

Southern Methodist University SMU Scholar

**Historical Working Papers** 

Cox School of Business

1-1-1983

# Strategy as Goals-Means Structure and Performance: An Empirical Examination

William R. Bigler, Jr. Southern Methodist University

Banwari L. Kedia Louisiana State University

Follow this and additional works at: https://scholar.smu.edu/business\_workingpapers

Part of the Business Commons

This document is brought to you for free and open access by the Cox School of Business at SMU Scholar. It has been accepted for inclusion in Historical Working Papers by an authorized administrator of SMU Scholar. For more information, please visit http://digitalrepository.smu.edu.

Research and Development School of Business Administration Soutcern Methodist University Dallas, Texas 75275

# STRATEGY AS GOALS-MEANS STRUCTURE AND PERFORMANCE: AN EMPIRICAL EXAMINATION

Working Paper 83-116\*

by

William R. Bigler, Jr.

and

Banwari L. Kedia

William R. Bigler, Jr. Department of Organizational Behavior Edwin L. Cox School of Business Southern Methodist University Dallas, Texas 75275

> Banwari L. Kedia Department of Management Louisiana State University Baton Rouge, Louisiana 70803

\*This paper represents a draft of work in progress by the authors and is being sent to you for information and review. Responsibility for the contents rests solely with the authors. This working paper may not be reproduced or distributed without the written consent of the authors. Please address all correspondence to William R. Bigler, Jr.



# STRATEGY AS GOALS-MEANS STRUCTURE AND PERFORMANCE: AN EMPIRICAL EXAMINATION

#### ABSTRACT

This paper conceptually and empirically examines the once heralded, now "revived" Goal Paradigm. Recent research in this area construes Goals-Means structures at the top management level as a component of strategy. This paper, following a different line of argument, argues and tests for the explanatory power of a Goals-Means structure on performance.



One of the prominent interests of strategy researchers is to conceptualize and operationalize strategic variables that explain variation in organization performance. Of many attempts in this regard, the recent work emanating from Industrial Organization (Porter 1980) and multidisciplinary research attempts such as Lenz (1980a, b), Hambrick, (1980), and Miles and Snow (1978, 1981) have made considerable advances. Additionally, there has been a return to the once heralded construct of goals and goal structures in an attempt to add to the explanation of performance. Bourgeois (1978, 1980a, b) and Ramasprasad and Knod (1981) have provided new perspectives in terms of viewing goals and goal structures as strategy.

At the theoretical level, both from conceptual as well as empirical bases, it is important to stipulate the level of strategy at which goal structure is operationalized. Bourgeois (1980b) outlines two levels of strategy making:

- "Domain definition strategy refers to the organization's choice of domain or change of domain that occurs when, for example, a firm diversifies into or exists from particular products or markets" (p. 27).
- 2. "Domain navigation strategy refers to competitive decisions made within a particular product-market or task environment' (p. 27).

The first type is primary strategy and sets the industry(ies) in which the firm will compete. The second type is secondary strategy and answers the question of how a firm competes in the chosen industries. It is within this area of second order strategy (Bourgeois, 1978:101) that goals and means ought to be operationally defined.

The purpose of this paper is to test a variation of Bourgeois (1978, 1980a). As such, we are also mainly interested in relating goals-means structure to performance at the level of second order strategy. However, our hypotheses are drawn from a slightly different argument than that of Bourgeois. Hopefully though, the results of this study can add to the discussion of the effect of goals-means structure as strategy on performance.

## THEORY AND RESEARCH

The focus and attempts of two groups of scholars have resulted in significant contribution to the theory and research on goals and goal structures. These are (1) Organization theorists, and (2) Strategy researchers. While the organization theorists have argued for and against the existence of goals and whether goals are really efficacious in producing any real effects of guidance, the strategy researchers have been concerned with whether goals can be and are set in a synoptic, consensus filled vision statement or emerge through incremental politicized processes. What follows is a brief review of these contributions.

## Contributions from Organization Theorists

According to Georgiou, the goal construct is established as a paradigm,<sup>1</sup> (Kuhn 1962) in that:

> the goal paradigm has become a procrustean bed into which all findings are forced and even incipient counter paradigms absorbed, regardless of their promise of greater insight. (Georgious, 1973:292)

As such, the goal construct is one that researchers have repeatedly returned to despite acerbic debate that the goal paradigm is a fiction. This debate has been well chronicled by Georgiou (1973), Hall (1977) and Mohr (1973) and will not be repeated here. However, it will be useful to provide the main points of the arguments that these researchers outline so as to provide an explicit argument for the position of the authors of this paper.

The argument against the goal paradigm (or why goals are difficult to formulate and attain) is supplied by at least four major fronts. First, the

question arises as to whether organizations as units have goals or are in existence to satisfy individual needs, desires and goals (Simon, 1964:2 and Barnard 1938:139). If the position is taken that organizations exist only to satisfy individual goals, it would be ontologically incorrect to speak of an organization goal. If this is the case, no goal directed activity in behalf of the organization could take place. Secondly, this problem is exacerbated by the fact that even if we could speak of the <u>organization</u> as possessing goal directed activity, organizations in practice are seen to exhibit multiple goals (Cyert and March, 1963:28). How then can multiple and sometimes conflicting goals provide for the needed rational guidance so that means can accomplish the goals?

Thirdly, formal goal (or goals) pronouncements, whether by the organization or individuals, can be vague and provide no guidance for action. Perrow (1961:855), in laying a hierarchical formulation for the analysis of goals, distinguished between formal goals which are general, all encompassing goals and operative goals or policies which are concerned with actual, day to day operations. In Perrow's scheme, formal goals can fall prey to vagueness but operative goals will save the day in terms of providing teleological guidance for action. Since no overriding goal has to provide the required guidance and cohesion, adherence to operative goals is accomplished as a result of habit (Hall, 1977:84)

Fourthly, even if organization goal(s) could be established, could provide for guidance, and means could be rationally formulated and allocated to achieve goals, the irrational component in human nature could not be eradicated. Selznick (1948:32) writes, "...organized action cannot escape involvement, a commitment to personnel or institutions, or procedures which qualifies the initial plan." Human inclinations can lay to waste the best laid plans of

organizations (<u>Business Week</u>, 1980). Additionally, goals can be displaced so that observed behavior does not conform to formal announcements for rational reasons (Michels, 1978:378), and goals can be subordinated to means (Merton, 1957) primarily through the mechanism of only rewarding behaviors associated with means.

With such arguments and evidence to the contrary, why do goals seem to continue to titillate the fancy of researchers and certainly practitioners? Perhaps Bourgeois (1980a) is correct when he states that:

> The formulation of goals followed by the identification and choice of means to attain them (the usual prescribed sequence in our normative decision models) is so fundamental to the Western way of thinking, that the circumvention of this order of events is considered a violation of the rational ideal (277, 288).

This underscores the fact that managers do articulate goals, either on behalf of themselves or their organizations, and they do in fact try to accomplish such goals despite all of the arguments above. We would not go so far as Gross (1969:277) who states "...that it is the dominating presence of a goal that marks off an 'organization' from all other forms of systems": this amounts to reifying the goal construct. We would argue though that goals <u>can</u> exist in the minds of top management teams and may be viewed as one of the components of strategy.

