

## CONSENSUS ON STRATEGY FORMULATION AND ORGANIZATIONAL PERFORMANCE: COMPETITORS IN A FRAGMENTED INDUSTRY

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*This paper examines the relationship between organizational performance and consensus (or agreement) within top management teams on company objectives and competitive methods for a sample of nineteen firms competing within a highly fragmented industry—paints and allied products (SIC 2851). It was hypothesized that intense competitive pressures and the resultant low industry profitability would constrain organizational resources and augment the need for consensus on both objectives and methods. However, findings indicate that consensus on either objectives or methods is positively related to organizational performance.*

A review of the literature in strategic management reveals a lack of empirical research regarding the relationship between organizational performance and the extent of consensus, or agreement, among the top management team (TMT) on strategy for an organization. This lack of attention to consensus among strategic decision-makers is surprising, since much of the normative literature in management has either implicitly or explicitly emphasized the importance of consensus in decision-making (Holder, 1972; Hrebiniak and Joyce, 1984; Nielsen, 1981; Steiner, 1979). Also, there has been a great deal of interest among both practitioners and academicians about the Japanese style of management—of which consensus-building is a key element. Much of this interest may be attributed to William Ouchi's (1981) best-selling book—*Theory Z*.

With regard to the concept of strategy, several writers (e.g. Chandler, 1962; Andrews, 1971) have included *both* objective setting and the determination of competitive methods. The consideration of ends (objectives) and means (methods) as interactive components of strategy follows the argument of Simon (1957) concerning the interdependence of means and ends. Further, Lindblom (1959) has suggested that the inter-

actions among ends and means mitigate the usefulness of separating the two. However, for the purpose of the present study the author concurs with Schendel and Hofer that a *separation* between these two activities is important:

First, it is clear that ends and means are distinct concepts. Since the terms 'goals' and 'objectives' have been used to describe the former concept, it would be redundant to use the term 'strategy' to apply to both. . . . Second, it is clear that some organizations do formulate their desired ends (goals and objectives) separately from the means (strategy) they will use to achieve these ends. Finally, . . . research on structured problem solving and decision making indicates that superior performance occurs when the different steps of problem solving are considered separately (1979: 97).

In a similar vein, Hrebiniak and Joyce view strategic decision-making as a 'series of means-ends decisions beginning with the determination of long-term, global objectives (ends) and the development of shorter-term, more local actions to obtain these objectives' (1984: 28). With regard to the present research issue, recent literature exploring consensus among top executives on the strategy of an organization has

generally separated the ends (objectives) from the means (competitive methods) (Bourgeois, 1980; Bourgeois and Singh, 1983; Dess, 1983). To avoid confusion in terminology throughout the remainder of the paper, the terms ends, goals, and objectives should be considered as synonymous, as should the terms means and methods.

This paper proposes a model which provides the basis for the hypothesized positive relationship between organization performance and consensus within top management teams on company objectives *and* competitive methods. It is argued that the intense competitive pressures faced by firms in the paint and allied products industry (SIC 2851) serve to constrain organization resources and drive down overall industry profitability and, subsequently, strategic choices. Therefore, a high level of consensus in strategy-making is considered to be critical in promoting a unified direction for the firm and enhancing the successful implementation of a given strategy.

The next section will review research which investigates *only* consensus regarding the content of a firm's strategy and the research which explores the consensus  $\longleftrightarrow$  organization performance link. Although the present study builds on prior research, the Bourgeois (1980) study is of primary importance because it was the first to simultaneously explore consensus on goals and consensus on means *and* their relationship to performance. The current paper draws extensively on this earlier study with regard to instrument design, hypotheses, and the operationalization and measurement of the 'consensus' variables. Comparisons of the present study to Bourgeois' research with regard to research design, analytical procedures, results, and interpretations will be a central issue in this paper.

## REVIEW OF PRIOR RESEARCH

### Studies investigating consensus in strategy formulation

Stagner (1969), among the first to investigate consensus in organizations, analyzed responses from top managers in 109 firms among the *Fortune* list of the 500 largest American corporations. He studied 52 pairs of respondents from within the same firms for similarities in their patterns of responses on goals and means and found the

range of correlations was +0.79 (rather high agreement) to +0.01 (no agreement at all). Although top managers of the same firm were found to agree more in their responses than were managers from two different firms, Stagner did not relate his findings to performance.

