in the model due to potentially uncharacteristic sample observations. With respect to this study, the dependent variable is artificially constrained in the sense that all cases in which similar rulings have been rendered are accorded a certain equivalence. In reality, while judicial decisions are determined according to thresholds of evidence as perceived by the judiciary, all cases on either side of this threshold still possess their own unique combinations of variables. As noted previously, most cases taken to litigation will be expected to lie relatively close to the threshold, i.e., both parties will anticipate reasonable prospects for success. Nonetheless, if the sample group should possess numerous uncharacteristically "imbalanced" cases, then the incorporation of such outliers will create a specification

bias in the model. Therefore, once more, if an alternative methodology exists in which the artificial constraining of the dependent variable is not necessary (that is, where the entire real line can be utilized), a potentially serious problem can be avoided.

RESEARCH METHODOLOGY FOR THIS STUDY

Log-Linear Analysis

Log-linear analysis possesses many similarities to ordinary regression. Regression typically attempts to predict numerical values for interval or ratio scale dependent variables. However, if a dependent variable is binary in nature, regression output can be interpreted as showing how the probability of the occurrence of a particular response is affected by variation in the independent variables. In the version of log-linear analysis utilized in this study (Logit Analysis), the underlying procedure is similar to a regression with the major distinction that the independent variables do not result in probabilities but instead determine "odds" with respect to the dependent variable.

Such an emphasis on odds necessitates a clear conceptualization of this idea as the basic form of the variation to be explained by the model. Knoke & Burke define an odds as "the ratio between the frequency of being

in one category and the frequency of not being in that category." In other words, odds represent the chance that a randomly selected individual will fall into one classification of interest (possessing continuity of interest, for instance) as opposed to another. Interwoven into any conceptualization of odds is this sense of relativity or comparability between alternative forms.

A more refined version of the odds concept involves conditional odds which represent the chances of falling into one category of interest as opposed to another given some known characteristics. The comparison of such conditional odds constitutes the cornerstone of log-linear analysis. A summary statistic (referred to as the odds ratio) is produced by dividing one conditional odds by another. This statistic is constrained only by a lower limit of 0 (that is, it has no upper limit). Furthermore, an odds ratio of 1 indicates that no relationship exists between the variables since the conditional odds are, by definition, equal. For example, if a male has an equal chance of being a college graduate as does a female, then a variable representing individuals' genders would possess no explanatory power with respect to identifying potential college graduates. On the other hand, an odds ratio greater than 1 indicates a direct covariation or relationship between variables and an odds ratio less than one indicates an inverse relationship.

Log-Linear Model

A model, for the purpose of log-linear analysis, represents a statement of the expected frequencies as functions of parameters representing characteristics of and interactions between independent variables. The primary criterion with which this analysis assesses "goodness-of-fit" involves the extent to which expected frequencies generated by the model correspond to actual observed frequencies.

Along these lines, two major categories of log-linear analysis exist: (1) the general log-linear model; and (2) the logit model. While this study utilizes the latter version, the general model nevertheless provides a theoretical basis for logit analysis and thus merits discussion.

At the outset, it should be stressed that parsimony (economy in the use of a means to an end) is a desired goal of any log-linear model. It is also clear that a saturated model (one which incorporates all independent variables and all interaction effects) will produce expected frequencies exactly equal to observed frequencies. Therefore, the practical utility and generalizability of any saturated model is limited since its use is analogous to defining a word with itself. Log-linear analysis moves away from the saturated model by assuming that most higher-order interactions between variables are equal

to zero. While this produces discrepancies between expected and observed frequencies, a primary benefit is achieved if the true relationships among the variables are adequately described by relatively few and more easily interpretable parameters. This tradeoff between goodness-of-fit and understandability is central to the concept of parsimony. Unfortunately, however, no clear delineation exists as to what constitutes a perfect or even an adequate trade-off. To offset this inherent subjectivity, log-linear analysis has the capability of establishing an effective level of parsimony through a stepwise selection procedure -- of which two alternatives exist (backward elimination and forward selection).

The backward elimination process starts with a saturated model and eliminates those interaction effects and variables which do not contribute substantially to the model's goodness-of-fit. The primary drawback to this approach involves a potential for inefficiency. That is, it automatically reviews every variable and interaction effect within the saturated version of the model even though it is probable that many of these are not significant. Consequently, this study utilizes the forward selection process which, in contrast, estimates a constant term and then adds variables to the model which significantly increase the model's goodness-of-fit. This aspect of the model will be discussed in further detail with respect to Logit Analysis.

One final point should be noted with respect to the general log-linear model concerning the generation of expected frequencies by the model. While direct formulas can be utilized for simple cases, complex analyses such as that involved in this study necessitate the use of some form of algorithm (a repetitive, mechanical solution to a mathematical problem). Consequently, this study utilizes the BMDP3F iterative proportional fitting algorithm to produce its expected frequencies.

Logit Analysis

As noted, the general log-linear model treats all variables as response variables whose interrelationships are determined by multiplicative or additive functions incorporating the entire set of variables. The criterion modeled by the effect parameters is the expected cell frequency. The logit model, in contrast, establishes one variable as dependent upon variation caused by the other variables. The criterion to be analyzed here is the odds of the expected cell frequencies. Importantly, Logit Analysis offers an alternative methodology to Linear Discriminant Analysis (for which the underlying assumptions are violated) and to Linear Probability models (for which a specification bias results).

The Logit model is based upon the cumulative logistic probability function of the form

$$P_i = \frac{1}{1 + e^{-(\alpha + \beta X_i)}}$$

where P_i represents the probability that a decision-making entity will make a certain choice given information concerning the independent variables. In relation to this research endeavor, the probability would be that of reaching a determination that continuity of interest is present, given the information presented in the judicial brief.

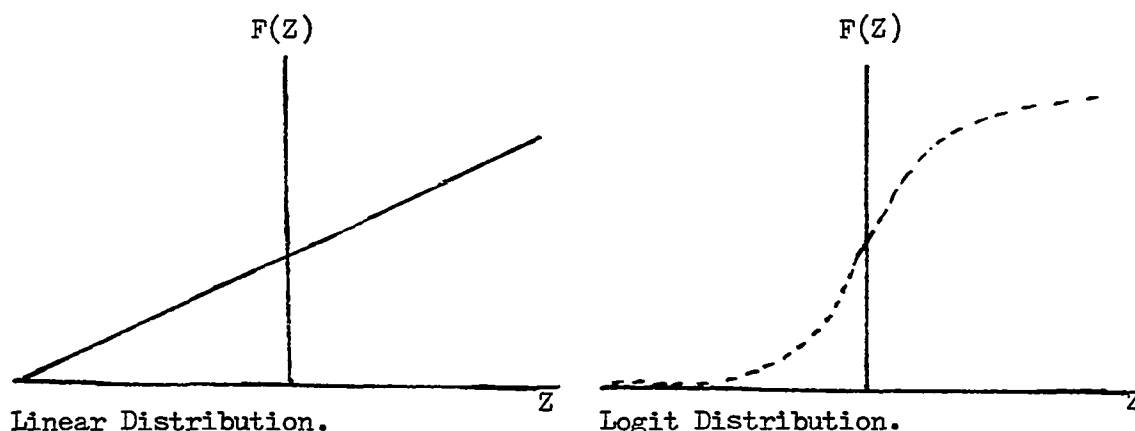
By rewriting the cumulative logistic probability function, the following equation to be estimated can be derived:

$$\log \frac{1}{1 - P_i} = \alpha + \beta X_i = Z_i.$$

The dependent variable in the revised equation represents the logarithm of the odds that a particular decision will be made.

One intuitively appealing aspect of Logit Analysis involves the transformation of the research problem from predicting within the 0,1 interval inherent in linear techniques to that of predicting along the range of the entire real line. Both the Linear Probability Model and the Logit Model can be graphically illustrated as follows.

Figure 5-2



It is evident from the illustration that the slope of the Logit function is greatest at the midpoint of its distribution. The inference to be drawn from this is that changes in the independent variables will result in their greatest impact at the midpoint and, conversely, similar quantitative changes in the independent variables will have significantly slighter impacts near the extremes of the distribution. The significance of this implication can easily be demonstrated by an example. In order to predict how individual voters would react to an across-the-board tax cut proposal, an obvious factor to consider would be the income levels of the individuals. Furthermore, it is intuitive that a uniform increase in each individual's level of income (say, \$1,000) would have only a modest impact on the voting preferences of the very rich and the very poor. That is, the rich would have voted for the proposal in any event, and the poor would be better off to an only marginal extent that

would most likely not alter their voting tendencies. In the intermediate range, however, voters would tend not to have strong feelings for or against the proposal and a significantly greater impact would be anticipated from the same quantitative increase in income.

In summary, then, perhaps the most attractive feature of Logit Analysis involves its S-shaped distribution in that it represents a more realistic portrayal of the existing interactions among the independent variables. In this sense, The Logit distribution is more representative than its linear alternatives. This can be demonstrated in reference to the tax cut proposal example discussed earlier. Assuming that the rich and the poor will not be significantly affected by changes in the independent variable (level of income), it is clear that the Logit distribution more closely reflects the true underlying process than does the linear distribution. Whereas the linear model does not differentiate between the impact of the underlying process at varying points along its distribution, Logit Analysis does reflect the variables' interactions and correctly portrays the absence of a significant impact near the distribution's extremes (the rich and the poor) and shows the significantly greater impact on the middle-income voters (as indicated by the steeper slope).

Thus, since Logit Analysis eliminates the problem of robustness associated with the violated assumptions

of Linear Discriminant Analysis and at the same time provides a more intuitively satisfying representation of the underlying process being modeled, this methodology represents a considerable advancement for this genre of accounting research.

Evaluation of Goodness-of-Fit

Having conceptualized log-linear models in both the general and Logit forms, it is now important to describe how an assessment of a Logit model's goodness-of-fit may be undertaken. Essentially, this process involves a comparison of expected frequencies (generated internally by the model) to observed frequencies using a likelihood-ratio statistic.

Logit Output

Two aspects of Logit Analysis output are particularly relevant to this study. The first, the likelihood-ratio statistic (L^2), follows a chi-square distribution with degrees of freedom equal to the number of parameters assumed to have no effect on expected cell frequencies. The larger the L^2 statistic (relative to the degrees of freedom), the more the expected frequencies differ from the observed or actual frequencies. Thus, in this study, relatively lower likelihood-ratio statistics will constitute evidence of better fits to the data.

Before proceeding with this discussion of the likelihood-ratio statistic, one important limitation of Logit Analysis should be noted. That is, the methodology offers no direct criterion (such as R^2) with which to assess the predictive capability of the fitted logistic model. Thus, Logit Analysis possesses an inherent limitation with respect to determining whether the model provides an adequate fit to the data. However, this limitation is not as formidable as it might appear initially, primarily since Log-Linear Analysis does provide an indirect assessment of goodness-of-fit which constitutes a reasonable analog to R^2 . Basically, a "baseline" model can be selected whose L^2 statistic serves as a standard against which the improvement in fit resulting from more complex models can be judged. For this purpose, the baseline model in this study will be that model in which all independent variables are assumed not to be significant. Thus, the model will relate to all of the variability within the sample data. Then, if the proportion of the baseline L^2 accounted for by a more complex model (incorporating the significant independent variables) is high, the complex model may be adjudged as providing a satisfactory fit to the data. The form of the R^2 analog is as follows:

$$\frac{\text{Baseline } L^2 - \text{Maximum } L^2}{\text{Baseline } L^2}$$

Thus, while conclusive inferences will not be drawn with respect to goodness-of-fit, comparison of various model's L statistics (along with the analog to R^2) will provide the basis for sensitivity analyses that will be undertaken. For instance, one point of significance in the study involves whether the artificial dichotomization of a continuous independent variable will result in a loss of information content. A comparison of the respective L statistics and R analogs for models incorporating each version of this variable should provide valuable insight with respect to this issue.

Before proceeding to the second relevant Logit Analysis output, a novel aspect of the L statistic merits attention because it might result in confusion with respect to the research decision-making. The assessment of L^2 is the converse of that normally associated with traditional chi-square tests of independence. In a typical chi-square test of independence, an attempt is made to reject a null hypothesis asserting an absence of association between the variables. Therefore, a large chi-square value relative to the degrees of freedom is hoped for. In contrast, Logit Analysis attempts to find the best fitting model to a data set and, consequently, it is hoped that the hypothesized model will be accepted. Hence, a low L value relative to the degrees of freedom is required.

The second aspect of the Logit output that is particularly useful for the purpose of this study involves the capability of the model to classify individual cases as either possessing or not possessing continuity of interest. The classification is accomplished by applying the Logit coefficients relating to variables entered as significant into a model to an individual case's values for those significant variables. The result, a log-odds ratio, can be transformed into an estimate of the outcome probability by the following arithmetic adjustment:

$$P = \frac{AL}{1 + AL}$$

where P represents the probability estimate and AL represents the anti-log of the log-odds ratio. In addition, the BMDP computer routine for Logit Analysis automatically produces classification accuracies for the model with respect to all cases included in the sample upon which the model is based.

FOOTNOTES

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3. S. Sidney Ulmer, "The Discriminant Function and Theoretical Context for Its Use in Estimating the Votes of Judges," in Frontiers of Judicial Research (New York: John Wiley and Sons, Inc., 1969), pp. 335-363.
4. Ted D. Englebrecht, "An Empirical Investigation into the Valuation of Closely Held Corporations by the Tax Court for Estate and Gift Tax Purposes" (Ph.D. dissertation, University of South Carolina, 1976).
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CHAPTER VI

This chapter presents the results of the study's analysis of the Tax Court's assessment of continuity of interest. In order to instill as much insight as possible into the issue, the presentation will include: (1) the results of sensitivity analysis conducted into the relative importance of different variables--including the potentially different forms in which some variables may be coded; (2) an assessment of the potential lack of homogeneity between reorganizations involving solvent and insolvent corporations; (3) the development of logit models based upon sets of cases paired so as to maximize the study's potential for developing guidelines under which more objective determinations of continuity of interest may be achieved; (4) the results of an assessment into potential upward biasness that may exist in the logit models; (5) results of the study's investigation into the temporal stability demonstrated by the model over the time period during which continuity of interest has been litigated; and (6) results of the application of the Tax Court logit model to continuity of interest cases decided in either the District Court or the Court of Claims.