# Contributions From Strategy Researchers

Strategy researchers for the most part take the existence of goals as givens. Andrews (1980) is probably the most eloquent spokesman on behalf of the goal paradigm and Richards (1978) devotes an entire book to explicating goals structures as strategy (Table 2.2 on p. 44 is illustrative of this thrust). Given that goals exist then, strategists argue primarily on the mode of goals formulation. Formulation is the setting of goals and means to attain

goals in one of two modes: a rational comprehensive approach and the political-incremental mode (Bouregois, 1980a:229). In the former mode, the overall organizational goals are rationally set that describe a vision of the desired future state of the organization (Etzioni, 1964:6). Since participants are held to be rational, presumably some argument is given in the course of formulation that enables choice among alternatives. This would elicit at least acceptance of if not aggreement on the chosen goals and means. In the latter mode, formulation takes place via disjointed, incremental, potentially highly politicized processes. This scenario allows for at least acceptance, if not agreement, on means but allows goals to be disagreed upon (Lindblom, 1979; Quinn, 1977, 1978, 1980).

The evidence for which mode is closer to the truth of things or even which one works better in differing conditions is sparse. However, the brief overview given in this section, as in the last, was taken to make a point: that no matter which mode is used to formulate goals and means, goals do exist in organizations. They are conceptualized and articulated (formally or informally) and they are implemented in some fashion so that hopefully some measure of positive performance ensues (Hall, 1977:70).

Bourgeois chose to relate goals-means structure to performance from a certain vantage point. His main hypothesis was the <u>consensus</u> on goals and means by top management teams was a necessary condition for a positive relation of goals-means structure to performance. Bourgeois (1980a:239) found that agreement on means but disagreement on goals was associated with the highest performing firms. While consensus on goals and means undeniably can be an important contributor to explaining performance, we feel that he may have limited the goals construct too severely. One can accept goals and means without agreeing on them. Acceptance without agreement would presuppose some

sort of authority and legitimacy for the independent existence of the goal structure. Accordingly, it can be argued that goals-means structure should, by its presence alone, be able to explain a certain degree of variation in performance. The Goal Paradigm implicitly argues that a goals-means structure should guide organizational strategy and decision making in a manner that would lead to high performance.

#### Hypotheses

From the above brief arguments that goals-means structures are foundational to organizations, we derive the two main hypotheses for this study:

- a. There should be a meaningful small number of factors that can parsimoniously account for the important goals and means for the organization. In other words, there should exist a "dominant thrust" for the organization.
  - b. <u>Certain means should be correlated with certain goals</u>. The concept of equifinality (Kast and Rosenzweig, 1979:103) states that different means items may be responsible for accomplishing a given goal and conversely, a given means item may help to accomplish more than one goal.<sup>2</sup>
- 2. The goals-means structure itself should relate significantly to performance. Recall that this is a less restricted position than that taken by Bourgeois (1978, 1980a) who holds that agreement among top management teams must take place before goals-means structures can be significantly related to performance. However, following Bourgeois (1980a), means ought to better explain performance than goals.

Couched in these terms the two hypotheses restate the Goal Paradigm in a testable form which will be considered below.

#### METHOD

#### Sample

A modified version of the questionnaire designed by Bouregois (1978, 1980a) was administered to CEO's or other members of the top management team in 90 banks in Louisiana in September-November 1981 to test the two main hypotheses presented above. This number represents about a third of the banks in the state (N=264), and of the 90 who agreed to participate in the study, 44 usable questionnaires representing 44 banks were returned. An analysis of the sample showed that adequate size and geographic dispersion relative to the state totals was attained.

Realizing that the meanings attached to the various goals-means items in the questionnaire might vary from industry to industry, we restricted our sample to one industry in one state. To test the hypotheses above, all that is needed is variation in goals-means structure and performance. This requirement was met in this sample.

# Questionnaire

The Bourgeois (1978, 1980a) Ends-Means Questionnaire, which asks respondents to indicate the importance of goal and means items on a five point Likert scale, was used in the study but was modified slightly in two ways (see these sources for rationale for the scales):

1. After discussions with industry analysts, certain scales were modified to make them appropriate for a service, financial institution industry. These changes were minor in nature; for example, changing the word product to service and price to rate, etc. Four means items had to be dropped because they did not apply either to the sample or to the industry.

2. Certain items were added (six goals and one means) to reflect other goals that are currently appropriate to the industry (Parker, 1981).

These modifications resulted in eighteen goal items (twelve for Bourgeois) and twenty-one means items (twenty-three for Bourgeois). We feel however that the nature and structure of the Bourgeois scales were left intact. (See Appendix 1 for a list of the goals and means items used in this study.)<sup>3</sup>

## Statistical Method

To test Hypothesis 1, factor analysis employing varimax rotation was performed. The SPSS algorithm was used for this purpose (Nie, et. al, 1975). This procedure was undertaken for two reasons:

1. The factor analysis performed on goals and means separately was done to search for an underlying structure in the goals and means items that could supply a dominant thrust of goals-means importance for the firms in the sample.<sup>4</sup>

2. Factor scores were generated for each of the goals and means factors. These factor scores were correlated using the Pearson product moment correlation method. The resulting correlation matrix should have significant correlations between certain means and goals items in order to help confirm Hypothesis 1b.

To test Hypothesis 2, two stepwise multiple regressions were run. These were as follows:

 A stepwise multiple regression treating all <u>means factors</u> as independent variables was regressed on four year average return on assets (AVRGTASS) as the dependent variable.

2. A multiple regression treating all goals factors as independent variables was regressed on AVRGTASS.

Average return on assets (average return on assets for the years 1977-1980) was used as the dependent variable. The return on assets variable is a commonly used indicator of bank performance (Reed, et. al, 1980:195). Since the effectiveness of goals and means is supposed to be reflected over a period of time, the four year average return on assets was considered more appropriate for performance than return on assets in one particular year.

#### RESULTS

#### Test of Hypothesis 1

Table 1 presents the varimax rotated solution for the goal items. Four

Insert Table 1 about here

meaningful factors accounting for a total of 66 percent of the variance in the data emerged. While the Scree test (Cattell, 1960) signified retaining at most three factors, the eigenvalue greater than one rule suggested retaining the four factors. Upon inspection, there appeared to be reason to retain four factors because they supplied "good information" (Kim and Mueller, 1978:44). From inspection of the loadings we see that they are all positive and meet a .50 loading cutoff criteria (Hair, et. al, 1979:234). The four factors retained were then labelled for their apparent "dominant thrust." The four factors for 1) Internal Strength to Meet Service Challenges, 2) Image and Marketing, 3) Power and Strength in the Market, and 4) Profit, seem to account for a reasonable amount of the variance in the goals variables (65.8%) and supply a good, consistent structure of "dominant thrust."

Table 2 presents the varimax rotated solution for the means items. Four

Insert Table 2 about here

factors were retained for the reasons discussed above (even though six factors met the eigenvalue greater than one rule). Here, we see no consistency problems, the communalities for each variable prove to be adequate, and the factors explain a reasonable amount of the variance in the goals variables (59.5%). These four factors for the means items also appear to present an adequate dominant thrust picture.