In a laboratory study of the strategic decision-making process, Whitney and Smith (1983) concluded that in the strategic decision-making process, normative pressure to arrive at a consensus is likely to lead to decisions which are suboptimal to the organization. The possibility of such an outcome forms the basis behind the notion of 'groupthink' (Janis, 1972) and may serve to explain previous findings of a negative relationship between top management consensus and organizational performance.

### Studies investigating the consensus $\longleftrightarrow$ performance link

Grinyer and Norburn (1977-78) investigated the relationship between consensus on organizational goals and performance. They interviewed 91 managers in 21 British companies in 13 different industries and found what they considered to be an 'alarming level' of disagreement within the firms among members of the top management team. These authors questioned the value of formal planning processes for obtaining agreement among top managers on explicitly set objectives and clear perceptions of strategy. Also, they found that for the highest-performing firms consensus on goals was negatively related to performance. Similar findings were obtained in a study of consensus on alternative means for obtaining goals in 168 Belgian firms by DeWoot, Heyvaert and Martou (1977-78). They found that the more successful firms were characterized by a negative relationship between consensus on means and performance.

Hrebiniak and Snow (1982) recently examined the relationship between organizational performance and top managers' agreement on the strengths and weaknesses of their firm. They found a positive relationship between measures of organizational performance and consensus among top managers on the strengths and weaknesses of the firm.

Bourgeois (1980) conducted the first empirical study which simultaneously studied both consensus on goals and consensus on means *and* their

relationship to performance. He studied a sample of 67 managers from 12 non-diversified businesses competing in 11 different four-digit SIC industries. Three of the firms competed in the services industry (e.g. wholesale groceries); four competed in high-technology industries (e.g. electronic computing equipment) and five of the firms competed in manufacturing industries (e.g. boat building). The firms were all publicly held and their approximate annual sales ranged from \$7 million to \$330 million with an average of \$89.7 million. He found that consensus on both ends and means did *not* yield the highest firm performance. Instead, the highest-performing group had consensus on means but not ends. He concluded:

consensus on means *always* yields higher performance than disagreement on means, while allowing disagreement on less tangible goals *tends* to be associated with better performance. Also, the *worst* performance results in goals agreement combined with means disagreement —i.e., when a firm agrees on where it wants to go but cannot agree on how to get there (1980: 243).

However, further analysis of the same data (Bourgeois and Singh, 1983) revealed that the presence of slack resources in the environment seems to promote goal consensus among top managers.

### Summary of literature review

Table 1 provides more detail on important aspects of the above literature. In summary, one may conclude that previous research has *not* consistently demonstrated either a positive relationship or a negative relationship between consensus on either goals, means, or both and organizational performance. Although many substantive and methodological reasons for these conflicting findings may be advanced, I argue that a salient limitation of previous research is the tendency to disregard the heterogeneity of the environments in which organization managers make their strategic decisions. The conflicting results obtained in previous field studies on the relationship between consensus and performance may be partially due to samples consisting of firms facing different industry environments. Selection of a sample which is heterogeneous with respect to a

characteristic that affects the phenomena of interest poses a threat to statistical conclusion validity (Campbell and Stanley, 1963). That is, only by controlling for characteristics (i.e. the industry context) believed to inflate the variance explained in regression analysis can we be confident that negative results reflect the rejection of a theory (Winer, 1971). The present study attempts to control for variation in the industry environment by selecting a sample of non-diversified firms in a single highly competitive fragmented industry.

## THE PROPOSED CONCEPTUAL MODEL

Figure 1 presents a model which provides the underlying rationale for the hypothesized relationships between consensus in strategy formulation among a firm's TMT and organization performance. The subsections below specify key relationships in this model for the present research context and present the research hypotheses.