Research Question #1

The Tax Court Logit Model

The primary objective of this study involves the development of a logit model which will provide a parsimonious fit to the data relating to the Tax Court's assessment of the continuity of interest doctrine (a complete and chronological listing of the Tax Court cases is presented in Table 6-1). However, the nature of some of the independent variables identified as potentially relevant to continuity of interest necessitates some form of sensitivity analysis aimed at focusing the study as clearly as possible upon the most relevant research questions. Primarily, two aspects of the independent variables merit such analysis. First, an assessment must be undertaken to determine whether significant informational content has been sacrificed as a result of artificially converting Variable 3-A (which represents the proportion of the value of all items transferred in the transaction that consists of equity interests) from a continuous to a discrete variable. And second, an assessment must be made as to whether those independent variables which represent potentially disquisive transactions between the reorganization parties are significant in and of themselves and whether the psychological impact of such transactions has a significant impact on the judicial assessments. In addition, both of these aspects are

inherently intertwined with a third--the insolvency/solvency dilemma discussed previously. That is, the consistently high proportions observed in the insolvency litigation with respect to Variable 3-A may distort the true significance of that variable regardless of how it is coded. And, furthermore, the general lack of flexibility available to parties involved in insolvency reorganizations may have a dilutive effect on the significance of the disquisive variables in that taxpayer manipulation is generally not a viable option in reorganizations impelled by the economic necessity of bankruptcy. Both of these concepts are developed more fully in subsequent discussion. Thus, the aggregation of insolvency reorganizations with those involving economically-healthy corporate entities may well have a distorting impact on the meaningfulness of otherwise relevant variables.

TABLE 6-1

Tax Court
Continuity of Interest
Litigation

#	Case	Citation	Bankruptcy vs.
			Non-Bankruptcy
1	Michigan Limestone & Chemical Co.	26 BTA 928	Non.
2	Warner Co.	26 BTA 1225	Non.
3	Minnesota Tea Co.	28 BTA 591	Non.
4	Barker, Fred	28 BTA 657	Non.
5	Dolomite, Inc.	28 BTA 1271	Non.
6	Ward, D.	29 BTA 1252	Non.
7	Burns, R.	30 BTA 163	Non.
8	Woodard, J.S.	30 BTA 1216	Non.
9	Coleman, W.C.	31 BTA 319	Non.
10	Rockford Brick & Tile Co.	31 BTA 537	Bank.
11	Dohme, A.L.	31 BTA 671	Non.
12	Bashford, L.	33 BTA 10	Non.
13	McNabb, P.	33 BTA 192	Non.
14	Flanders, E.	33 BTA 483	Non.
15	Berch, J.	35 BTA 385	Non.
16	Mellon, A.W.	36 BTA 977	Non.
17	Rawco, Ltd.	37 BTA 128	Non.

TABLE 6-1 (cont.)

#	Case	Citation	Bankruptcy vs.
			Non-Bankruptcy
18	Leckie, F.	37 BTA 252	Bank.
19	Graham, G.	37 BTA 623	Non.
20	Rex Manufacturing Co.	37 BTA 984	Bank.
21	Douglas, D.W.	37 BTA 1122	Non.
22	Whitney Corp.	38 BTA 224	Non.
23	Michigan Steel Corp. of New Jersey	38 BTA 425	Non.
24	United Power & Light Corp.	38 BTA 477	Non.
25	Kleeden, M.	38 BTA 821	Non.
26	Corpus Christi, Inc.	38 BTA 944	Non.
27	Neidrich, S.	38 BTA 1178	Non.
28	Pickard, S.	40 BTA 258	Non.
29	Fleischman, D.	40 BTA 672	Non.
30	Alabama Asphaltic Co.	41 BTA 324	Bank.
31	Schweitzer & Conrad, Inc.	41 BTA 533	Non.
32	Hoagland, A.	42 BTA 13	Non.
33	Newton, J.	42 BTA 473	Bank.
34	Miller & Paine, Inc.	42 BTA 586	Non.
35	American Light & Traction Co.	42 BTA 1121	Non.
36	Skenandoa Co.	42 BTA 1287	Non.
37	Pulfer, R.	43 BTA 677	Non.
38	Chase, G.	44 BTA 39	Non.

Table 6-1 (cont.)

#	Case	Citation	Bankruptcy vs.
			Non-Bankruptcy
39	Gilmore, A.	44 BTA 881	Non.
40	Muskegon Motors Corp.	45 BTA 551	Non.
41	Skourac, G.	45 BTA 1224	Bank.
42	Hoboken, T.	46 BTA 495	Non.
43	Menefee, G.	46 BTA 865	Non.
44	Thatcher, M.	46 BTA 869	Non.
45	Stoddard, L.	47 BTA 584	Bank.
46	Capento Securities, Inc.	47 BTA 691	Bank.
47	United Gas Improvements	47 BTA 715	Bank.
48	Claridge Apartments	1 TC 163	Bank.
49	Alcazar Hotel Corp.	1 TC 872	Bank.
50	Bedford, F.	2 TC 1189	Non.
51	Illinois Water Service Co.	2 TC 1200	Non.
52	Morley Cypress Trust	3 TC 84	Non.
53	New Jersey Mortgage & Title Co.	3 TC 1277	Non.
54	Clyde Bacon, Inc.	4 TC 1107	Non.
55	Survaunt P.	5 TC 665	Non.
56	Taylor-Wharton Iron & Steel Co.	5 TC 768	Bank.
57	Southland Ice Co.	5 TC 842	Bank.
58	Sheldon, I.	6 TC 510	Non.
59	Montgomery Bldg. & Realty Co.	7 TC 417	Bank.

Table 6-1 (cont.)

#	Case	Citation	Bankruptcy vs.
			Non-Bankruptcy
60	Adamston Glass Co.	7 TC 493	Bank.
61	Peabody Hotel, Inc.	7 TC 600	Bank.
62	Central Kansas Telephone Co.	PH TCM 43,151	Non.
63	Roebling, F.	PH TCM 43,324	Non.
64	Duncan, A.	9 TC 468	Bank.
65	Republic National Bank of Dallas	9 TC 1039	Non.
66	Standard Realization Co.	10 TC 708	Non.
67	Industry Property, Inc.	4 CCH TCM 1118	Bank.
68	Lewis, J.B.	10 TC 1080	Non.
69	Hill, E.	10 TC 1090	Non.
70	Erdman, E.	5 CCH TCM 63	Bank.
71	Mellon, R.	12 TC 90	Non.
72	Roosevelt Hotel Co.	13 TC 399	Bank.
73	Gage Brothers	13 TC 472	Bank.
74	Reilly Oil Co.	13 TC 919	Non.
75	Southwest Natural Gas Co.	14 TC 81	Non.
76	Ericson Screw Machine Co.	14 TC 757	Non.
77	Campbell, R.	15 TC 312	Non.
78	Connohio, Inc.	PH TCM 50,295	Bank.
79	Williams, T.	15 TC 474	Non.
80	H. Grady Manning Trust	15 TC 930	Non.

Table 6-1 (cont.)

#	Case	Citation	Bankruptcy vs.
			Non-Bankruptcy
81	American Wire Fabrics Corp.	16 TC 607	Non.
82	Miller, G.	17 TC 1308	Non.
83	Robert Dollar Co.	18 TC 444	Non.
84	Spangler, C.	18 TC 976	Non.
85	Russel, A.	1953 PH TCM 53,147	Bank.
86	Standard Coal Co.	20 TC 208	Bank.
87	Becher, E.	22 TC 932	Non.
88	Goldstein Brothers	23 TC 1047	Bank.
89	Western Massachusetts Theatres Corp.	24 TC 331	Bank.
90	Farr, R.	24 TC 350	Non.
91	Murrin, J.	24 TC 502	Non.
92	Howard, H.	24 TC 792	Non.
93	Heintz, R.	25 TC 123	Non.
94	Montana Dakota Utilities Corp.	25 TC 408	Bank.
95	Wilson, P.	PH TCM 64,017	Non.
96	Avco Manufacturing Co.	25 TC 975	Bank.
97	Bullock, G.	26 TC 276	Non.
98	George, W.	26 TC 396	Non.
99	Williamson, F.	27 TC 647	Non.
100	Morgan Manufacturing Co.	28 TC 837	Non.
101	Truschel, W.	29 TC 433	Non.

Table 6-1 (cont.)

#	Case	Citation	Bankruptcy vs.
			Non-Bankruptcy
102	Consolidated Office Building Co.	29 TC 479	Bank .
103	Southwell Combing Co.	30 TC 487	Non .
104	Bausch & Lomb Optical Co.	30 TC 602	Non .
105	San Antonio Transit Co.	30 TC 1215	Bank .
106	Berghash, G.	32 TC 80	Non .
107	Northwest Terra Cotta Corp.	34 TC 886	Bank .
108	Long Island Water Corp.	36 TC 377	Non .
109	Atlas Oil & Refining Corp.	36 TC 675	Bank .
110	Grubbs, D.	39 TC 42	Non .
111	Gallagher, R.	39 TC 144	Non .
112	Bateman, W.	40 TC 408	Non .
113	South Bay Corp.	41 TC 888	Non .
114	Morris Trust	42 TC 779	Non .
115	Norman Scott, Inc.	48 TC 598	Bank .
116	Lammerts, H.	54 TC 420	Non .
117	Madison Square Garden Corp.	58 TC 619	Non .
118	Kass, M.	60 TC 218	Non .
119	Yoc Heating Co.	61 TC 168	Non .
120	American Bronze Corp.	64 TC 1111	Non .
121	Atlas Tool Co.	70 TC 86	Bank .
122	Laure, G.	70 TC 1087	Bank .

The assessment of these complex and interacting relationships involves comparisons and contrasts of a 2x2x2 set of models consisting of all combinations of the three complicating factors (the loss of information content, the potentially disquisive variables, and the implications of the solvency/insolvency dilemma). The eight combinations are delineated in Table 6-2 below. The criteria with which the various models were contrasted include the variables entered as significant into each model, likelihood-ratio statistics, R^2 analogs, and internal classification accuracies for each model.

Then, before proceeding to specific comparisons of models, a review and summary of the criteria upon which the relative assessments will be based and a summary of the values relating to these criteria for each of the eight models are presented in Tables 6-3 and 6-4 respectively.

TABLE 6-2

Characteristics of Individual Models

Model	Treatment of Variable 3-A	Disquisive Variables Entered	Scope of the Model
1	Continuous	6-B and 7-B	all COI cases
2	Continuous	6-B and 7-B	only solvent cases
3	Continuous	only 8-B	all COI cases
4	Continuous	only 8-B	only solvent cases
5	Discrete	6-B and 7-B	all COI cases
6	Discrete	6-B and 7-B	only solvent cases
7	Discrete	only 8-B	all COI cases
8	Discrete	only 8-B	only solvent cases

TABLE 6-3

DESCRIPTIONS

CRITERIA

Variables Entered As Significant Into the Model	For the purposes of this study, Logit Analysis utilizes a forward stepwise procedure which adds one variable at a time into the model which results in the greatest increase in the goodness-of-fit. This iterative process continues until the next variable to be entered does not significantly increase the fit.
L^2 (Baseline)	L^2 statistics follow a Chi-square distribution with degrees of freedom equal to the number of parameters assumed to have no effect on the expected cell frequency. The larger the L^2 , the more the expected frequency differs from the observed. The L^2 (Baseline) is the L^2 statistic relating to the model for which no independent variables are significant. As such, the statistic relates to all of the variance within the sample data.
L^2 (Maximum)	This L^2 statistic relates to the logit model produced by the stepwise procedure that results in the best goodness-of-fit to the sample data.
R^2 Analog	$\frac{L^2 \text{ (Baseline)} - L^2 \text{ (Maximum)}}{L^2 \text{ (Baseline)}}$ <p>This statistic represents the proportion of the L^2 (Baseline)-- which relates to the total variance within the data -- that is accounted for by the more complex L^2 (Maximum) model.</p>

TABLE 6-3 (cont.)