From the results of Tables 1 and 2, it appears that adequate simple structure exists within the goals and means categories. A dominant thrust of importance of goals and means separately for the banks in the sample can be gleaned from the factors, thus supporting Hypothesis 1a.<sup>5</sup>

Table 3 shows the bivariate correlation matrix of factor scores between the four goals

Insert Table 3 about here

factors and the four means factors. At this level of aggregation it is interesting to note the significant correlations. The first means factor, <u>The</u> <u>Importance of Service Development and Distinctive Competence</u>, increases as the second goals factor, the <u>Importance of Image and Marketing</u>, increases. The variables which load highly on each of these factors show that as prestige and innovation, etc. become important as goals, such things as low price, friendliness of service, wide service range, new service development, consumer loans (typically a non-desirable loan category) and prediction of customer tastes become important as means.

The second means factor, the <u>Importance of Cost and Safety</u>, increases as the first goals factor, <u>Internal Strength to Meet Service Challenges</u>, increases. Here, as employee and top management development <u>and</u> the penetration of old markets and the development of new markets become important as goals, the variables of financial liquidity, new sources of funds, cost reduction, employee efficiency, employee morale and service quality become important as means. Presumably, the banks in this sample attempt to, across the board, pare down costs and seek new sources of funds to develop management in order to make penetration moves and develop new markets. This would seem to be the epitomy of effective and efficient management. The second means factor, on the other hand, <u>decreases</u> as the third goals factor, the <u>Importance of Power and Strength in the Market</u>, increases. This inverse relationship shows that as rate of growth, market share, asset reserves and dominance in the market increase in importance, the variables for the <u>Cost and Safety</u> means factor <u>decrease</u> in importance. This is not to say that management is not concerned about these issues. It may be reflective of the argument that short term resources must be consumed for long run position in the market place, and that the importance placed on the <u>Cost and Safety</u> factor must take a lower priority.

Finally, the fourth means factor, the <u>Importance of Tried and True Strat-</u> egies, is seen to increase as both the first goals factor, the <u>Importance of</u> <u>Internal Strength to Meet Service Challenges</u> and the third goals factor, the <u>Importance of Power and Strength in the Market</u>, increase. As one can see, there is importance placed on the means of commercial and real estate loans (historically a powerful part of the loan portfolio for the banks in this sample), a more narrow service range and old service enhancement when the goals factors of <u>Internal Strengths to Meet Service Challenges</u> and <u>Power and</u> <u>Strength in the Market</u> become more important. This finding would suggest that new strategic thrusts should respect and perhaps be an extension of the older, tried and true strategies.

All of the significant correlations above are crude indicators of validity in the sense that useful relations between goals and means items are present. These correlations would tend to tentatively support Hypothesis 1b. Further research would need to be done stipulating which goals and means items ought to relate and what the causal sequence between them would be.

## Test of Hypothesis 2

Table 4 shows the significant results from the regression procedures. The only significant equation to be found was with the goals factor of POWER. The equation is just significant at the .1 level and the R-square is low. However, the sign of the beta, negative, is interesting. It shows that as the importance placed on rate of growth, market share, dominance and assets reserves <u>increases</u>, AVRGTASS <u>decreases</u>. If this is a practically useful equation, it would tend to confirm the PIMS studies (Buzzell, et al.: 1975) that show that attempts to build market share and increase investment intensity (providing more reserves can be thought of analogously) are destructive of return on assets in the short run.

Insert Table 4 about here

#### CONCLUSIONS

We cannot categorically state from our study that goals-means structures, by the fact of their existence, guide organizational action in a manner that would lead to high performance. However, from the factor analysis we observe that some meaningful factors which delineate a "dominant thrust" of importance for goals and means are highlighted. This kind of analysis might aid CEO's in focusing their thinking if not their efforts. It is easier to think in terms of eight factors than in terms of 39 variables. The question arises, though: Why do means factors not account at all for variation in performance and a goals factor only slightly explain performance in the regression analysis? The following aspects might represent reasons for such a poor showing. They might also point the way for future research. 1. The effects of goals and means on performance might be diffused by the issues, actions and vicissitudes of the <u>actual</u> implementation of the goals and means. Perhaps the goals-means statements need to be couched in a fashion that would allow almost microscopic inspection. In other words, the goalsmeans statements as formulated may still be too vague (Perrow, 1961:855-856). In addition, this narrowing in the reference and wording of means statements might also allow for the matching of perceptual responses to objective indicators of the goals-means items in question. In addition, Hall and Clark (1980) develop similar lines of argument by suggesting that inclusion of dominant coalition activity into the study of goals would better get at the implementation issue and would cause goal structure to better correlate with performance. Although they do not stipulate how this would be done, presumably conflict, consensus and power would be involved.

2. In this study, attempt was made to relate the goal structure to only one kind of performance, namely AVRGTASS. Given the concept of <u>stakeholders</u> and multiple criteria for performance, it is possible that the goal structure could best relate (or explain) criteria not selected in the study. Nevertheless, at least for economic institutions, the importance of return on assets cannot be understated.

3. The adequacy of the factor solutions suggest that the structures are at least internally consistent. These structures may be internally consistent, but totally fail to align the firm with the requirements of its environment. Since we did not delve into the environments in which the banks compete in this paper, there was little way to demonstrate if these goals structures were appropriate for the "contingencies" (Hickson, et. al, 1971) of their environments. As such, Hall and Clark (1980:128) call for a model that "... brings resource acquisition... back into the picture." This would presumably

better align the relation of goals and performance or at least show why formal goals have little explanatory power.

These suggestions argue for the <u>direct</u> inclusion of external parameters for goals and the internal processes used to formulate them. If this thrust is valid, it would seem to support a view that the goals and means structure as measured in this study could not explain performance even though we get a good picture of the structure's internal consistency. Perhaps a study of Environment + Goals Process and Content + Performance may provide more fruitful results. However, by this formulation, goals and goals-means structures would then be <u>contingent</u> on contextual influences. This contingency view would not support the pure form of the Goal Paradigm, as presented here. It will remain still for further study to delve into the nuances of the Goal Paradigm before it can be admitted as formal, tested knowledge. Otherwise, it will have to remain as sort of a myth or be struck from our lexicon.

#### Endnotes

<sup>1</sup>The Goal Paradigm sees the organization as "an instrument, a deliberate and rational means for attaining known goals: (Thompson, 1968:397).

<sup>2</sup>Since this is really an exploratory study, no attempt is made to hypothesize which means items ought to correlate with given goals items. Indeed, the particular means-goals correlations will probably differ given a particular industry. The <u>procedure</u> outlined below purports to help understand goalsmeans structures and it may be of use across industry settings.

<sup>3</sup>Copies of both instruments can be obtained from the authors.

<sup>4</sup>A small sample size precluded a factor analysis of all goals and means items together. This small sample size is a weakness of this study. However, the subsequent correlation of the goals and means factor scores (shown in Table 3) shows that meaningful correlations are present. This face validity applicability ameliorates the problem of small sample size and only within goals and means factor solutions somewhat.

<sup>5</sup>A factor structure which is consistent (few variables that load highly on more than one factor) and which explains an adequate amount of variance (greater than 50%) is statistically adequate. This adequacy is really a simple measure of reliability for the entire structure of variables. As always then, reliability is a necessary condition for validity, which is arrived at in the test of Hypothesis 1b. So, an adequate factor structure is a necessary condition to support Hypothesis 1a, which is present here.