DESCRIPTIONS	
CRITERIA	
\bar{R}^2 Analog	<p>This statistic represents an adjustment to the R^2 Analog intended to enhance the comparability of goodness-of-fit between models possessing different numbers of observations and variables. Although the adjustment is related primarily to regression, the same observation/variable problem exists in Logit and the adjustment should reveal any substantial degree of differences in fit due to different numbers of variables in respective models. The form of the statistic is given below.</p> $\bar{R}^2 \text{ Analog} = R^2 \text{ Analog} - \frac{K}{N-K-1}(1 - R^2 \text{ Analog})$ <p>where K equals the number of variables in each model and N equals the number of observations upon which each model was based².</p>
Internal Classification Accuracy	<p>As part of the BMDP computer routine for Logit Analysis², each model is utilized to classify every case in the data set and the resulting overall classification accuracy is reported. While this accuracy will probably be slightly inflated due to upward biasness, it will still suffice for comparative purposes.</p>

TABLE 6-4

Model	Variables Entered As Significant	L^2 (Base-line)	L^2 (Maximum)	R^2 Ana-log	\bar{R}^2 Ana-log	Internal Classification Accuracy
#1	1-A 11-C	209.03	97.18	53.5	52.7	76.8%
#2	1-A 11-C	209.03	95.52	54.3	53.5	77.6%
#3	4-A 13-C	113.68	27.38	76.1	75.6	88.5%
#4	7-B 13-C	113.68	22.96	79.8	79.3	89.1%
#5	2-A 11-C	209.03	75.60	63.8	63.2	78.8%
#6	2-A, 3-A (Discr) & 11-C	209.03	79.39	62.0	61.0	88.8%
#7	3-A(Discr) 6-B 11-C 13-C	113.68	17.83	85.2	84.5	91.2%
#8	3-A(Discr) 7-B 13-C	113.68	0.44	99.4	99.4	100.0%

TABLE 6-5

Variable	Description of All Variables Entered as Significant in at Least One Model
1-A	The nature of the equity interest surrendered by the shareholders of the acquired corporation.
2-A	The nature of the equity interest retained by the shareholders of the acquired corporation in the surviving entity.
3-A	The proportion of the value of the items transferred in exchange for equity interests to the value of all items transferred in the exchange. This variable is dually coded as both a continuous and a discrete variable in different models.
4-A	The existence of a preconceived plan among the shareholders of the acquired corporation to dispose of their equity interests retained in the surviving corporation.
6-B	The presence of a transaction affecting the reorganization between the involved parties occurring subsequent to the actual transaction.
7-B	The presence of a transaction affecting the reorganization between the involved parties occurring either prior or subsequent to the actual transaction.
8-B	The presence of a transaction related to the reorganization involving an independent third party.
11-C	The presence of a sound business purpose for the reorganization.
13-C	The presence of an event unrelated to the reorganization that significantly altered the basic environment.

Conversion of the Proportion Variable

One aspect of the coding of the independent variables which merits particular attention involves the conversion of Variable 3-A from a quantitative measure of the proportion of the total value exchanged consisting of equity interest into a discrete variable (all discrete variables are designated as such in the computer programming of the models). In order to detect any potential deterioration in the informational content of the logit models as a consequence of this conversion, comparisons were made of all pairs of models within which the only differences in input involved how Variable 3-A was coded (that is, as a continuous or discrete variable). Four such pairs exist within the eight models identified in Table 6-2:

Model 1 vs. Model 5

Model 2 vs. Model 6

Model 3 vs. Model 7

Model 4 vs. Model 8.

With respect to the comparative analysis of these pairs, a basic premise was asserted that any significant deterioration in informational content would result in observably declining goodness-of-fits (as measured by the criteria delineated in Table 6-3). It should be noted, a priori, that a significant reduction in fit was not anticipated in as much as it appears that the judiciary's

application of this factor is quite compatible with the discrete version of the variable. That is, if the Tax Court does not attach increased importance to the proportion level beyond some threshold of acceptability (as appears reasonable), then it is possible that the discrete version may reflect the underlying judicial assessment more accurately than does the continuous version.

Several conclusions appear to be inferrable from the comparison of these pairs of models focusing on the impact of the dual codification of the proportion variable. Primarily, it is evident in all four pairs that the models utilizing the discrete variable outperformed those utilizing the continuous version with respect to both internal classification accuracy and the R^2 analog (since only trivial and consistent differences resulted from adjusting the R^2 Analog for the number of observations and variables, the analysis will focus only on the R^2 Analog so as to avoid redundancy). This constitutes very persuasive evidence to the effect that a loss of informational content has not occurred. And, even more importantly, it constitutes at least probable evidence that the discrete version represents a clearer reflection of how the Tax Court utilizes this variable in assessing continuity of interest.

This conclusion is obliquely supported by the fact that the continuous version of the variable was not found

TABLE 6-6
Assessment For Loss of Informational Content

	Variables Entered As Significant	Internal Class- ification Accuracy	R ² Analog	\bar{R}^2 Analog
Model #1 (con- tinuous)	1-A 11-C	76.8%	53.5	52.7
Model #5 (discrete)	2-A 11-C	78.8%	63.8	63.2
Model #2 (con- tinuous)	1-A 11-C	77.6%	54.3	53.5
Model #6 (discrete)	2-A 3-A(Discrete) 11-C	88.8%	62.0	61.0
Model #3 (con- tinuous)	4-A 13-C	88.5%	76.1	75.6
Model #7 (discrete)	3-A(Discrete) 6-B 11-C 13-C	91.2%	85.2	84.5
Model #4 (con- tinuous)	7-B 13-C	89.1%	79.8	79.3
Model #8 (discrete)	3-A(Discrete) 7-B 13-C	100.0%	99.4	99.4

to be significant in any of the four models in which it was incorporated (Model #'s 1 - 4), while the discrete version was entered as significant in three of its four models (Model #'s 6, 7 and 8). This does not constitute conclusive evidence as to the viability of either version (since no assurance exists that the proportion variable is significant). However, given the considerable importance that has been placed on this variable by the legislature, the courts and the Service, it is not unreasonable to have intuitively anticipated that this factor would figure prominently in any continuity of interest assessment. Therefore, the observed significance of the discrete version constitutes at least indirect evidence to the effect that the discrete variable constitutes a more realistic portrayal of how this factor is utilized by the Tax Court.

And, finally, leading into another aspect of this sensitivity analysis, an inference appears to exist with respect to the solvency/insolvency dilemma's impact on the relevance of the proportion variable. That is, the discrete version was significant in both of the models based upon only solvent cases in which it was incorporated (Models #7 and #8), while the same version was significant in only one of the two models based upon all reorganization cases (Model #6, but not Model #5). Assuming that the proportion variable does significantly influence judicial

assessments of continuity of interest (as appears reasonable), the deterioration of significance observed for the models based on all continuity cases indicates a potential lack of homogeneity between solvent and insolvent reorganizations.

Disguisive Aspects of the Independent Variables

A second aspect of this preliminary sensitivity analysis involves how transactions which constitute potential sources for taxpayer manipulation influence judicial assessments of continuity of interest. These variables (6-B, 7-B and 8-B) clearly have an impact on the courts' assessments in that they directly alter the proportion of the total value of items transferred in the exchange consisting of retained equity interest (Variable 3-A). In addition, the possibility exists that the judiciary may react to what it perceives to be taxpayer manipulation by requiring (either consciously or subconsciously) more rigorous evidence concerning continuity of interest before rendering favorable decisions. It is with respect to this possible psychological reaction by the judiciary that sensitivity analysis may add further insight.

The analysis, itself, involves a comparison of pairs of models in which the only differences in input involve the treatment of these potentially disguisive variables. In half of the eight models, variables relating to transactions between the reorganization parties which might

occur either prior or subsequent to the actual reorganization were included as separate variables. And, in the remaining half, only one variable representing a combination of both prior and subsequent inter-party transactions was utilized. This dual treatment was intended to allow for an assessment of each variable individually (thereby focusing on the timing implications) and for an assessment of an aggregate variable that focuses more closely on the potential psychological reactions of the judiciary without regard to the timing of the transaction.

Several inferences may be elicited from this comparative analysis. First, none of the disquisive variables were significant in any of the models based upon both solvent and insolvent reorganizations (Model #'s 1, 3, 5 and 7). This seems to be in accordance with the premise (to be discussed in greater detail subsequently) that the absence of flexibility available to taxpayers involved in economically-imposed reorganizations dilutes the significance of these otherwise important disquisive variables. This inference is further supported by the fact that the combined version of this factor was significant in both of the models (#4 and #8) based on only solvent reorganizations and that one of the individual variables was significant in one of the two models based on only solvent reorganizations (Model #6). Furthermore, given the combined version's

TABLE 6-7
Assessment of Disquisive Aspects

	Variables Entered as Significant	Internal Classifi- cation Accuracy	R ² Analog	\bar{R}^2 Analog
Model #1	1-A 11-C	76.8%	53.5	52.7
Model #3	4-A 13-C	88.5%	76.1	75.6
Model #2	1-A 11-C	77.6%	54.3	53.5
Model #4	7-B 13-C	89.1%	79.8	79.3
Model #5	20-A 11-C	78.8%	63.8	63.2
Model #7	3-A(Discrete) 6-B 11-C 13-C	91.2%	85.2	84.5
Model #6	2-A 3-A(Discrete) 11-C	88.8%	62.0	61.0
Model #8	3-A(Discrete) 7-B 13-C	100.0%	99.4	99.4

greater focus on the psychological aspect of the variable, it appears reasonable to suggest that the psychological aspect is the primary source of the factor's significance.

While no strong conclusions are inferred with respect to the relative merits of the various forms which the disquisive variables may assume, it does seem clear, at the least, that psychological reactions to court-perceived taxpayer manipulation do have a significant impact on the Tax Court's assessment of continuity of interest in solvent reorganizations.

Homogeneity Between Solvent and Insolvent Reorganizations

Perhaps the most important aspect of this sensitivity analysis involves an assessment of the degree of homogeneity that exists between reorganizations involving economically solvent corporations and reorganizations entered into primarily for the economic motives of bankruptcy. While it is clear that the Tax Court's stated position on this solvency/insolvency dilemma is that continuity of interest should be applied in a consistent manner in both situations, it is far from certain whether the court's position is correct and whether, therefore, the current position should serve as the basis for future assessments of the issue.

The assessment of homogeneity will involve, for the most part, comparisons of those pairs of models in which the only differences in inputs relate to the scope of the

models' data bases, i.e., encompassing all Tax Court assessments of continuity of interest or focusing only on those Tax Court Cases involving solvent corporate reorganizations. If solvent and insolvent reorganizations are not particularly homogeneous, it is anticipated that the contrasting models will identify different significant variables and that the restricted-population models (those based only on solvent reorganizations) will outperform the unrestricted-population models with respect to classification accuracy and explanation of variance.

As anticipated, given the fundamentally divergent natures of solvent and insolvent reorganizations, the comparative analysis strongly suggests an inference that these contrasting situations possess only limited homogeneity. In all four comparisons, the variables entered as significant for the restricted and unrestricted-population versions were strikingly different. In fact, only two of the nine variables entered as significant in the four unrestricted models were also significant in the restricted version. Conversely, only two of the eleven variables entered as significant in the restricted version were also significant in the unrestricted models. Since the only difference in the respective models involved the scope of their data bases, such disparate results clearly infer that the bases are far from homogeneous.

TABLE 6-8
Assessment of Homogeneity

	Variables Entered as Significant	Internal Classifi- cation Accuracy	R ² Analog	\bar{R}^2 Analog
Model #1	1-A 11-C	76.8%	53.5	52.7
Model #2	1-A 11-C	77.6%	54.3	53.5
Model #3	4-A 13-C	88.5%	76.1	75.6
Model #4	7-B 13-C	89.1%	79.8	79.3
Model #5	2-A 11-C	78.8%	63.8	63.2
Model #6	2-A 3-A(Discrete) 11-C	88.8%	62.0	61.0
Model #7	3-A(Discrete) 6-B 11-C 13-C	91.2%	85.2	84.5
Model #8	3-A(Discrete) 7-B 13-C	100.0%	99.4	99.4

This inference is further supported by two additional aspects of the comparison. First, in each of the four pairs contrasted, the models based on only solvent reorganizations clearly outperformed the unrestricted-population models with respect to internal classification accuracy and explained variance. This is quite compatible with an inference of limited homogeneity in as much as it is clearly easier to fit a parsimonious model within a more homogeneous data base. And second, the consistent significance of the potentially disquisive variables (primarily the combined version) in the restricted-population models in conjunction with the conspicuous absence of significance for these variables in the unrestricted models supports, at least indirectly, the inference of limited homogeneity. As hypothesized previously, if the reduced flexibility available to taxpayers in bankruptcy situations automatically precludes the possibility of taxpayer manipulation, then the aggregation of solvent and insolvent reorganizations will almost certainly dilute the significance of the disquisive variables. Since the comparison does demonstrate a strong dilutive effect with respect to these variables' significance, it appears reasonable to conclude that the cause of the dilution involves a substantial lack of homogeneity.

In addition, to provide possible additional insight into the degree of homogeneity, an analysis was undertaken

with regard to whether the parameters of the models were similar in sign and magnitude. However, for several reasons, this did not prove to be a viable source for insight. First of all, the mechanics involved in producing the parameters for the logit models severely limits any comparability between models based on the size of parameters. That is, the models automatically assign the discrete values which were designated as "0" a parameter of zero. Then, all other possible discrete values result in parameters that are centered upon the "0" value. Thus, each set of parameters is entirely internally-determined with respect to size and no valid comparisons can be made upon this basis. The relative signs of the parameters do offer a better basis for comparison but problems also exist for it. In each of the four pairs of models, the models to be compared possessed different significant variables. As before, since the parameters for each model are internally-generated, this inconsistency between models clearly reduces comparability. Nonetheless, an assessment of parameter signs was undertaken for every variable that was significant in both models to be compared. One instance in which inconsistency between signs was identified (with respect to the business purpose/tax motive variable for Models #5 and #6). However, the conclusion was drawn that the analysis on the whole was simply not amenable to analyzing

homogeneity through the models' parameters.

A final assessment of homogeneity involved the utilization of the logit model which provided the best fit to the restricted-population data set (Model #4) to classify those cases involving insolvent reorganizations (the mechanics of the classification procedure were discussed in Chapter V). This resulted in correct classifications in 21 of the 31 insolvent cases for an accuracy percentage of .71. Comparison of this percentage with Model #4's internal classification accuracy of 100% provides additional support to the limited homogeneity inference. It should be noted that this comparison is not entirely valid in that the internal classification accuracy possesses a slight degree of upward bias. A subsequently discussed adjustment for upward bias produced an adjusted accuracy percentage of .94 which is still markedly greater than the classification accuracy with respect to the insolvent cases.