### Varimax Rotated Factor Solution For Goals\*

VARIABLE	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4	COMMUNALITY
	Internal				
	Strength	•			
	To Meet	Image	Power and		
	Service	and	Strength in	Profit	
	Challenges	Marketing	the Market	Profit	
NETPROFF	0.12933	-0.00032	12354	*0.87172	0.79189
RATEGROW	0.09501	0.10402	*0.84790	0.05207	0.74149
MARKETSH	0.01147	0.08252	*0.83691	-0.09549	0.71648
EEREBENE	*0.65328	0.32660	-0.04127	0.16307	0.56174
NETPROFY	0.08870	0.11033	-0.03830	*0.88772	0.80955
PRESTIGE	0.20857	*0.61677	0.37480	0.10887	0.57624
INNOVATN	0.59514	*0.60816	0.08529	0.02100	0.73177
ASETRESV	0.44345	0.25528	*0.51000	0.31288	0.61982
DIVIPAYO	0.09778	*0.75601	0.17098	0.08511	0.61759
PRICLEAD	0.34338	0.38653	0.38246	0.02000	0.41399
COMUSERV	0.22281	*0.80383	-0.04020	0.07712	0.70336
EQIPBLDG	0.22942	*0.64636	0.39430	0.08067	0.63240
PENETRAT	*0.59973	0.49148	0.04931	-0.11881	0.61778
NEWMARKT	*0.71485	0.04804	0.24715	0.08901	0.58233
MERGAOUI	0.43605	-0.44404	0.38950	0.17245	0.56876
DOMPOWER	0.16146	0.37833	*0.59197	0.40965	0.68744
EESATDEV	*0.78361	0.26684	0.07712	0.14385	0.71189
CEODEVEL	*0.86092	0.06934	0.11968	0.07896	0.76655
Eigenvalue	3.727	3.403	2.764	1.956	11.850
Percent of					
Variance					
Explained	20.71	18.91	15.36	10.87	65.80

\* Star to the left of variable loadings indicates variables which have met a .50 cut off point.

•

#### Table 2

### Varimax Rotated Factor Solution For Means\*

VARIABLE	FACTOR 1 Service	FACTOR 2	FACTOR 3	FACTOR 4	COMMUNALITY
	Development			Tried	
	and	Cost		and	
	Distinctive	and	External	True	
	Competence	Safety	Relations	Strategies	
FINLIQUD	0.11562	*0.61453	0.04257	0.24839	0.45452
NUSRCFUN	0.01072	*0.72223	0.06411	0.35878	0.65456
ADVRFREQ	0.05138	-0.01760	*0.84901	-0.01673	0.72405
ADVROUAL	-0.14052	0.02843	*0.91654	0.08022	0.86704
COSTREDC	0.07285	*0.80669	-0.05215	-0.22575	0.70973
EEEFICCY	0.28020	*0.76569	0.05510	0.05018	0.67035
EEMORALE	0.37595	*0.65445	-0.03382	0.04188	0.57254
LOWPRICE	0.49901	0.21466	-0.19093	0.22529	0.38230
HIGPRICE	*-0.57590	-0.06548	0.10034	-0.09804	0.35563
FIRMIMAG	0.47570	0.37412	0.03078	0.10132	0.37746
CONSLOAN	*0.57807	0.16913	0.05396	-0.47610	0.59235
SERVQUAL	0.34659	*0.67739	0.05018	0.30740	0.67059
REALLOAN	0.00928	0.37688	0.03503	*0.62331	0.53186
CUSTSERV	*0.60638	0.46042	0.07484	0.03262	0.58636
WIDESERV	*0.76313	0.04731	0.03985	-0.00968	0.58629
NAROSERV	0.03388	0.21800	-0.30959	*0.74255	0.69590
NUSERVDE	*0.82257	0.20099	0.26840	0.11702	0.80274
OLSRVBET	0.47714	0.07898	0.23921	*0.58854	0.63751
LOBBYACT	0.34112	0.20037	*0.60216	-0.29273	0.60481
CUSTTAST	*0.57951	0.30787	0.23007	-0.05839	0.48727
COMPACTN	0.36531	-0.06649	0.43016	0.46495	0.53909
Eigenvalue	3.962	3.828	2.462	2.250	12.503
Percent of		<b>3</b> .			
Variance					
Explained	18.87	18.23	11.72	10.71	59.54
1993년 1월 1997년 1998년 1997년 1997년 1997년 1997년 1997					

\* Star to the left of variable loadings indicates variables which have met a

# Table 3

# GOALS-MEANS FACTOR SCORE CORRELATIONS\*

a (51	Internal Strength to Meet Service Challenges (G1)*	Image and Marketing (G2)	Power and Strength in the Market (G3)	Profit (G4)
Service Development and Distinctive Competence (M1)	.24 (.1219)	•56 (•0001)	.18 (.2402)	.01 (.9268)
Cost and Safety	.61	.20	28	01
(M2)	(.0001)	(.1961)	(.0706)	(.9560)
External Relations	.15	.12	.05	02
(M3)	(.3362)	(.4290)	(.7416)	(.8973)
Tried and True	.35	04	•28	.17
Strategies (M4)	(.0222)	(.8098)	(•0655)	(.2764)

\*G = Goals Factor, M = Means Factor

Source: Primary

# Table 4

SIGNIFICANT STEPWISE REGRESSION SOLUTION FOR AVRGTASS

Model: AVRGTASS = 1.205 - .103 (POWER)

F = 3.00 Significance F = .0904

 $R^2 = .07$ 

Source: Primary

# Appendix 1

# LIST OF THE GOALS-MEANS ITEMS\*

Variable			Standard
Prefix	Variable Description	Means**	Deviation
NETPROFF	Net Profit Over Five Years	4.810	.397
RATEGROW	Rate of Growth	3.976	.897
MARKETSH	Market Share	3.976	.869
EEREBENE	Employee Rewards and Benefits	3.810	.917
NETPROFY	Net Profit Over The Coming Year	4.738	.544
PRESTIGE	Company Prestige	4.071	.808
INNOVATN	Innovation	3.571	.941
ASETRESV	Assets and Reserves	4.286	.708
DIVIPAYO	Dividend Payout	3.310	1.115
PRICELEAD	Price Leadership	3.548	.889
COMUSERV	Service to Community	4.000	.883
EQUIPBLDG	Employment and Building Modernization	3.548	.968
PENETRAT	Increase Current Volue of Business	4.190	.671
NEWMARKI	Attract New Customers	4.143	.751
MERGAQUI	Merger and Acquisition Activity	2.000	1.082
DOHPOWER	Dominance in the Market	3.524	1.018
EESATDEV	Employee Satisfaction and Devel.	4.214	
CEODEVEL	Top Management Devel.	4.429	.737
FINLIQUD	Financial Liquidity	4.390	.666
NUSRCFUN	New Sources of Funds	4.049	.740
ADVRFREQ	Advertising Frequency	2.878	.781
ADVRQUAL	Advertising Quality	3.463	.925
COSTREDC	Cost Reduction	4.073	.685
EEEFICCY	Employee Efficiency	4.341	.617
EEMORALE	Employee Morale	4.171	.738
LOWPRICE	Low Interest Charged	2.805	.954
HIGPRICE	High Interest Charges	3.585	.865
FIRMIMAG	Firm Image	4.195	.641
CONSLOAN	Consumer Loans	3.293	.901
SERVQUAL	Service Quality	4.098	.625
REALLOAN	Commercial and Real Estate Loans	4.024	.758
CUSTSERV	"Friendliness of Service"	4.390	.703
WIDESERV	Wide Service Range	3.732	.923
NAROSERV	Narrow Service Range	2.878	.980
NUSERVDE	New Service Development	3.415	.894
OLSRVBET	Existing Service Improvement	3.927	.648
LOBBYACT	Lobbying Activity	3.000	.894
CUSTTAST	Prediction of Customer Tastes	3.415	.805
COMPACTN	Prediction of Competitor Action	3.537	.711
AVRGTASS	Four Year Average (1977-1980)	1.198	.407
	Return on Assets		

\* Items NETPROFF to CEODEVEL are Goals; FINLIQUD to COMPACTN are Means.

<sup>\*\*</sup> A senior executive at each bank was asked to respond on a five point Likert scale as to the importance of each of the goals-means items (1-Not at all important to 5-Extremely important).

#### References

- Andrews, K. R., The Concept of Corporate Strategy, Homewood, Illinois, Irwin, Inc., 1980 rev. ed., 180 pp.
- Barnard, C. I., The Functions of the Executive, Cambridge, Harvard University Press, 1938, 334 pp.
- Bourgeois, L. J., "Economic Performance and Dominant Coalition Agreement on Means Versus Ends in Second Order Strategy Making," <u>Academy of Manage-</u> ment Proceedings, 1978, pp. 101-105.
- Bourgeois, L. J., "Performance and Consensus," <u>Strategic Management Journal</u>, Vol. 1, No. 3, July-September 1980, pp. 227-248.
- Bourgeois, L. J., "Strategy and Environment: A Conceputal Integration," The Academy of Management Review, Vol. 5, No. 1, January 1980, pp. 25-39.
- Buzzell, R. D., B. T. Gale and R.G.M. Sultan, "Market Share: A Key to Profitability," Harvard Business Review, January-February 1975, pp. 97-105.
- Cattell, R. B., "Scree Test for the Number of Factors," <u>Multivariate Behavior</u> al Research, Vol. 2, 1960, pp. 245-276.
- Cyert, R. M. and J. G. March, <u>A Behavioral Theory of the Firm</u>, Englewood Cliffs, New Jersey, Prentice-Hall, Inc., 1963, 332 pp.
- Etzioni, A., <u>Modern Organizations</u>, Englewood Cliffs, New Jersey, Prentice-Hall Inc., 1964, 120 pp.
- Georgiou, P., "The Goal Paradigm and Notes Towards a Counter Paradigm," ASQ, Vol. 18, No. 3, September 1973, 291-310.
- Gross, E., "The Definition of Organizational Goals," British Journal of Sociology, Vol. 30, No. 3, September 1969, 277-294.
- Hair, J. F., R. E. Anderson, R. L. Tatham and B. J. Grablowsky, <u>Multivariate</u> <u>Data Analysis With Readings</u>, Tulsa, Oklahoma, Petroleum Publishing Co., 1979, 360 pp.
- Hall, R. H., Organizations: Structure and Process, Englewood Cliffs, New Jersey, Inc., 1977, Second Ed., 356 pp.
- Hall, R. H. and J. P. Clark, "An Ineffective Effectiveness Study and Some Suggestions for Future Research," <u>The Sociological Quarterly</u>, Vol. 21, No. 1, Winter 1980, pp. 119-134.
- Hambrick, D. C., "Operationalizing the Concept of Business-Level Strategy in Research," <u>The Academy of Management Review</u>, Vol. 5, No. 4, 1980, pp. 567-575.

- Hickson, D. J., C. R. Hinings, C. A. Lee, R. E. Schneck and J. M. Pennings, "A Strategic Contingencies Theory of Intraorganizational Power," <u>ASQ</u>, Vol. 16, No. 2, June 1971, pp. 216-229.
- Kast, F. E. and J. E. Rosenzweig, Organization and Management: A Systems. Contingency Approach, New York, McGraw-Hill, 1979, 644 pp.
- Kim, J., and C. W. Mueller (1978), "Factor Analysis: Statistical Methods and Practical Issues," <u>Sage University Paper Series</u>, 07-014, Beverly Hills, Sage Publishers, 88 pp.
- Kuhn, T. S., The Structure of Scientific Revolutions, Chicago, The University of Chicago Press, 1970, Second Ed., Enlarged, 210 pp.
- Lenz, R. T., "Environment, Strategy, Organization Structure and Performance: Patterns in One Industry," <u>Strategic Management Journal</u>, Vol. 1, No. 3, July-September 1980, pp. 209-226.
- Lenz, R. T., "Determinants of Organizational Performance: An Interdisciplinary Review," Working Paper, Indiana University at Indianapolis, 1980, 32 pp.
- Lindblom, C. E., "Still Muddling, Not Yet Through," <u>Public Administration Re-</u> view, Vol. 39, No. 6, November-December 1979, pp. 517-526.
- Merton, R. K., "Bureaucratic Structure and Personality," in his <u>Social Theory</u> and <u>Social Structure</u>, New York, The Free Press, 1968 Enlarged Ed., pp. 249-260.
- Michels, R., Political Parties: A Sociological Study of the Oligarchical Tendencies of Modern Democracy, Gloucester, Mass., Peter Smith, 1978, 416 pp.
- Miles, R. W. and C. C. Snow, Organizational Strategy, Structure, and Process, New York, McGraw-Hill, 1978, 274 pp.
- Miles, R. W. and C. C. Snow, "Toward a Synthesis in Organization Theory," in Organizations by Design: Theory and Practice, M. Jelinek, J. Litterer and R. Miles, eds., Business Publications Inc., Plano, Texas, 1981, pp. 548-567.
- Mohr, L. B., "The Concept of Organizational Goal," The American Political Science Review, Vol. 67, No. 2, June 1973, pp. 470-481.
- Nie, N. H., C. Hull, J. Jenkins, X. Steinbrenner and D. Bent, <u>Statistical</u> <u>Package for the Social Sciences</u>, New York, McGraw-Hill, 1975, 2nd Ed., pp. 468-514.
- Parker, G. G. C., "Now Management Will Make or Break The Bank," Harvard Business Review, Vol. 59, No. 6, November-December 1981, pp. 140-156.
- Perrow, Charles, "The Analysis of Goals in Complex Organizations," American Sociological Review, Vol. 26, No. 6, December 1961, pp. 854-865.