Summary of Sensitivity Analysis

Probably the most important inference that may be gleaned from the sensitivity analysis involves the surmised lack of homogeneity. This inference is central to the interpretation of and the potential contributions from the study and, therefore, requires a precise and thorough understanding. Importantly, it should be stressed that the sensitivity results are in no sense critical of past

insolvency decisions in the Tax Court. That is, a general concept of continuity of interest is applicable to insolvency reorganizations and a rationale for a tax-deferral on such transactions is as justifiable for insolvent as for solvent reorganizations. What is inferred by the analysis, however, is that inherent differences do exist between the alternative situations and that the mechanics of applying the continuity doctrine should be tailored to the specific exigencies posed by the respective situations. One primary benefit that may be attained by segregating the solvent and insolvent litigation involves the much improved goodness-of-fits observed in the restricted models. The improved fit itself suggests that legislation which effectively models the Tax Court's assessment of continuity of interest without resulting in concomitantly unacceptable levels of subjectivity is at least feasible for solvent reorganizations.

A second inference from the sensitivity analysis is that the conversion of Variable 3-A from a continuous to a discrete independent variable does not result in a loss of informational content. In fact, it appears to be the case that the discrete version more accurately reflects how the variable is used by the Tax Court in assessing continuity of interest. This inference is quite compatible with the a priori interpretations as to the relevance and

utility of this variable which provided the justification for the variable's dual coding.

And finally, a less evident inference can be made with respect to the potentially disquisive independent variables. While the results are not conclusive as to the importance of individual transactions occurring prior or subsequent to a reorganization, the combined version of these factors clearly had a substantial impact on the Tax Court's continuity of interest assessment. Since the common characteristic shared by the diversely timed transactions involved the potential for taxpayer manipulation, it appears not unreasonable to suggest that the judiciary's reaction to court-perceived tax evasion is the primary basis for this factor's significance.

As a result of this sensitivity analysis' strong inference of limited homogeneity, the remaining research undertaken in the study will center for the most part upon only solvent reorganizations. Furthermore, the remaining analysis will consist primarily of additional assessments of the model that produced the best fit to the study's data. This model (#8) utilized the discrete version of the proportion variable and the combined version of the disquisive variables. This focus appears to be strongly justified by the results of the sensitivity analysis.

RESEARCH QUESTION #2

Whenever a predictive model that is based upon a given sample is used to predict the sample cases themselves, an inflated classification accuracy (referred to as upward bias) will almost certainly exist. This bias results from the model's incorporation of potentially unique characteristics of unusual or outlying cases within the sample -- thereby increasing the model's ability to correctly classify those unusual cases.

Several strategies exist with which to assess and/or adjust for upward bias. One possibility involves the utilization of an independent hold-out sample of cases to be classified by the basic model. The independence of the hold-out sample negates the cause of the upward bias and, therefore, the resulting classification accuracy provides evidence of the model's external validity. However, given the relatively limited size of this study's data base, such a strategy was not considered to be efficacious. A second strategy, which is often incorporated into computer package routines, involves the systematic withholding of one case at a time from the sample, the development of a model based on all of the other cases, and the subsequent classification of the withheld case. This process is reiterated for all cases in the sample and the resulting cumulative classification accuracy provides a criterion

that has been adjusted for the effects of upward bias. While the BMDP routine utilized in this study did not include this option, it was a relatively simple task to simulate the procedure.

Toward this end, the 92 cases involving solvent reorganizations which provided the basis for Model #8 were randomly assigned to one of ten subsets. Then, one subset was withheld at a time and a logit model based on the remaining nine was utilized to classify the withheld subset's cases. This procedure was reiterated until each subset had been withheld and the classification results are illustrated in Table 6-9.

The resulting cumulative classification accuracy rate (94.5%), while less than the unadjusted internal classification accuracy of Model #8, (100%), nonetheless provides independent corroborating evidence of the model's ability to efficiently and parsimoniously reconstruct the Tax Court's assessment of continuity of interest.

TABLE 6-9

Subsets	Number of Cases Assigned to Each Subset	Number of Cases Classified Correctly
1	9	8
2	10	10
3	9	9
4	8	8
5	11	10
6	8	8
7	8	7
8	9	9
9	10	9
10	10	9
<hr/> Total	<hr/> 92	<hr/> 87

RESEARCH QUESTION #3

Since continuity of interest has been addressed by the Tax Court for an approximately fifty year period, the possibility exists that the variables identified as relevant to the issue may not have been applied consistently by the court over the duration of the litigation. If this were the case, then serious doubts would be cast on the validity of the study's data set. For several reasons, however, it appears likely that at least an acceptable degree of temporal stability does exist. First, it is clear from the analytic investigation into the background and development of continuity of interest that has been undertaken in this study that continuity of interest has served the same basic purpose, from the same general perspective of the Tax Court, since its inception. While changes in the statutes have altered the applicability of the doctrine from time to time, such changes in its scope have never altered how the doctrine has been applied when still appropriate. And second, the very positive results from the assessment of Research Question #1 with respect to goodness-of-fit and classification accuracy constitutes indirect evidence of temporal stability. That is, if temporal stability was not present, then it would seem very unlikely that any model could produce the results observed with respect to Model #8 (a 94% classification

accuracy and a 99% R^2 Analog). Consequently, a general presumption that temporal stability is present appears to intuitively supportable. The subsequent analysis will attempt to produce evidence to the contrary and, failing that, the supposition that temporal stability exists will be presumed tenable.

The analysis of temporal stability, itself, involved the dichotomization of the Tax Court's solvent reorganization cases into two discrete chronological segments. The dichotomization was based on an event (changes in the reorganization statutes in the 1954 Revenue Act) which was perceived as having had the greatest potential for having altered the judicial assessment of continuity of interest. The 1954 Code established definitive guidelines for corporate reorganizations which, if met, guaranteed the parties involved a tax deferral on the transaction. The overall effect of this legislation on continuity of interest was that the scope of its applicability was reduced since taxpayers could bypass the subjective continuity assessment by opting for restrictive (but objective) alternatives. This reduction in scope is perceived as potentially having altered the judicial assessment of continuity of interest.

Alternative events which might have had similar effects were sought for but were either not found or were not amenable to incorporation into the analysis. With respect

to the latter instance, the key Supreme Court cases³ affecting continuity of interest that were discussed in Chapter II all occurred during the initial stage of continuity litigation and, therefore, do not suffice as dichotomizing events. In addition, the Service's recent Revenue Procedure 77-37⁴ (which represents a fairly definitive guide to the proportion of qualifying consideration necessary for an advance ruling) may constitute such an event. However, insufficient cases involving solvent reorganizations have been litigated since its pronouncement to allow for its incorporation into the analysis.

Both discrete groups of solvency reorganization cases -- pre-1954 Act and post-1954 Act -- were used to develop logit models which produced the same criteria that were utilized for comparative purposes in Research Question #1 (variables entered as significant, R^2 analogs and internal classification accuracies). In addition, each model was utilized to predict all of the cases in the other data set under the premise that, if temporal stability did not exist, a deterioration in classification accuracy should have resulted. The results of the analysis are presented in Table 6-10.

TABLE 6-10

Criteria Data Sets	Number of Cases in Data Set	Variables Entered as Significant	R^2 Analog	\bar{R}^2 Analog	Internal Classifi- cation Accuracy	Classifi- cation Accuracy w.r.t. Independent Data Set
Pre-1954	68	3-A(Discrete) 7-B 13-C	96.2	96.0	95.6%	89%
Post-1954	24	3-A(Discrete) 7-B	98.4	98.3	100%	91%

Several inferences may be drawn from Table 6-10. Primarily, while the two models' classification accuracies with respect to the independent data sets are slightly lower than the classification accuracy adjusted for upward bias of 94% for Model #8 (which was based on all solvent reorganization cases), the decrease in accuracy does not appear to be severe enough to suggest that an unacceptable degree of temporal instability is present. In addition, the significance in each chronological data set of the two independent variables which were intuitively perceived to be the most important variables with respect to continuity of interest (the discrete version of the proportion variable and the combined version of the disquisive variables) suggests that the Tax Court has assessed continuity of interest in an essentially consistent manner over time. The presence of Variable 13-C as significant in the prior chronological set but not the latter does suggest some degree of instability but it is not difficult to rationalize this phenomenon as not overly critical. For instance, it is quite possible that this variable (the presence or absence of an event that significantly altered the basic business environment thereby triggering the reorganization) constituted an important but peripheral factor with respect to continuity of interest. Given the relative ease with which events that significantly alter the entire business

environment (World War II or Prohibition, for instance) can be identified, once this factor was determined to be relevant to continuity of interest, it is probable that this aspect would not figure prominently in subsequent litigation due to the clarity of the precedent.

Thus, this analysis clearly does not present evidence of temporal instability. In fact, the evidence strongly suggests that stability is present. This, combined with the a priori analytical determination that temporal stability appeared to exist, provides a strong basis for a favorable conclusion with respect to temporal stability.

RESEARCH QUESTION #4

Up to this point in the study, the analysis of continuity of interest has focused only upon the Tax Court, for the reasons noted previously (primarily relating to the more sophisticated tax expertise of the Tax Court). However, it is at least interesting to consider whether substantive differences may exist between how continuity of interest is assessed in the Tax Court as opposed to the other judicial forums in which reorganization litigation may be initiated (the Court of Claims and the District Court). However, a direct analysis of possible differences between the various courts was not feasible because the relatively limited litigation relating to continuity of

interest that has been undertaken in the District Court and the Court of Claims is insufficient to support the development of separate models (only 31 cases involving continuity of interest were identified in these two courts -- the cases are listed in Table 6-11).

As a result, the analysis of differences between the courts was limited to a use of the most efficient Tax Court model (Model #8) to classify the independent District Court and Court of Claims cases. If the Tax Court model (which possessed an adjusted classification accuracy percentage of 94%) produced a disparate classification result with respect to the non-Tax Court cases, then evidence would exist to the effect that structural differences do exist between the various courts. In addition, this analysis will also focus on both possible outcomes (continuity versus non-continuity) separately in an attempt to identify more specific differences. However, this approach provides no basis for hypothesizing about the direction or magnitude of possible differences and no attempt will be made to do so. The results of the application of the Tax Court model in regard to classifying the District Court and Court of Claims cases is subsequently provided in Table 6-12.

TABLE 6-11

#	Case	Citation	Bankruptcy vs. Non-Bankruptcy
1.	Rocky Mountain Federal Savings	473 F. Supp. 779	Non.
2.	Pierson, J.	472 F. Supp. 957	Non.
3.	First Federal Savings & Loan	452 F. Supp. 32	Non.
4.	General Housewares Corp.	488 F. Supp. 926	Bank.
5.	Masters Key Co.	422 F. Supp. 836	Non.
6.	Aetna Casualty Co.	403 F. Supp 498	Bank.
7.	Cinocca, J.	400 F. Supp. 527	Non.
8.	Home Savings & Loan Ass'n	73-2 USTC 9609	Non.
9.	Hempt Brothers, Inc.	354 F. Supp. 1172	Bank.
10.	West Side Federal Savings	73-1 USTC 9178	Non.
11.	Stockman Nat'l Life Insurance	71-2 USTC 9748	Non.
12.	Wilcox Supplies, Inc.	336 F. Supp. 1202	Non.
13.	Calcote, H.	327 F. Supp. 363	Bank.
14.	Yeaman, K.	69-2 USTC 9585	Non.
15.	Holliman, E.	275 F. Supp. 927	Non.
16.	Yuba Industries, Inc.	242 F. Supp. 561	Bank.
17.	Home Savings & Loan Ass'n	223 F. Supp. 134	Non.
18.	El Pomar Investment Co.	210 F. Supp. 333	Bank.

TABLE 6-11 (cont.)

#	Case	Citation	Bankruptcy vs. Non-Bankruptcy
19.	Nadeau, H.	181 F. Supp. 752	Non.
20.	Capital Savings & Loan Ass'n	607 F.2d 970	Non.
21.	Jeffers, L.	214 Ct. Cl. 9	Non.
22.	FEC Liquidating Corp.	212 Ct. Cl. 345	Bank.
23.	Movielab, Inc.	204 Ct. Cl. 6	Non.
24.	King Enterprises, Inc.	189 Ct. Cl. 466	Bank.
25.	Ross Michael Simon Trust	185 Ct. Cl. 291	Non.
26.	Columbia Gas of Maryland, Inc.	177 Ct. Cl. 97	Non.
27.	McCullough, J.	170 Ct. Cl. 1	Non.
28.	Wisconsin Central Railroad Co.	155 Ct. Cl. 781	Bank.
29.	Berner, T.	151 Ct. Cl. 128	Non.
30.	Texas City Terminal Railway Co.	138 Ct. Cl. 739	Non.
31.	Meyer, L.	129 Ct. Cl. 214	Non.

TABLE 6-12

<u>Nature of Involved Cases</u>	<u>#</u>	<u>Number of Cases Correctly Classified by the Tax Court Model</u>	<u>Classification Accuracy</u>
All District Court and Court of Claims Cases:			
Pro-continuity rulings	20	12	60%
Anti-continuity rulings	<u>11</u>	<u>8</u>	<u>73%</u>
Total	31	20	67%
Only District Court and Court of Claims Cases In- volving Solvent Reorgani- zations:			
District Court cases	13	9	69%
Court of claims cases	<u>9</u>	<u>7</u>	<u>78%</u>
Total	22	16	73%
Only District Court and Court of Claims Cases In- volving Solvent Reorgani- zations:			
Pro-continuity rulings	14	9	64%
Anti-continuity rulings	<u>8</u>	<u>7</u>	<u>88%</u>
Total	22	16	73%

While caution was exercised to not elicit conclusions for which support was questionable, several points may nonetheless be noted. First, the improvement in the classification accuracy of the Tax Court model observed when the focus was altered from all District Court and Court of Claims cases to only those cases involving solvent reorganizations (64% to 73%) adds further support to the inference of limited homogeneity between solvent and insolvent corporate reorganizations. And second, it does appear that differences do exist between the continuity of interest assessments of the Tax Court and the other forums in which it may be addressed. The classification accuracy rate for the Tax Court model was considerably lower for both the District Court and the Court of Claims than was the internal classification accuracy of the Tax Court model adjusted for upward biasness (94%). Even further, it appears probable that the differences indicate a less rigorous application of the doctrine in that a large majority of the cases which were misclassified involved court rulings in favor of continuity. However, once again, due primarily to the limited number of non-Tax Court cases, these conclusions are somewhat tenuous in nature.

FOOTNOTES

1. Ronald J. Wonnacott and Thomas H. Wonnacott, Econometrics, John Wiley and Sons, New York, 1970, p. 311.
2. BMDP Biomedical Computer Programs (P-series), University of California Press, 1979.

CHAPTER VII

SUMMARY AND CONCLUSIONS

In Chapter I, four research questions were presented relating to an assessment of continuity of interest by the Tax Court on cases involving corporate reorganizations. The initial question involved the identification of relevant variables.

Research Question #1: How does the Tax Court weigh various factors in making their determinations as to continuity of interest?

In order to enhance the meaningfulness of the results, sensitivity analyses were also undertaken in order to assess the manner in which some independent variables would be coded and to determine the overall scope of the study. The second research question involved an adjustment of the results produced with respect to Research Question #1 for potential upward biasness that may have existed in the models.

Research Question #2: How well does a model consisting of the Tax Court's key variables perform with respect

to predicting determinations
for internally generated hold-
out samples of Tax Court cases?

Due to the relatively long period of time over which the cases comprising the basis for the study occurred, Research Question #3 involved an assessment of the temporal stability of the Tax Court model over the duration of the continuity of interest litigation.

Research Question #3: How stable is the Tax Court's assessment of continuity of interest over the approximately fifty year period during which the issue has been litigated?

And finally, an attempt was made to identify general differences that might exist between the usual forum for reorganization litigation (the Tax Court) and other possible forums for such litigation (the District Court and the Court of Claims).

Research Question #4: How well does the Tax Court model perform with respect to predicting determinations of continuity of interest for District Court and Court of Claims cases involving continuity of interest?

This chapter will provide a summary of the research results relating to these issues. A discussion of the internal and external validity of the study will follow along with conclusions and recommendations of the study.

Summary of Results

Research Question #1

Before proceeding to the explicit research questions relating to significant independent variables with respect to continuity of interest, an equally important aspect of Research Question #1 involved sensitivity analyses intended to focus the study as clearly as possible on the substance of the continuity of interest assessment. Three factors existed which complicated several independent variables in addition to the overall scope of the study. The first of these involved the proportion variable (#3-A) -- a factor which intuitively constituted the basis of any continuity assessment (this importance was strongly supported by the emphasis that prior literature had placed on the factor). However, the use of this variable in the study was complicated by the fact that precise data concerning the proportion was often not provided by the Tax Court judges, particularly when the proportion was obviously substantial. This inconsistency resulted in two research alternatives -- to make arithmetic data adjustments in order to maintain the variable as quantitative or to

artificially convert the factor into a discrete variable with substantiation for the discrete categories based upon key Supreme Court cases and Administrative Revenue Rulings and Procedures. In view of the general intent of the study to investigate the feasibility of safe harbor statutes, it was decided to opt for the discrete version of the variable since it was perceived to be analogous to the form that future safe harbor statutes would necessarily take. At the same time, it was viewed as desirable to at least attempt to assess whether informational content had been sacrificed in the conversion. The basis of this assessment involved comparisons of pairs of models in which the only difference involved how the proportion variable was entered (as continuous or discrete). The clear result of this comparison was a conclusion that artificially converting the proportion variable to a discrete variable did not result in a loss of informational content. In fact, the models utilizing the discrete version uniformly outperformed the models utilizing the continuous version with respect to goodness-of-fit and classification accuracy. Furthermore, an intuitive rationalization was thought to exist for this result in as much as the discrete version was thought to more closely represent how the Tax Court judiciary actually utilizes the proportion variable. That is, by implementing thresholds of evidence, the judiciary

would assign decreasing marginal importance to the proportion factor once it had passed the threshold of acceptability. Such a course of action would tend to explain why the judiciary often felt no compulsion to report precise information concerning the proportion once it had been determined to be substantial.

The second complicating factor involved the possibility of transactions related to the reorganization occurring either prior or subsequent to the actual reorganization in attempts to disguise the true nature of the transaction. The potential significance of such manipulative action was viewed as twofold. First, such actions would clearly have a direct impact upon the proportion variable since any assessment of the substance of the reorganization would necessitate a focusing on the overall impact of all related transactions. In addition, the manipulative action could result in the judiciary requiring (either consciously or subconsciously) more definitive evidence concerning continuity of interest than it would have if no manipulation had taken place. Therefore, comparisons were of pairs of models in which each model incorporated this disquisive aspect differently. On one hand, separate variables were included for related transactions occurring both prior and subsequent to the actual reorganization. And, on the other hand, only one combined variable was included for

related transactions occurring either prior or subsequent to the reorganization. By eliminating all aspects of timing, the combined version focuses more closely on the possible psychological reaction of the courts. The comparative results from these pairs indicated that the models utilizing the combined version clearly outperformed the models using separate variables with respect to goodness-of-fit and classification accuracy. The inference from this conclusion is that the Tax Court has reacted more than mechanically to taxpayer manipulation and that such a reaction is important to possible safe harbor statutes with regard to discouraging taxpayers from attempting such actions in the first place.

The third (and possibly most important) complicating factor involved the appropriate scope of the study, i.e., whether the study should focus on all continuity of interest cases or whether it should differentiate between reorganizations involving solvent and insolvent corporations. Such a possibility is necessitated by a fundamental difference in how continuity of interest is applied in solvent versus insolvent reorganizations. In reorganizations involving combinations of two or more solvent corporations, assessments of continuity of interest focus on the degree of equity ownership in the surviving entity that is retained by shareholders of the absorbed corporation in exchange

for prior equity interests. However, in reorganizations involving combinations of insolvent firms with economically-healthy corporations, the assessment of continuity is substantively different in that the prior equity interests in the absorbed insolvent corporations are without value (since, by definition, they constitute ownership in non-existent net assets). The Supreme Court has held, consequently, that holders of unsecured debt in the insolvent corporation should be treated as equity-interest holders for the purpose of assessing continuity of interest. Given this fundamental difference between solvent and insolvent reorganizations, an assessment of homogeneity between the alternatives is extremely important. If homogeneity is substantially lacking, then a conclusion would be warranted that any safe harbor statutes should not be based upon a mixed set of cases.

The assessment of homogeneity was undertaken by comparing pairs of cases in which the only difference involved the scope of the underlying data base (consisting of either all continuity cases or only upon solvent reorganization cases). The results of the comparisons strongly suggested that homogeneity between solvent and insolvent reorganizations is severely limited. The evidence included differences in significant variables for the two alternatives and much stronger goodness-of-fits and classification

accuracies for the models based on only solvent reorganizations as opposed to the models based on both solvent and insolvent litigation.

As a result of the overall sensitivity analysis, several important decisions were made with respect to the remainder of the study. Primarily, it was decided to focus primarily upon the possible development of safe harbor statutes based only upon solvent reorganizations. In addition, it was thought that the development of such statutes would best be accomplished by utilizing the discrete version of the proportion variable and the combined version of the disquisive aspects factor. The rationale for this decision included both intuitive support and the fact that the model with these characteristics (Model #8) produced the best empirical results.

In conclusion, the inferences to be drawn with respect to Research Question #1 are threefold. First, it was concluded that Model #8 does, in fact, reflect the essence of the Tax Court's assessment of continuity of interest for solvent corporate reorganizations. Second, a general consensus of opinion (based upon a review of prior literature) appears to exist to the effect that the Tax Court has done an equitable job of applying continuity of interest in the past (the need for safe harbor statutes, then, stems from the subjectivity of the judicial assessment which

has tended to prevent taxpayers from taking undue risks). Therefore, the variables identified as significant in Model #8 (the discrete proportion variable, the combined version of the disquisive aspects factor, and substantive changes in the operating environment of the absorbed corporation) provide a valid basis for the development of safe harbor statutes which reproduce the equitable assessment of the Tax Court without resulting in concomitantly high levels of subjectivity and uncertainty.

Research Question #2

In as much as each of the eight models utilized with respect to Research Question #1 involved the classification of a set of cases by a model based on these same cases, the possibility of an upward bias existing in the classification accuracies merited attention. Therefore, a procedure was undertaken to assess whether any substantial degree of upward bias did exist. This procedure was applied to the logit model which was deemed to possess the most efficient research parameters -- the discrete proportion variable, the combined disquisive aspects variable and the restricted-population scope. This model (#8) resulted in an internal classification accuracy of 100%. By randomly withdrawing small subsets of cases from the restricted population and then utilizing a model based on the remaining cases, a classification accuracy (adjusted for upward

biasness) of 94% was produced. Thus, it was concluded that the overall degree of upward biasness was not substantial enough to materially alter the analysis of Research Question #1.

Research Question #3

Another potential complication with respect to interpreting the results of the study involved a question of temporal stability. That is, given the relatively long period of time during the continuity of interest litigation had taken place, no assurance existed to the effect that the Tax Court had been applying the independent variables consistently over time. In order to assess the study's temporal stability, an event (the enactment of the 1954 Internal Revenue Code) was identified which could have materially altered the judiciary's assessment of the doctrine. By comparing the criteria produced by models based on the pre-1954 and post-1954 cases, the conclusion was reached that a substantial degree of temporal stability did exist in the study.

Research Question #4

The final research issue of the study involved an assessment of possible differences between the Tax Court's assessment of continuity of interest and those of either the District Court or the Court of Claims. Since non-Tax Court litigation was not sufficient for the development

of separate models, this analysis was restricted to utilizing the Tax Court model to classify the independent District Court and Court of Claims cases. The results of this procedure indicated that some differences do exist between the alternative forums and that these differences appear to focus primarily on how strictly the doctrine is enforced. That is, it appears that cases which would probably result in an adverse Tax Court decision would have a greater probability of success in either the District Court or the Court of Claims.

VALIDITY OF THE STUDY

A major consideration with respect to reviewing the results of the study involves an assessment of the study's validity. Two aspects of this assessment merit specific attention -- the internal and external validity.

Internal validity essentially relates to an assurance that the study is actually measuring or evaluating the research issue that it purports to be measuring. Perhaps the most positive aspect relating to this study's internal validity involves the general presence of intuitive support for both methodological assumptions made in the study and specific findings that were reached. The presence of a strong a priori basis for the primary research issues enhances the reliability of the conclusions. That is, the

fact that the variables identified as significant in the study were strongly correlated with the qualitative assessments of continuity of interest by prior researchers tends to suggest that the findings are based on the essence of the Tax Court assessment and not on mere random chance. This added reliance helps offset several weaknesses that exist with respect to the internal validity.

The weaknesses that do exist included the following. First, several problems were encountered with respect to the measurement of the study's data. The fact that the source for the data consisted of the opinions of the ruling judges resulted in a possibility that the judges might not report the evidence in an impartial manner (this possibility was offset by the existence of courts of appeal which tends to encourage the judiciary to clearly set out the grounds for their decisions). And, second, an assumption was made that, if a particular factor was not mentioned by the judiciary, then the factor was either not present or immaterial in degree. Finally, it was necessary to alter the substance of the proportion variable (#3-A) by either converting it to a discrete variable or arithmetically adjusting it so as to maintain it as continuous. While these weaknesses necessarily cast some questions as to the internal validity of the study, the strong intuitive support that existed for the assumptions and

adjustments was perceived to be strong enough to sufficiently ameliorate the problems.

A different weakness also existed with respect to the methodological structure of the study. That is, in order to maximize the study's data base, it was decided to not withhold sets of cases with which to undertake a direct and independent assessment of the model's performance. Thus, a degree of upward biasness almost certainly was inherent in the study's results. However, it was possible to devise a procedure with which to adequately ascertain that the degree of bias in the study was relatively limited in nature.

A final weakness with respect to internal validity involved an assumption that equal costs of misclassification existed in the study. Such a condition is almost certainly not the case since the prospect of predicting that a reorganization will be acceptable and then having it fail in the courts would result in considerable hardship to the taxpayers. On the other hand, predicting that a reorganization will not be acceptable when it actually would pass the scrutiny of the courts would ordinarily result in a change in taxpayer strategy and not in direct taxation. However, this weakness is not as crucial as it might appear since the primary intended use of the study's results was not to predict future judicial assessments.

Rather, the primary goal was to develop safe harbor statutes which reflect the essence of a judicial assessment that has consistently been given high marks by authoritative commentators as equitable to all parties concerned. Therefore, the presence of problems relating to costs of misclassification does not significantly affect the main thrust of the study.

External validity, the second aspect that merited attention, relates to the degree of confidence with which the conclusions of the study may be generalized to situations outside of the study's data. Once more, given the aforementioned primary aim of the analysis, this aspect of validity does not appear to be as important as the internal aspect. That is, the primary aim does not involve a direct application of the research conclusions to predict the outcome of independent cases. However, the external validity is still important because it does constitute an intrinsic component of the overall methodological structure.