- Porter, M., Competitive Strategy: Techniques for Analyzing Industries and Competitors, New York, The Free Press, 1980, 396 pp.
- Quinn, J. B., "Strategic Goals: Process and Politics," <u>Sloan Management Re-</u> view, Vol. 19, Fall 1977, pp. 21-37.
- Quinn, J. B., "Strategic Change: Logical Incrementalism," Sloan Management Review, Vol. 20, Fall 1978, pp. 7-21.
- Quinn, J. B., <u>Strategies for Change: Logical Incrementalism</u>, New York, Irwin, 1980, 222 pp.
- Ramaprasad, A. and E. M. Knod, "Hierarchical Analysis: A Vehicle for Strategic Planning," in <u>The Relationship Between Theory, Research and Practice</u>, Mississippi, Southern Management Associatioon, 1981, pp. 168-170.
- Reed, E., R. V. Cotter, E. K. Gill and R. K. Smith, Commercial Banking, New Jersey, Prentice-Hall, 1980, 2nd Ed., 458 pp.
- Richards, M. D., Organizational Goal Structures, St. Paul, West Publishing Company, 1978, 152 pp.
- Selznick, P., "Foundations of a Theory of Organizations," <u>American Sociologi</u>cal Review, Vol. 13, pp. 25-35.
- Simon, H. A., "On the Concept of Organizational Goal," Administrative Science Quarterly, Vol. 9, No. 1, June 1964, pp. 1-22.
- Thompson, James D., "Models of Organizations and Administrative Systems" in <u>The Social Sciences: Problems and Orientations</u>, The Hague: Mouton, <u>UNESCO</u>, 1968, pp. 395-405.

\_\_\_\_\_, "Corporate Culture: The Hard to Change Values That Spell Success or Failure," Business Week, October 27, 1980, pp. 148-160.

The following papers are currently available in the Edwin L. Cox School of Business Working Paper Series.

- 79-100 "Microdata File Merging Through Large-Scale Network Technology," by Richard S. Barr and J. Scott Turner
- 79-101 "Perceived Environmental Uncertainty: An Individual or Environmental Attribute," by Peter Lorenzi, Henry P. Sims, Jr., and John W. Slocum, Jr.
- 79-103 "A Typology for Integrating Technology, Organization and Job Design," by John W. Slocum, Jr., and Henry P. Sims, Jr.
- 80-100 "Implementing the Portfolio (SBU) Concept," by Richard A. Bettis and William K. Hall
- 80-101 "Assessing Organizational Change Approaches: Towards a Comparative Typology," by Don Hellriegel and John W. Slocum, Jr.
- 80-102 "Constructing a Theory of Accounting--An Axiomatic Approach," by Marvin L. Carlson and James W. Lamb
- 80-103 "Mentors & Managers," by Michael E. McGill
- 80-104 "Budgeting Capital for R&D: An Application of Option Pricing," by John W. Kensinger
- 80-200 "Financial Terms of Sale and Control of Marketing Channel Conflict," by Michael Levy and Dwight Grant
- 80-300 "Toward An Optimal Customer Service Package," by Michael Levy
- 80-301 "Controlling the Performance of People in Organizations," by Steven Kerr and John W. Slocum, Jr.
- 80-400 "The Effects of Racial Composition on Neighborhood Succession," by Kerry D. Vandell
- 80-500 "Strategies of Growth: Forms, Characteristics and Returns," by Richard D. Miller
- 80-600 "Organization Roles, Cognitive Roles, and Problem-Solving Styles," by Richard Lee Steckroth, John W. Slocum, Jr., and Henry P. Sims, Jr.
- 80-601 "New Efficient Equations to Compute the Present Value of Mortgage Interest Payments and Accelerated Depreciation Tax Benefits," by Elbert B. Greynolds, Jr.
- 80-800 "Mortgage Quality and the Two-Earner Family: Issues and Estimates," by Kerry D. Vandell
- 80-801 "Comparison of the EEOCC Four-Fifths Rule and A One, Two or Three σ Binomial Criterion," by Marion Gross Sobol and Paul Ellard
- 80-900 "Bank Portfolio Management: The Role of Financial Futures," by Dwight M. Grant and George Hempel

- 80-902 "Hedging Uncertain Foreign Exchange Positions," by Mark R. Eaker and Dwight M. Grant
- 80-110 "Strategic Portfolio Management in the Multibusiness Firm: An Implementation Status Report," by Richard A. Bettis and William K. Hall
- 80-111 "Sources of Performance Differences in Related and Unrelated Diversified Firms," by Richard A. Bettis
- 80-112 "The Information Needs of Business With Special Application to Managerial Decision Making," by Paul Gray
- 80-113 "Diversification Strategy, Accounting Determined Risk, and Accounting Determined Return," by Richard A. Bettis and William K. Hall
- 80-114 "Toward Analytically Precise Definitions of Market Value and Highest and Best Use," by Kerry D. Vandell
- 80-115 "Person-Situation Interaction: An Exploration of Competing Models of Fit," by William F. Joyce, John W. Slocum, Jr., and Mary Ann Von Glinow
- 80-116 "Correlates of Climate Discrepancy," by William F. Joyce and John Slocum
- 80-117 "Alternative Perspectives on Neighborhood Decline," by Arthur P. Solomon and Kerry D. Vandell
- 80-121 "Project Abandonment as a Put Option: Dealing with the Capital Investment Decision and Operating Risk Using Option Pricing Theory," by John W. Kensinger
- 80-122 "The Interrelationships Between Banking Returns and Risks," by George H. Hempel
- 80-123 "The Environment For Funds Management Decisions In Coming Years," by George H. Hempel
- 81-100 "A Test of Gouldner's Norm of Reciprocity in a Commercial Marketing Research Setting," by Roger Kerin, Thomas Barry, and Alan Dubinsky
- 81-200 "Solution Strategies and Algorithm Behavior in Large-Scale Network Codes," by Richard S. Barr
- 81-201 "The SMU Decision Room Project," by Paul Gray, Julius Aronofsky, Nancy W. Berry, Olaf Helmer, Gerald R. Kane, and Thomas E. Perkins
- 81-300 "Cash Discounts to Retail Customers: An Alternative to Credit Card Performance," by Michael Levy and Charles Ingene
- 81-400 "Merchandising Decisions: A New View of Planning and Measuring Performance," by Michael Levy and Charles A. Ingene
- 81-500 "A Methodology for the Formulation and Evaluation of Energy Goals and Policy Alternatives for Israel," by Julius Aronofsky, Reuven Karni, and Harry Tankin

- 81-501 "Job Redesign: Improving the Quality of Working Life," by John W. Slocum, Jr.
- 81-600 "Managerial Uncertainty and Performance," by H. Kirk Downey and John W. Slocum, Jr.
- 81-601 "Compensating Balance, Rationality, and Optimality," by Chun H. Lam and Kenneth J. Boudreaux
- 81-700 "Federal Income Taxes, Inflation and Holding Periods for Income-Producing Property," by William B. Brueggeman, Jeffrey D. Fisher, and Jerrold J. Stern
- 81-800 "The Chinese-U.S. Symposium On Systems Analysis," by Paul Gray and Burton V. Dean
- 81-801 "The Sensitivity of Policy Elasticities to the Time Period Examined in the St. Louis Equation and Other Tests," by Frank J. Bonello and William R. Reichenstein
- 81-900 "Forecasting Industrial Bond Rating Changes: A Multivariate Model," by John W. Peavy, III
- 81-110 "Improving Gap Management as a Technique for Reducing Interest Rate Risk," by Donald G. Simonson and George H. Hempel
- 81-111 "The Visible and Invisible Hand: Source Allocation in the Industrial Sector," by Richard A. Bettis and C. K. Prahalad
- 81-112 "The Significance of Price-Earnings Ratios on Portfolio Returns," by John W. Peavy, III and David A. Goodman
- 81-113 "Further Evaluation of Financing Costs for Multinational Subsidiaries," by Catherine J. Bruno and Mark R. Eaker
- 81-114 "Seven Key Rules for Successful Stock Market Speculation," by David Goodman
- 81-115 "The Price-Earnings Relative as an Indicator of Investment Returns," by David Goodman and John W. Peavy, III
- 81-116 "Strategic Management for Wholesalers: An Environmental Management Perspective," by William L. Cron and Valarie A. Zeithaml
- 81-117 "Sequential Information Dissemination and Relative Market Efficiency," by Christopher B. Barry and Robert H. Jennings
- 81-118 "Modeling Earnings Behavior," by Michael F. van Breda
- 81-119 "The Dimensions of Self-Management," by David Goodman and Leland M. Wooton
- 81-120 "The Price-Earnings Relatives A New Twist to the Low-Multiple Strategy," by David A. Goodman and John W. Peavy, III
- 82-100 "Risk Considerations in Modeling Corporate Strategy," by Richard A. Bettis