The only major problem with respect to external validity appears to involve the fact that the conclusions of the study are solely based on litigated cases involving continuity of interest (to the exclusion of probably more numerous non-litigated reorganizations). Thus, the possibility exists that factors may exist which by their very

nature are so influential that they decide the continuity issue without any need to litigate the issue. Such factors, then, might not be demonstrated in an analysis of only litigated cases. However, this possibility is extremely slight in this study since such an influential factor would surely have been prominently discussed in prior qualitative research.

RECOMMENDATIONS FOR FUTURE RESEARCH

Perhaps the most interesting continuation of this study involves the probable growing number of private letter rulings that should result from Revenue Procedure 77-37. These rulings should produce a much clearer perception of how the service assesses continuity of interest (this perception would be one-sided, however, since the Procedure requires a minimum percentage of 50% for the proportion variable). However, the rulings would allow a comparison of how the Tax Court model assesses reorganizations involving substantial proportion variables as opposed to the Service. If significant differences exist, then insight may be produced as to whether the courts or the Service is more closely adhering to the legislative intent in the reorganization area.

A second possible refinement of the study involves the fact that the study generally assumed that all Tax

Court judges possessed essentially uniform levels of expertise and that each separate assessment of continuity of interest was substantially consistent with all others. While this was a reasonable assumption, it might be interesting to conduct a sensitivity analysis to see if, in fact, the differing Tax Court judges themselves had an impact on the outcome.

APPENDIX A

SUMMARY OF INDEPENDENT VARIABLES

- 1-A Nature of the equity interests surrendered by shareholders of the absorbed corporation.
- 2-A Nature of the equity interests retained in the surviving entity by shareholders of the absorbed corporation.
- 3-A Proportion of the total value exchanged in the reorganization that was transferred in exchange for equity interests.
- 4-A Existence of a plan among the absorbed corporation's shareholders to dispose of equity interests retained in the surviving entity.
- 5-B Existence of a transaction related to the reorganization occurring between the reorganization parties prior to the actual transaction.
- 6-B Existence of a transaction related to the reorganization occurring between the reorganization parties subsequent to the actual transaction.
- 7-B Existence of either Variable 5-B or 6-B.
- 8-B Existence of a transaction related to the reorganization involving an independent third party.
- 11-C Existence of a sound business purpose for the reorganization (as opposed to tax avoidance motives).
- 12-C Continuation of operations subsequent to the reorganization by the absorbed corporation in substantially the same manner as before the reorganization.
- 13-C Existence of an event which fundamentally altered the environment in which the absorbed corporation had operated.

#	CASE/ CITATION	BANKRUPT vs NONBANK.	Var. 1-A	Var. 2-A	Var. 3-A (Discrete)	Var. 3-A (Cont)	Var. 4-A	Var. 5-B
1.	Adamston Glass Co. 7 TC 493	Bank.	Debt	Common Stock	Low	N/A	No	No
2.	Aetna Casualty Co. 403 F.Supp. 498	Bank.	Debt	Common Stock	High	N/A	No	No
3.	Alabama Asph. Co. 41 BTA 324	Bank.	Debt	Common Stock	High	100%	No	No
4.	Alcazar Hotel Corp. 1 TC 872	Bank.	Debt	Common Stock	High	100%	No	No
5.	American Bronze Co. 64 TC 1111	Non.	Common Stock	Common Stock	High	100%	No	No
6.	American Light Co. 42 BTA 1121	Non.	Common Stock	Common Stock	Low	5%	No	No
7.	Amer. Wire Fabrics 16 TC 607	Non.	Common Stock	Common Stock	Medium	36%	No	Yes
8.	Atlas Oil & Rfg. 36 TC 675	Bank.	Debt	Common Stock	High	N/A	No	No
9.	Atlas Tool Co. 70 TC 86	Bank.	Debt	Common Stock	High	N/A	No	No

#	CASE/ CITATION	Var. 6-B	Var. 7-B	Var. 8-B	Var. 11-C	Var. 12-C	Var. 13-C
1.	Adamston Glass Co. 7 TC 493	No	No	No	Business Purpose	Yes	No
2.	Aetna Casualty Co. 403 F.Supp. 498	No	No	NO	Business Purpose	Yes	No
3.	Alabama Asph. Co. 41 BTA 324	No	No	No	Business Purpose	Yes	No
4.	Alcazar Hotel Corp. 1 TC 872	No	No	No	Business Purpose	Yes	No
5.	American Bronze Co. 64 TC 1111	No	No	No	Business Purpose	Yes	No
6.	American Light Co. 42 BTA 1121	No	No	No	Business Purpose	Yes	No
7.	Amer. Wire Fabrics 16 TC 607	No	Yes	No	Combination	Yes	No
8.	Atlas Oil & Rfg. 36 TC 675	No	No	No	Business Purpose	Yes	No
9.	Atlas Tool Co. 70 TC 86	No	No	No	Business Purpose	Yes	No

#	CASE/ CITATION	BANKRUPT vs NONBANK.	Var. 1-A	Var. 2-A	Var. 3-A (Discrete)	Var. 3-A (Cont)	Var. 4-A	Var. 5-B
10.	Avco Mfg. Co. 25 TC 975	Bank.	Debt	Common Stock	High	N/A	No	No
11.	Barker, F. 28 BTA 657	Non.	Common Stock	Common Stock	High	52%	No	No
12.	Bashford, L. 33 BTA 10	Non.	Comm. & Pref. St.	Common Stock	High	N/A	No	No
13.	Bateman, W. 40 TC 408	Non.	Common Stock	Common Stock	High	N/A	No	No
14.	Bausch & Lomb Opt. 30 TC 602	Non.	Common Stock	Comm. & Pref. St.	High	80%	Yes	No
15.	Becher, E. 22 TC 932	Non.	Common Stock	Common Stock	High	100%	No	No
16.	Bedford, F. 2 TC 1200	Non.	Pref. Stock	Subs. Stock	High	N/A	No	No
17.	Berch, J. 35 BTA 385	Non.	Common Stock	Common Stock	High	N/A	Yes	No
18.	Berner, T.R. 151 Ct.Cl. 128	Non.	Common Stock	Common Stock	Low	N/A	No	No

#	CASE/ CITATION	Var. 6-B	Var. 7-B	Var. 8-B	Var. 11-C	Var. 12-C	Var. 13-C
10.	Avco Mfg. Co. 25 TC 975	Yes	Yes	No	Tax Motives	No	No
11.	Barker, F. 28 BTA 657	No	No	No	Business Purpose	Yes	No
12.	Bashford, L. 33 BTA 10	No	No	No	Business Purpose	Yes	No
13.	Bateman, W. 40 TC 408	No	No	No	Business Purpose	Yes	No
14.	Bausch & Lomb Opt. 30 TC 602	Yes	Yes	No	Business Purpose	Yes	No
15.	Becher, E. 22 TC 932	No	No	No	Business Purpose	Yes	Yes
16.	Bedford, F. 2 TC 1200	No	No	No	Business Purpose	Yes	No
17.	Berch, J. 35 BTA 385	Yes	Yes	No	Tax Motives	Yes	No
18.	Berner, T.R. 151 Ct.Cl. 128	No	No	No	Business Purpose	Yes	No

#	CASE/ CITATION	BANKRUPT vs NONBANK.	Var. 1-A	Var. 2-A	Var. 3-A (Discrete)	Var. 3-A (Cont)	Var. 4-A	Var. 5-B
19.	Berghash, G. 32 TC 80	Non.	Common Stock	Common Stock	Medium	45%	No	No
20.	Bullock, G. 26 TC 276	Non.	Comm. & Pref. St.	Comm. & Pref. St.	High	N/A	No	No
21.	Burns, R. 30 BTA 163	Non.	Common Stock	Common Stock	Low	21%	No	No
22.	Calcote, H. 327 F.Supp. 363	Bank.	Debt	Common Stock	High	N/A	No	No
23.	Campbell, R. 15 TC 312	Non.	Common Stock	Common Stock	High	N/A	No	No
24.	Capento Securities 47 BTA 691	Bank.	Debt	Pref. Stock	High	100%	No	No
25.	Capital S&L Ass'n 607 F.2d 970	Non.	Common Stock	Common Stock	Low	N/A	No	No
26.	Central Ks. Telephone PH TCM 43,151	Non.	Common Stock	Common Stock	Medium	39%	Yes	Yes
27.	Chase, G. 44 BTA 39	Non.	Common Stock	Common Stock	High	95%	No	No

#	CASE/ CITATION	Var. 6-B	Var. 7-B	Var. 8-B	Var. 11-C	Var. 12-C	Var. 13-C
19.	Berghash, G. 32 TC 80	Yes	Yes	No	Business Purpose	Yes	No
20.	Bullock, G. 26 TC 276	Yes	Yes	No	Business Purpose	No	Yes
21.	Burns, R. 30 BTA 163	No	No	No	Combination	Yes	No
22.	Calcote, H. 327 F.Supp. 363	No	No	No	Business Purpose	Yes	No
23.	Campbell, R. 15 TC 312	No	No	No	Business Purpose	Yes	No
24.	Capento Securities 47 BTA 691	No	No	No	Business Purpose	Yes	No
25.	Capital S&L Ass'n 607 F.2d 970	No	No	No	Business Purpose	Yes	No
26.	Central Ks. Telephone PH TCM 43,151	No	Yes	No	Combination	Yes	No
27.	Chase, G. 44 BTA 39	No	No	Yes	Business Purpose	Yes	No

#	CASE/ CITATION	BANKRUPT vs NONBANK.	Var. 1-A	Var. 2-A	Var. 3-A (Discrete)	Var. 3-A (Cont)	Var. 4-A	Var. 5-B
28.	Cinocca, J. 400 F.Supp. 527	Non.	Common Stock	Common Stock	High	N/A	No	No
29.	Claridge Apartments 1 TC 163	Bank.	Debt	Common Stock	High	N/A	No	No
30.	Clyde Bacon, Inc. 4 TC 1107	Non.	Common Stock	Common Stock	High	N/A	No	No
31.	Coleman, W.C. 31 BTA 319	Non.	Common Stock	Comm. & Pr. St.	High	N/A	No	No
32.	Columbia Gas Co. 177 Ct.Cl. 97	Non.	Common Stock	Common Stock	High	N/A	No	Yes
33.	Connohio, Inc. PH TCM 50,295	Bank.	Debt	Common Stock	High	100%	No	No
34.	Cons. Office Bldg. 29 TC 479	Bank.	Debt	Common Stock	High	N/A	No	No
35.	Corpus Christi, Inc. 38 BTA 944	Non.	Common Stock	Common Stock	High	60%	No	No
36.	Detr.-Mich. Stove Co 121 F.Supp. 892	Non.	Common Stock	Common Stock	High	N/A	No	No

#	CASE/ CITATION	Var. 6-B	Var. 7-B	Var. 8-B	Var. 11-C	Var. 12-C	Var. 13-C
28.	Cinocca, J. 400 F.Supp. 527	No	No	No	Combination	Yes	No
29.	Claridge Apartments 1 TC 163	No	No	No	Business Purpose	Yes	No
30.	Clyde Bacon, Inc. 4 TC 1107	No	No	No	Business Purpose	Yes	No
31.	Coleman, W.C. 31 BTA 319	No	No	No	Business Purpose	Yes	No
32.	Columbia Gas Co. 177 Ct.Cl. 97	No	Yes	No	Business Purpose	Yes	No
33.	Connohio, Inc. PH TCM 50,295	No	No	No	Business Purpose	Yes	No
34.	Cons. Office Bldg. 29 TC 479	No	No	No	Business Purpose	Yes	No
35.	Corpus Christi, Inc. 38 BTA 944	No	No	No	Business Purpose	Yes	No
36.	Detr.-Mich. Stove Co. 121 F.Supp. 892	No	No	No	Business Purpose	Yes	No

#	CASE/ CITATION	BANKRUPT vs NONBANK.	Var. 1-A	Var. 2-A	Var. 3-A (Discrete)	Var. 3-A (Cont)	Var. 4-A	Var. 5-B
37.	Dohme, A.L. 31 BTA 671	Non.	Common Stock	Common Stock	Low	N/A	No	No
38.	Dolomite, Inc. 28 BTA 1271	Non.	Common Stock	Pref. Stock	High	N/A	Yes	No
39.	Douglas, D. 37 BTA 1122	Non.	Common Stock	Common Stock	High	95%	No	No
40.	Duncan, A. 9 TC 468	Bank.	Debt	Common Stock	High	N/A	No	No
41.	El Pomar Inv. Co. 210 F.Supp. 333	Bank.	Debt	Common Stock	Low	N/A	No	No
42.	Erdman, E. 4 CCH TCM 63	Bank.	Debt	Common Stock	High	100%	No	No
43.	Ericson Screw Co. 14 TC 757	Non.	Common Stock	Common Stock	High	N/A	No	No
44.	Farr, R. 24 TC 350	Non.	Common Stock	Common Stock	High	N/A	No	No
45.	FEC Liquidating Co. 212 Ct.Cl. 345	Bank.	Debt	Common Stock	High	100%	No	No

#	CASE/ CITATION	Var. 6-B	Var. 7-B	Var. 8-B	Var. 11-C	Var. 12-C	Var. 13-C
37.	Dohme, A.L. 31 BTA 671	No	No	No	Business Purpose	Yes	No
38.	Dolomite, Inc. 28 BTA 1271	Yes	Yes	No	Business Purpose	Yes	No
39.	Douglas, D. 37 BTA 1122	No	No	No	Business Purpose	Yes	No
40.	Duncan, A. 9 TC 468	No	No	No	Business Purpose	Yes	No
41.	El Pomar Inv. Co. 210 F.Supp. 333	No	No	No	Business Purpose	Yes	No
42.	Erdman, E. 4 CCT TCM 63	No	No	No	Combination	Yes	No
43.	Ericson Screw Co. 14 TC 757	Yes	Yes	No	Combination	Yes	No
44.	Farr, R. 24 TC 350	No	No	No	Business Purpose	Yes	Yes
45.	FEC Liquidating Co. 212 Ct.Cl. 345	No	No	No	Business Purpose	Yes	No

#	CASE/ CITATION	BANKRUPT vs NONBANK.	Var. 1-A	Var. 2-A	Var. 3-A (Discrete)	Var. 3-A (Cont)	Var. 4-A	Var. 5-B
46.	1st Federal S&L 452 F.Supp. 32	Non.	Common Stock	Common Stock	High	N/A	No	Yes
47.	Flanders, E. 33 BTA 483	Non.	Common Stock	Common Stock	High	80%	Yes	No
48.	Fleischman, D. 40 BTA 672	Non.	Common Stock	Common Stock	High	92%	No	No
49.	Gage Brothers Co. 13 TC 472	Bank.	Debt	Common Stock	High	N/A	No	No
50.	Gallagher, R. 39 TC 144	Non.	Common Stock	Common Stock	High	72%	No	No
51.	General Housewares 488 F.Supp. 926	Bank.	Debt	Common Stock	High	N/A	No	No
52.	George, W. 26 TC 396	Non.	Common Stock	Common Stock	High	N/A	No	No
53.	Gilmore, A. 44 BTA 881	Non.	Common Stock	Comm. & Pr. St.	High	100%	No	No
54.	Goldstein Bros. 23 TC 1047	Bank.	Debt	Common Stock	Low	19%	No	No

#	CASE/ CITATION	Var. 6-B	Var. 7-B	Var. 8-B	Var. 11-C	Var. 12-C	Var. 13-C
46.	1st Federal S&L 452 F.Supp. 32	No	Yes	No	Combination	Yes	No
47.	Flanders, E. 33 BTA 483	Yes	Yes	No	Tax Motives	Yes	No
48.	Fleischman, D. 40 BTA 672	No	No	No	Business Purpose	Yes	No
49.	Gage Brothers Co. 13 TC 472	No	No	No	Business Purpose	Yes	No
50.	Gallagher, R. 39 TC 144	No	No	No	Business Purpose	Yes	No
51.	General Housewares 488 F.Supp. 926	No	No	No	Business Purpose	Yes	No
52.	George, W. 26 TC 396	No	No	No	Business Purpose	Yes	Yes
53.	Gilmore, A. 44 BTA 881	No	No	Yes	Combination	Yes	No
54.	Goldstein Bros. 23 TC 1047	No	No	No	Business Purpose	Yes	No

#	CASE/ CITATION	BANKRUPT vs NONBANK.	Var. 1-A	Var. 2-A	Var. 3-A (Discrete)	Var. 3-A (Cont)	Var. 4-A	Var. 5-B
55.	Graham, G. 37 BTA 623	Non.	Common Stock	Common Stock	Low	10%	No	No
56.	Grubbs, D. 39 TC 42	Non.	Common Stock	Pref. Stock	High	N/A	No	No
57.	H. Grady Manning Trust 15 TC 930	Non.	Comm. & Pr. St.	Common Stock	High	N/A	No	No
58.	Heintz, R. 25 TC 123	Non.	Common Stock	Pref. Stock	Medium	38%	Yes	No
59.	Hempt Bros., Inc. 354 F.Supp. 1172	Bank.	Debt	Common Stock	High	N/A	No	No
60.	Hill, E. 10 TC 1090	Non.	Common Stock	Common Stock	High	N/A	No	No
61.	Hoagland, A. 42 BTA 13	Non.	Common Stock	Common Stock	High	60%	No	No
62.	Hoboken, T. 46 BTA 495	Non.	Common Stock	Common Stock	High	N/A	No	No
63.	Holliman, G. 275 F.Supp. 927	Non.	Common Stock	Common Stock	High	N/A	No	No

#	CASE/ CITATION	Var. 6-B	Var. 7-B	Var. 8-B	Var. 11-C	Var. 12-C	Var. 13-C
55.	Graham, G. 37 BTA 623	No	No	No	Business Purpose	Yes	No
56.	Grubbs, D. 39 TC 42	No	No	No	Business Purpose	Yes	No
57.	H. Grady Manning Tr. 15 TC 930	No	No	No	Business Purpose	Yes	No
58.	Heintz, R. 25 TC 123	Yes	Yes	No	Combination	Yes	No
59.	Hempt Bros., Inc. 354 F.Supp. 1172	No	No	No	Business Purpose	No	No
60.	Hill, E. 10 TC 1090	No	No	No	Business Purpose	Yes	Yes
61.	Hoagland, A. 42 BTA 13	No	No	No	Business Purpose	Yes	No
62.	Hoboken, T. 46 BTA 495	No	No	No	Business Purpose	Yes	No
63.	Holliman, G. 275 F.Supp. 927	No	No	No	Business Purpose	Yes	No

#	CASE/ CITATION	BANKRUPT vs NONBANK.	Var. 1-A	Var. 2-A	Var. 3-A (Discrete)	Var. 3-A (Cont)	Var. 4-A	Var. 5-B
64.	Home S&L Ass'n 73-1 USTC 9178	Non.	Common Stock	Common Stock	High	79%	No	No
65.	Howard, H. 24 TC 792	Non.	Common Stock	Common Stock	High	N/A	Yes	No
66.	Ill. Water Services 2 TC 1200	Non.	Common Stock	Common Stock	Medium	41%	No	No
67.	Industry Prop., Inc. 4 CCH TCM 1118	Bank.	Debt	Common Stock	High	100%	No	No
68.	Jeffers, L. 214 Ct.Cl. 345	Non.	Common Stock	Common Stock	High	100%	No	No
69.	Kass, M. 60 TC 218	Non.	Common Stock	Common Stock	High	82%	No	Yes
70.	King Enterprises 418 F.Supp. 511	Bank.	Debt	Common Stock	High	100%	No	No
71.	Kleeden, M. 38 BTA 821	Non.	Common Stock	Common Stock	High	100%	No	No
72.	Lammerts, H. 54 TC 420	Non.	Common Stock	Comm. & Pr. St.	Low	25%	No	No

#	CASE/ CITATION	Var. 6-B	Var. 7-B	Var. 8-B	Var. 11-C	Var. 12-C	Var. 13-C
64.	Home S&L Ass'n 73-1 USTC 9178	No	No	No	Business Purpose	Yes	No
65.	Howard, H. 24 TC 792	Yes	Yes	No	Combination	Yes	No
66.	Ill. Water Services 2 TC 1200	No	No	No	Business Purpose	Yes	No
67.	Industry Prop., Inc. 4 CCH TCM 1118	No	No	No	Business Purpose	Yes	No
68.	Jeffers, L. 214 Ct.Cl. 345	No	No	No	Business Purpose	Yes	No
69.	Kass, M. 60 TC 218	No	Yes	No	Business Purpose	Yes	No
70.	King Enterprises 418 F.Supp. 511	No	No	No	Business Purpose	Yes	No
71.	Kleeden, M. 38 BTA 821	No	No	No	Business Purpose	Yes	No
72.	Lammerts, H. 54 TC 420	No	No	No	Business Purpose	Yes	No

#	CASE/ CITATION	BANKRUPT vs NONBANK.	Var. 1-A	Var. 2-A	Var. 3-A (Discrete)	Var. 3-A (Cont)	Var. 4-A	Var. 5-B
73.	Laure, G. 70 TC 1087	Bank.	Debt	Common Stock	High	N/A	No	Yes
74.	Leary, E. 34 BTA 1206	Non.	Common Stock	Common Stock	High	80%	No	No
75.	Leckie, F. 37 BTA 252	Bank.	Debt	Common Stock	High	97%	No	No
76.	Long Island Water 36 TC 377	Non.	Common Stock	Common Stock	High	N/A	No	Yes
77.	Louis, J. 10 TC 1080	Non.	Common Stock	Common Stock	High	N/A	No	No
78.	Madison Sq. Garden 58 TC 619	Non.	Common Stock	Common Stock	High	80%	No	Yes
79.	Master Key Co. 454 F.Supp. 32	Non.	Common Stock	Common Stock	High	100%	No	No
80.	McCullough, J. 344 F.2d 383	Non.	Common Stock	Common Stock	High	N/A	No	No
81.	McNabb, P. 33 BTA 192	Non.	Common Stock	Common Stock	Low	N/A	No	No

#	CASE/ CITATION	Var. 6-B	Var. 7-B	Var. 8-B	Var. 11-C	Var. 12-C	Var. 13-C
73.	Laure, G. 70 TC 1087	No	Yes	No	Tax Motives	No	No
74.	Leary, E. 34 BTA 1206	No	No	No	Business Purpose	Yes	No
75.	Leckie, F. 37 BTA 252	No	No	No	Business Purpose	Yes	No
76.	Long Island Water 36 TC 377	No	No	No	Business Purpose	Yes	No
77.	Louis, J. 10 TC 1080	No	Yes	No	Combination	Yes	No
78.	Madison Sq. Garden 58 TC 619	No	Yes	No	Combination	Yes	No
79.	Master Key Co. 454 F.Supp. 32	No	No	No	Business Purpose	Yes	No
80.	McCullough, J. 344 F.2d 383	No	No	No	Business Purpose	Yes	No
81.	McNabb, P. 33 BTA 192	No	No	No	Business Purpose	Yes	No

#	CASE/ CITATION	BANKRUPT vs NONBANK.	Var. 1-A	Var. 2-A	Var. 3-A (Discrete)	Var. 3-A (Cont)	Var. 4-A	Var. 5-B
82.	McDonalds of Zion 54-2 USTC 9436	Non.	Common Stock	Common Stock	High	N/A	No	No
83.	Mellon, A. 36 BTA 977	Non.	Common Stock	Common Stock	High	N/A	Yes	No
84.	Menefee, G. 46 BTA 865	Non.	Common Stock	Common Stock	High	100%	No	No
85.	Meyer, L. 129 Ct.Cl. 214	Non.	Common Stock	Common Stock	Low	26%	Yes	No
86.	Michigan Limestone 26 BTA 928	Non.	Common Stock	Common Stock	High	100%	No	No
87.	Michigan Steel Corp. 38 BTA 425	Non.	Common Stock	Common Stock	Low	25%	No	No
88.	Miller, G. 17 TC 1308	Non.	Common Stock	Common Stock	High	59%	No	No
89.	Miller & Paine, Inc. 42 BTA 586	Non.	Common Stock	Common Stock	High	N/A	No	No
90.	Millon, R. 12 TC 90	Non.	Common Stock	Common Stock	Low	19%	No	No

#	CASE/ CITATION	Var. 6-B	Var. 7-B	Var. 8-B	Var. 11-C	Var. 12-C	Var. 13-C
82.	McDonalds of Zion 54-2 USTC 9436	No	No	No	Combination	Yes	No
83.	Mellon, A. 36 BTA 977	Yes	Yes	No	Tax Motives	Yes	No
84.	Menefee, G. 46 BTA 865	No	No	No	Business Purpose	Yes	No
85.	Meyer, L. 129 Ct.Cl. 214	Yes	Yes	No	Business Purpose	Yes	No
86.	Michigan Limestone 26 BTA 928	No	No	No	Business Purpose	Yes	No
87.	Michigan Steel Corp. 38 BTA 425	No	No	No	Business Purpose	Yes	No
88.	Miller, G. 17 TC 1308	No	No	No	Business Purpose	Yes	No
89.	Miller & Paine, Inc. 42 BTA 586	No	No	No	Business Purpose	Yes	No
90.	Millon, R. 12 TC 90	No	No	Yes	Combination	Yes	No

#	CASE/ CITATION	BANKRUPT vs NONBANK.	Var. 1-A	Var. 2-A	Var. 3-A (Discrete)	Var. 3-A (Cont)	Var. 4-A	Var. 5-B
91.	Minnesota Tea Co. 28 BTA 591	Non.	Common Stock	Common Stock	Low	8%	No	No
92.	Mont. Dak. Utilities 25 TC 408	Bank.	Debt	Common Stock	High	100%	Yes	No
93.	Montgomery Bldg. Co. 7 TC 417	Bank.	Debt	Comm. & Pr. St.	High	100%	No	No
94.	Morgan Mfg. Co. 28 TC 837	Non.	Common Stock	Common Stock	High	N/A	Yes	No
95.	Morley Cypress Trust 3 TC 84	Non.	Common Stock	Common Stock	High	100%	No	No
96.	Morris Trust 42 TC 779	Non.	Common Stock	Common Stock	High	100%	No	No
97.	Movielab, Inc. 204 Ct.Cl. 6	Non.	Common Stock	Common Stock	High	N/A	No	No
98.	Murrin, J. 24 TC 502	Non.	Common Stock	Common Stock	High	58%	No	No
99.	Muskegon Motors Co. 45 BTA 551	Non.	Common Stock	Common Stock	High	N/A	No	No

#	CASE/ CITATION	Var. 6-B	Var. 7-B	Var. 8-B	Var. 11-C	Var. 12-C	Var. 13-C
91.	Minnesota Tea Co. 28 BTA 591	No	No	No	Business Purpose	Yes	No
92.	Mont. Dak. Utilities 25 TC 408	Yes	Yes	No	Business Purpose	Yes	No
93.	Montgomery Bldg. Co. 7 TC 417	No	No	No	Business Purpose	Yes	No
94.	Morgan Mfg. Co. 28 TC 837	Yes	Yes	No	Combination	Yes	No
95.	Morley Cypress Trust 3 TC 84	No	No	No	Business Purpose	Yes	No
96.	Morris Trust 42 TC 779	No	No	No	Business Purpose	Yes	Yes
97.	Movielab, Inc. 204 Ct.Cl. 6	No	No	No	Business Purpose	Yes	No
98.	Murrin, J. 24 TC 502	No	No	No	Business Purpose	Yes	No
99.	Muskegon Motors Co. 45 BTA 551	No	No	No	Business Purpose	Yes	Yes