- 82-101 "Modern Financial Theory, Corporate Strategy, and Public Policy: Three Conundrums," by Richard A. Bettis
- 82-102 "Children's Advertising: The Differential Impact of Appeal Strategy," by Thomas E. Barry and Richard F. Gunst
- 82-103 "A Typology of Small Businesses: Hypothesis and Preliminary Study," by Neil C. Churchill and Virginia L. Lewis
- 82-104 "Imperfect Information, Uncertainty, and Credit Rationing: A Comment and Extension," by Kerry D. Vandell
- 82-200 "Equilibrium in a Futures Market," by Jerome Baesel and Dwight Grant
- 82-201 "A Market Index Futures Contract and Portfolio Selection," by Dwight Grant
- 82-202 "Selecting Optimal Portfolios with a Futures Market in a Stock Index," by Dwight Grant
- 82-203 "Market Index Futures Contracts: Some Thoughts on Delivery Dates," by Dwight Grant
- 82-204 "Optimal Sequential Futures Trading," by Jerome Baesel and Dwight Grant
- 82-300 "The Hypothesized Effects of Ability in the Turnover Process," by Ellen F. Jackofsky and Lawrence H. Peters
- 82-301 "Teaching a Financial Planning Language as the Principal Computer Language for MBA's," by Thomas E. Perkins and Paul Gray
- 82-302 "Put Budgeting Back Into Capital Budgeting," by Michael F. van Breda
- 82-400 "Information Dissemination and Portfolio Choice," by Robert H. Jennings and Christopher B. Barry
- 82-401 "Reality Shock: The Link Between Socialization and Organizational Commitment," by Roger A. Dean
- 82-402 "Reporting on the Annual Report," by Gail E. Farrelly and Gail B. Wright
- 82-403 "A Linguistic Analysis of Accounting," by Gail E. Farrelly
- 82-600 "The Relationship Between Computerization and Performance: A Strategy for Maximizing the Economic Benefits of Computerization," by William L. Cron and Marion G. Sobol
- 82-601 "Optimal Land Use Planning," by Richard B. Peiser
- 82-602 "Variances and Indices," by Michael F. van Breda
- 82-603 "The Pricing of Small Business Loans," by Jonathan A. Scott
- 82-604 "Collateral Requirements and Small Business Loans," by Jonathan A. Scott
- 82-605 "Validation Strategies for Multiple Regression Analysis: A Tutorial," by Marion G. Sobol

- 82-700 "Credit Rationing and the Small Business Community," by Jonathan A. Scott
- 82-701 "Bank Structure and Small Business Loan Markets," by William C. Dunkelberg and Jonathan A. Scott
- 82-800 "Transportation Evaluation in Community Design: An Extension with Equilibrium Route Assignment," by Richard B. Peiser
- 82-801 "An Expanded Commercial Paper Rating Scale: Classification of Industrial Issuers," by John W. Peavy, III and S. Michael Edgar
- 82-802 "Inflation, Risk, and Corporate Profitability: Effects on Common Stock Returns," by David A. Goodman and John W. Peavy, III
- 82-803 "Turnover and Job Performance: An Integrated Process Model," by Ellen F. Jackofsky
- 82-804 "An Empirical Evaluation of Statistical Matching Methodologies," by Richard S. Barr, William H. Stewart, and John Scott Turner
- 82-805 "Residual Income Analysis: A Method of Inventory Investment Allocation and Evaluation," by Michael Levy and Charles A. Ingene
- 82-806 "Analytical Review Developments in Practice: Misconceptions, Potential Applications, and Field Experience," by Wanda Wallace
- 82-807 "Using Financial Planning Languages for Simulation," by Paul Gray
- 82-808 "A Look at How Managers' Minds Work," by John W. Slocum, Jr. and Don Hellriegel
- 82-900 "The Impact of Price Earnings Ratios on Portfolio Returns," by John W. Peavy, III and David A. Goodman
- 82-901 "Replicating Electric Utility Short-Term Credit Ratings," by John W. Peavy, III and S. Michael Edgar
- 82-902 "Job Turnover Versus Company Turnover: Reassessment of the March and Simon Participation Model," by Ellen F. Jackofsky and Lawrence H. Peters
- 82-903 "Investment Management by Multiple Managers: An Agency-Theoretic Explanation," by Christopher B. Barry and Laura T. Starks
- 82-904 "The Senior Marketing Officer An Academic Perspective," by James T. Rothe
- 82-905 "The Impact of Cable Television on Subscriber and Nonsubscriber Behavior," by James T. Rothe, Michael G. Harvey, and George C. Michael
- 82-110 "Reasons for Quitting: A Comparison of Part-Time and Full-Time Employees," by James R. Salter, Lawrence H. Peters, and Ellen F. Jackofsky
- 82-111 "Integrating Financial Portfolio Analysis with Product Portfolio Models," by Vijay Mahajan and Jerry Wind

- 82-112 "A Non-Uniform Influence Innovation Diffusion Model of New Product Acceptance," by Christopher J. Easingwood, Vijay Mahajan, and Eitan Muller
- 82-113 "The Acceptability of Regression Analysis as Evidence in a Courtroom -Implications for the Auditor," by Wanda A. Wallace
- 82-114 "A Further Inquiry Into the Market Value and Earnings' Yield Anomalies," by John W. Peavy, III and David A. Goodman
- 82-120 "Compensating Balances, Deficiency Fees and Lines of Credit: An Operational Model," by Chun H. Lam and Kenneth J. Boudreaux
- 82-121 "Toward a Formal Model of Optimal Seller Behavior in the Real Estate Transactions Process," by Kerry Vandell
- 82-122 "Estimates of the Effect of School Desegregation Plans on Housing Values Over Time," by Kerry D. Vandell and Robert H. Zerbst
- 82-123 "Compensating Balances, Deficiency Fees and Lines of Credit," by Chun H. Lam and Kenneth J. Boudreaux
- 83-100 "Teaching Software System Design: An Experiential Approach," by Thomas E. Perkins
- 83-101 "Risk Perceptions of Institutional Investors," by Gail E. Farrelly and William R. Reichenstein
- 83-102 "An Interactive Approach to Pension Fund Asset Management," by David A. Goodman and John W. Peavy, III
- 83-103 "Technology, Structure, and Workgroup Effectiveness: A Test of a Contingency Model," by Louis W. Fry and John W. Slocum, Jr.
- 83-104 "Environment, Strategy and Performance: An Empirical Analysis in Two Service Industries," by William R. Bigler, Jr. and Banwari L. Kedia
- 83-105 "Robust Regression: Method and Applications," by Vijay Mahajan, Subhash Sharma, and Jerry Wind
- 83-106 "An Approach to Repeat-Purchase Diffusion Analysis," by Vijay Mahajan, Subhash Sharma, and Jerry Wind
- 83-200 "A Life Stage Analysis of Small Business Strategies and Performance," by Rajeswararao Chaganti, Radharao Chaganti, and Vijay Mahajan
- 83-201 "Reality Shock: When A New Employee's Expectations Don't Match Reality," by Roger A. Dean and John P. Wanous
- 83-202 "The Effects of Realistic Job Previews on Hiring Bank Tellers," by Roger A. Dean and John P. Wanous
- 83-203 "Systemic Properties of Strategy: Evidence and a Caveat From an Example Using a Modified Miles-Snow Typology," by William R. Bigler, Jr.
- 83-204 "Differential Information and the Small Firm Effect," by Christopher B. Barry and Stephen J. Brown

- 83-300 "Constrained Classification: The Use of a Priori Information in Cluster Analysis," by Wayne S. DeSarbo and Vijay Mahajan
- 83-301 "Substitutes for Leadership: A Modest Proposal for Future Investigations of Their Neutralizing Effects," by S. H. Clayton and D. L. Ford, Jr.
- 83-302 "Company Homicides and Corporate Muggings: Prevention Through Stress Buffering - Toward an Integrated Model," by D. L. Ford, Jr. and S. H. Clayton
- 83-303 "A Comment on the Measurement of Firm Performance in Strategy Research," by Kenneth R. Ferris and Richard A. Bettis
- 83-400 "Small Businesses, the Economy, and High Interest Rates: Impacts and Actions Taken in Response," by Neil C. Churchill and Virginia L. Lewis
- 83-401 "Bonds Issued Between Interest Dates: What Your Textbook Didn't Tell You," by Elbert B. Greynolds, Jr. and Arthur L. Thomas
- 83-402 "An Empirical Comparison of Awareness Forecasting Models of New Product Introduction," by Vijay Mahajan, Eitan Muller, and Subhash Sharma
- 83-500 "A Closer Look at Stock-For-Debt Swaps," by John W. Peavy III and Jonathan A. Scott
- 83-501 "Small Business Evaluates its Relationship with Commercial Banks," by William C. Dunkelberg and Jonathan A. Scott
- 83-502 "Small Business and the Value of Bank-Customer Relationships," by William C. Dunkelberg and Jonathan A. Scott
- 83-503 "Differential Information and the Small Firm Effect," by Christopher B. Barry and Stephen J. Brown
- 83-504 "Accounting Paradigms and Short-Term Decisions: A Preliminary Study," by Michael van Breda
- 83-505 "Introduction Strategy for New Products with Positive and Negative Word-Of-Mouth," by Vijay Mahajan, Eitan Muller and Roger A. Kerin
- 83-506 "Initial Observations from the Decision Room Project," by Paul Gray
- 83-600 "A Goal Focusing Approach to Analysis of Integenerational Transfers of Income: Theoretical Development and Preliminary Results," by A. Charnes, W. W. Cooper, J. J. Rousseau, A. Schinnar, and N. E. Terleckyj
- 83-601 "Reoptimization Procedures for Bounded Variable Primal Simplex Network Algorithms," by A. Iqbal Ali, Ellen P. Allen, Richard S. Barr, and Jeff L. Kennington
- 83-602 "The Effect of the Bankruptcy Reform Act of 1978 on Small Business Loan Pricing," by Jonathan A. Scott

- 83-800 "Multiple Key Informants' Perceptions of Business Environments," by William L. Cron and John W. Slocum, Jr.
- 83-801 "Predicting Salesforce Reactions to New Territory Design According to Equity Theory Propositions," by William L. Cron
- 83-802 "Bank Performance in the Emerging Recovery: A Changing Risk-Return Environment," by Jonathan A. Scott and George H. Hempel
- 83-803 "Business Synergy and Profitability," by Vijay Mahajan and Yoram Wind
- 83-804 "Advertising, Pricing and Stability in Oligopolistic Markets for New Products," by Chaim Fershtman, Vijay Mahajan, and Eitan Muller
- 83-805 "How Have The Professional <u>Standards</u> Influenced Practice?," by Wanda A. Wallace
- 83-806 "What Attributes of an Internal Auditing Department Significantly Increase the Probability of External Auditors Relying on the Internal Audit Department?," by Wanda A. Wallace
- 83-807 "Building Bridges in Rotary," by Michael F. van Breda
- 83-808 "A New Approach to Variance Analysis," by Michael F. van Breda
- 83-809 "Residual Income Analysis: A Method of Inventory Investment Allocation and Evaluation," by Michael Levy and Charles A. Ingene
- 83-810 "Taxes, Insurance, and Corporate Pension Policy," by Andrew H. Chen
- 83-811 "An Analysis of the Impact of Regulatory Change: The Case of Natural Gas Deregulation," by Andrew H. Chen and Gary C. Sanger
- 83-900 "Networks with Side Constraints: An LU Factorization Update," by Richard S. Barr, Keyvan Farhangian, and Jeff L. Kennington
- 83-901 "Diversification Strategies and Managerial Rewards: An Empirical Study," by Jeffrey L. Kerr
- 83-902 "A Decision Support System for Developing Retail Promotional Strategy," by Paul E. Green, Vijay Mahajan, Stephen M. Goldberg, and Pradeep K. Kedia
- 83-903 "Network Generating Models for Equipment Replacement," by Jay E. Aronson and Julius S. Aronofsky
- 83-904 "Differential Information and Security Market Equilibrium," by Christopher B. Barry and Stephen J. Brown
- 83-905 "Optimization Methods in Oil and Gas Development," by Julius S. Aronofsky
- 83-906 "Benefits and Costs of Disclosing Capital Investment Plans in Corporate Annual Reports," by Gail E. Farrelly and Marion G. Sobol.

- 83-907 "Security Price Reactions Around Corporate Spin-Off Announcements," by Gailen L. Hite and James E. Owers
- 83-908 "Costs and Their Assessment to Users of a Medical Library: Recovering Costs from Service Usage," by E. Bres, A. Charnes, D. Cole Eckels, S. Hitt, R. Lyders, J. Rousseau, K. Russell and M. Schoeman
- 83-110 "Microcomputers in the Banking Industry," by Chun H. Lam
- 83-111 "Current and Potential Application of Microcomputers in Banking --Survey Results," by Chun H. Lam and George H. Hempel
- 83-112 "Rural Versus Urban Bank Performance: An Analysis of Market Competition for Small Business Loans," by Jonathan A. Scott and William C. Dunkelberg
- 83-113 "An Approach to Positivity and Stability Analysis in DEA," by A. Charnes, W. W. Cooper, A. Y. Lewin, R. C. Morey, and J. J. Rousseau
- 83-114 "The Effect of Stock-for-Debt on Security Prices," by John W. Peavy, III and Jonathan A. Scott
- 83-115 "Risk/Return Performance of Diversified Firms," by Richard A. Bettis and Vijay Mahajan
- 83-116 "Strategy as Goals-Means Structure and Performance: An Empirical Examination," by Willliam R. Bigler, Jr. and Banwari L. Kedia