#	CASE/ CITATION	BANKRUPT vs NONBANK.	Var. 1-A	Var. 2-A	Var. 3-A (Discrete)	Var. 3-A (Cont)	Var. 4-A	Var. 5-B
100.	Nadeau, H. 181 F.Supp. 752	Non.	Common Stock	Common Stock	High	N/A	No	No
101.	Neidich, S. 38 BTA 1178	Non.	Common Stock	Subs. Stock	High	100%	No	No
102.	NJ Mortgage Co. 3 TC 1277	Non.	Common Stock	Common Stock	High	100%	No	No
103.	Newton, J. 42 BTA 473	Bank.	Debt	Common Stock	High	100%	No	No
104.	Norman Scott, Inc. 48 TC 598	Bank.	Debt	Common Stock	High	N/A	No	No
105.	NW Terra Cotta Corp 34 TC 886	Bank.	Debt	Common Stock	High	N/A	Yes	No
106.	Peabody Hotel, Inc. 7 TC 600	Bank.	Debt	Common Stock	High	69%	No	No
107.	Pickard, S. 40 BTA 258	Non.	Common Stock	Common Stock	High	100%	Yes	Yes
108.	Pierson, J. 472 F.Supp. 957	Non.	Common Stock	Common Stock	High	N/A	No	No

#	CASE/ CITATION	Var. 6-B	Var. 7-B	Var. 8-B	Var. 11-C	Var. 12-C	Var. 13-C
100.	Nadeau, H. 181 F.Supp. 752	No	No	No	Business Purpose	Yes	No
101.	Neidich, S. 38 BTA 1178	No	No	No	Business Purpose	Yes	No
102.	NJ Mortgage Co. 3 TC 1277	No	No	No	Business Purpose	Yes	No
103.	Newton, J. 42 BTA 473	No	No	No	Business Purpose	Yes	No
104.	Norman Scott, Inc. 48 TC 598	No	No	No	Business Purpose	Yes	No
105.	NW Terra Cotta Corp. 34 TC 886	Yes	Yes	No	Combination	Yes	No
106.	Peabody Hotel, Inc. 7 TC 600	No	No	No	Business Purpose	Yes	No
107.	Pickard, S. 40 BTA 258	No	Yes	No	Tax Motives	Yes	No
108.	Pierson, J. 472 F.Supp. 957	No	No	No	Business Purpose	Yes	No

#	CASE/ CITATION	BANKRUPT vs NONBANK.	Var. 1-A	Var. 2-A	Var. 3-A (Discrete)	Var. 3-A (Cont)	Var. 4-A	Var. 5-B
109.	Pulfer, R. 43 BTA 677	Non.	Common Stock	Common Stock	Low	31%	No	Yes
110.	Rawco, Ltd. 37 BTA 128	Non.	Common Stock	Common Stock	High	59%	No	No
111.	Reilly Oil Co. 13 TC 919	Non.	Common Stock	Common Stock	High	69%	No	No
112.	Republic Nat'l Bank 9 TC1039	Non.	Common Stock	Common Stock	Low	13%	No	No
113.	Rex Mfg. Co. 37 BTA 984	Bank.	Debt	Comm. & Pr. St.	Medium	48%	No	No
114.	Robert Dollar Co. 18 TC 444	Non.	Comm. & Pr. St.	Comm. & Pr. St.	High	N/A	No	No
115.	Rockford B&T Co. 31 BTA 537	Bank.	Debt	Common Stock	High	N/A	No	No
116.	Rocky Mtn. S&L 473 F.Supp. 779	Non.	Common Stock	Common Stock	Low	N/A	No	Yes
117.	Roebling, F. PH TCM 43,324	Non.	Common Stock	Common Stock	High	100%	No	No

#	CASE/ CITATION	Var. 6-B	Var. 7-B	Var. 8-B	Var. 11-C	Var. 12-C	Var. 13-C
109.	Pulfer, R. 43 BTA 677	No	Yes	No	Business Purpose	Yes	No
110.	Rawco, Ltd. 37 BTA 128	No	No	No	Business Purpose	Yes	No
111.	Reilly Oil Co. 13 TC 919	No	No	No	Business Purpose	Yes	No
112.	Republic Nat'l Bank 9 TC 1039	No	No	No	Business Purpose	Yes	No
113.	Rex Mfg. Co. 37 BTA 984	No	No	No	Combination	No	No
114.	Robert Dollar Co. 18 TC 444	No	No	No	Business Purpose	Yes	Yes
115.	Rockford B&T Co. 31 BTA 537	No	No	No	Business Purpose	Yes	No
116.	Rocky Mtn. S&L 473 F.Supp. 779	No	Yes	No	Combination	Yes	No
117.	Roebling, F. PH TCM 43,324	No	No	No	Business Purpose	Yes	No

#	CASE/ CITATION	BANKRUPT vs NONBANK.	Var. 1-A	Var. 2-A	Var. 3-A (Discrete)	Var. 3-A (Cont)	Var. 4-A	Var. 5-B
118.	Roosevelt Hotel Co. 13 TC 399	Bank.	Debt	Common Stock	High	90%	No	No
119.	Russel, A. PH TCM 53,147	Bank.	Debt	Common Stock	High	67%	No	No
120.	San Ant. Transit Co. 30 TC 1215	Bank.	Debt	Common Stock	High	92%	No	No
121.	Schweitz & Conrad 41 BTA 533	Non.	Common Stock	Common Stock	High	61%	No	No
122.	Sheldon, I. 6 TC 510	Non.	Common Stock	Common Stock	High	N/A	No	No
123.	Simon, R. 185 Ct. Cl. 291	Non.	Common Stock	Common Stock	High	N/A	No	No
124.	Skenandoa Co. 42 BTA 1287	Non.	Pref. Stock	Pref. Stock	High	98%	No	No
125.	Skourac, G. 45 BTA 1224	Bank.	Debt	Common Stock	High	100%	No	No
126.	South Bay Corp. 41 TC 888	Non.	Common Stock	Common Stock	High	60%	No	No

#	CASE/ CITATION	Var. 6-B	Var. 7-B	Var. 8-B	Var. 11-C	Var. 12-C	Var. 13-C
118.	Roosevelt Hotel Co. 13 TC 399	No	No	No	Business Purpose	Yes	No
119.	Russel, A. PH TCM 53,147	No	No	No	Business Purpose	Yes	No
120.	San Ant. Transit Co. 30 TC 1215	No	No	No	Business Purpose	Yes	No
121.	Schweitz & Conrad 41 BTA 533	No	No	No	Business Purpose	Yes	No
122.	Sheldon, I. 6 TC 510	Yes	Yes	No	Combination	Yes	No
123.	Simon, R. 185 Ct.Cl. 291	No	No	No	Business Purpose	Yes	No
124.	Skenandoa Co. 42 BTA 1287	No	No	No	Business Purpose	Yes	No
125.	Skourac, G. 45 BTA 1224	No	No	No	Business Purpose	Yes	No
126.	South Bay Corp. 41 TC 888	No	No	No	Business Purpose	Yes	No

#	CASE/ CITATION	BANKRUPT vs NONBANK.	Var. 1-A	Var. 2-A	Var. 3-A (Discrete)	Var. 3-A (Cont)	Var. 4-A	Var. 5-B
127.	Southland Ice Co. 5 TC 842	Bank.	Debt	Common Stock	High	N/A	No	No
128.	Southwell Combing 30 TC 487	Non.	Common Stock	Common Stock	High	93%	Yes	No
129.	SW Natural Gas Co. 14 TC 81	Non.	Common Stock	Common Stock	Low	16%	No	No
130.	Spangler, C. 18 TC 976	Non.	Common Stock	Common Stock	High	N/A	No	No
131.	Standard Coal Co. 20 TC 208	Bank.	Debt	Common Stock	High	100%	No	No
132.	Standard Realiz. Co. 10 TC 708	Non.	Common Stock	Common Stock	High	N/A	Yes	No
133.	Stockman Life Ins. 73-2 USTC 9748	Non.	Common Stock	Common Stock	High	N/A	No	No
134.	Stoddard, L. 47 BTA 554	Bank.	Debt	Common Stock	High	N/A	No	No
135.	Survaunt, P. 5 TC 665	Non.	Common Stock	Common Stock	High	N/A	No	No

#	CASE/ CITATION	Var. 6-B	Var. 7-B	Var. 8-B	Var. 11-C	Var. 12-C	Var. 13-C
127.	Southland Ice Co. 5 TC 842	No	No	No	Business Purpose	Yes	No
128.	Southwell Combing 30 TC 487	Yes	Yes	No	Tax Motive	Yes	Yes
129.	SW Natural Gas Co. 14 TC 81	No	No	No	Business Purpose	Yes	No
130.	Spangler, C. 18 TC 976	No	No	No	Business Purpose	Yes	No
131.	Standard Coal Co. 20 TC 208	No	No	No	Business Purpose	Yes	No
132.	Standard Realiz. Co. 10 TC 708	Yes	Yes	No	Business Purpose	Yes	No
133.	Stockman Life Ins. 73-2 USTC 9748	No	No	No	Business Purpose	Yes	No
134.	Stoddard, L. 47 BTA 554	No	No	No	Business Purpose	Yes	No
135.	Survaunt, P. 5 TC 665	No	No	No	Business Purpose	Yes	No

#	CASE/ CITATION	BANKRUPT vs NONBANK.	Var. 1-A	Var. 2-A	Var. 3-A (Discrete)	Var. 3-A (Cont)	Var. 4-A	Var. 5-B
136.	Taylor- Wharton 5 TC 768	Bank.	Debt	Common Stock	High	100%	No	No
137.	Texas City Terminal 138 Ct.Cl. 739	Non.	Common Stock	Common Stock	High	N/A	No	No
138.	Thatcher, M. 46 BTA 869	Non.	Common Stock	Common Stock	Low	6%	No	Yes
139.	Truschel, W. 29 TC 433	Non.	Common Stock	Common Stock	Low	N/A	No	No
140.	United Gas Impr. 47 BTA 715	Bank.	Debt	Common Stock	High	100%	No	No
141.	United Power & Light 38 BTA 477	Non.	Common Stock	Common Stock	High	100%	No	No
142.	Ward, D. 29 BTA 1252	Non.	Comm. & Pr. St.	Common Stock	High	60%	No	No
143.	Warner Co. 26 BTA 1225	Non.	Common Stock	Common Stock	High	N/A	No	No
144.	West. Mass. Theater 24 TC 331	Bank.	Debt	Common Stock	Low	33%	No	No

#	CASE/ CITATION	Var. 6-B	Var. 7-B	Var. 8-B	Var. 11-C	Var. 12-C	Var. 13-C
136.	Taylor-Wharton 5 TC 768	No	No	No	Business Purpose	Yes	No
137.	Texas City Terminal 138 Ct.Cl. 739	No	No	No	Business Purpose	Yes	No
138.	Thatcher, M. 46 BTA 869	No	Yes	No	Business Purpose	Yes	No
139.	Truschel, W. 29 TC 433	No	No	No	Combination	Yes	No
140.	United Gas Impr. 47 BTA 715	No	No	No	Business Purpose	Yes	No
141.	United Power & Light 38 BTA 477	Yes	Yes	No	Business Purpose	Yes	No
142.	Ward, D. 29 BTA 1252	No	No	No	Business Purpose	Yes	No
143.	Warner Co. 26 BTA 1225	Yes	Yes	No	Business Purpose	Yes	No
144.	West. Mass. Theater 24 TC 331	Yes	Yes	No	Combination	Yes	No

#	CASE/ CITATION	BANKRUPT vs NONBANK.	Var. 1-A	Var. 2-A	Var. 3-A (Discrete)	Var. 3-A (Cont)	Var. 4-A	Var. 5-B
145.	Whitney Corp. 38 BTA 224	Non.	Common Stock	Common Stock	High	N/A	No	No
146.	Williams, T. 15 TC 474	Non.	Common Stock	Common Stock	High	N/A	No	No
147.	Williamson, F. 27 TC 647	Non.	Common Stock	Common Stock	High	100%	No	No
148.	Wilson, P. PH TCM 64,017	Non.	Common Stock	Common Stock	High	67%	No	No
149.	Woodard, J. 30 BTA 1216	Non.	Common Stock	Common Stock	High	N/A	No	No
150.	Yeaman, K. 69-2 USTC 9585	Non.	Common Stock	Common Stock	High	68%	No	No
151.	Yoc Heating Co. 61 TC 168	Non.	Common Stock	Common Stock	High	N/A	No	Yes
152.	Yuba Cons. Industr. 242 F.Supp. 561	Bank.	Debt	Common Stock	High	100%	No	No

#	CASE/ CITATION	Var. 6-B	Var. 7-B	Var. 8-B	Var. 11-C	Var. 12-C	Var. 13-C
145.	Whitney Corp. 38 BTA 224	Yes	Yes	No	Business Purpose	Yes	No
146.	Williams, T. 15 TC 474	No	No	No	Business Purpose	Yes	No
147.	Williamson, F. 27 TC 647	Yes	Yes	No	Business Purpose	Yes	No
148.	Wilson, P. PH TCM 64,017	No	No	No	Business Purpose	Yes	No
149.	Woodard, J. 30 BTA 1216	No	No	No	Business Purpose	Yes	No
150.	Yeaman, K. 69-2 USTC 9585	No	No	No	Business Purpose	Yes	No
151.	Yoc Heating Co. 61 TC 168	No	Yes	No	Business Purpose	No	No
152.	Yuba Cons. Industr. 242 F.Supp. 561	No	No	No	Business Purpose	Yes	No

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