### The organization–environment interface

The literature documents well that variability across organizational environments affects the nature of organizational strategies and strategy formulation. For example, Khandwalla (1976) found that when managers perceive their environments as dynamic and uncertain their strategies are likely to be more comprehensive or multifaceted. Hrebiniak and Snow (1980) analyzed patterns of organizational response to uncertainty, and found significant differences between industries, suggesting the importance of the industrial context for managerial perceptions and responses. Research by Pfeffer and Leblebici (1973) implies that differences between industries, such as the amount of competitive pressure in the industry, affect the executives' awareness of their firm's strategy, and Staw and Szajkowski (1975) found that organizations competing in less profitable industries were more likely to commit illegal acts.

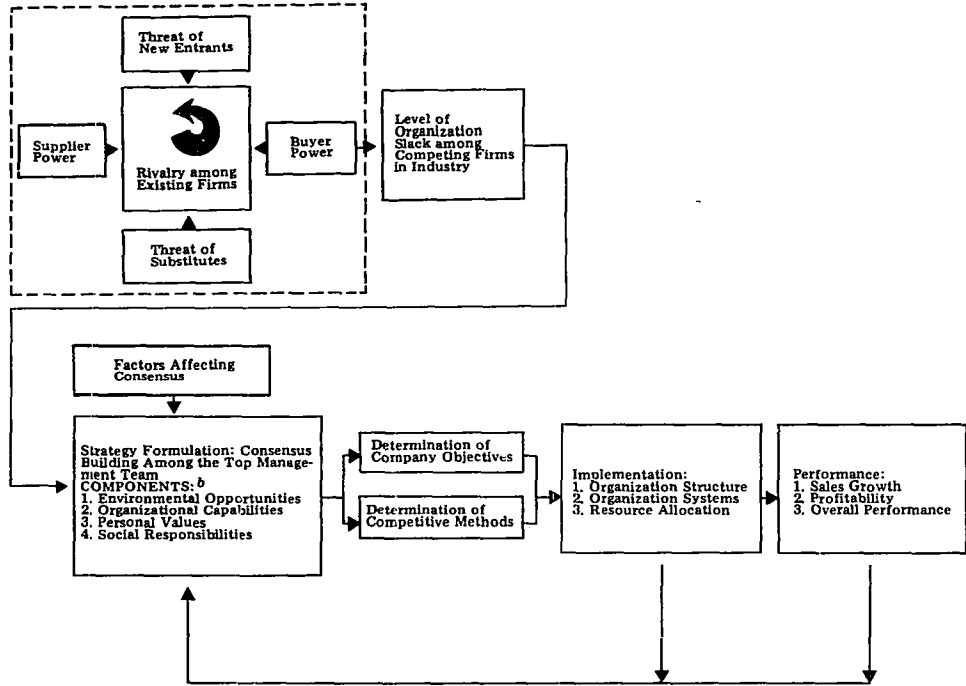
The fragmented nature and low profitability of the industry faced by the firms in this field study—paints and allied products—forms a primary basis for the hypothesized positive relationships between firm performance and consensus on organizational objectives and competitive methods. The key attributes of fragmented

Table 1. Review of consensus literature

Study	Subjects and research method	Consensus type	Dependent variable	Key findings
Stagner (1969)	217 Vice Presidents and top executives from <i>Fortune</i> 500 companies; mailed questionnaire	'managerial cohesiveness'—amount of agreement on responses to questionnaire items by executives	profitability; ( <i>not</i> used in examining relationships with managerial cohesiveness)	positive correlation between executive satisfaction on decision-making process and profitability; supported view of corporation as a coalition; found three important dimensions of decision-making process: managerial cohesiveness, formality, and centralization
Whitney and Smith (1983)	88 U.S. graduate and undergraduate students assuming roles of product managers or strategic planners; laboratory study; evaluated two marketing case studies: one to facilitate role induction and the second to develop a strategic plan	'cohesiveness'—'a group characteristic which is inferred from the number and strength of mutual positive attitudes among the members of a group'	attitude polarization and knowledge about the strategic plan	increased polarization between strategic planners and product managers under emphasized group cohesiveness condition; persuasive arguments and social comparison theories do not lead to contradictory predictions of the effect on attitude of interaction between two groups holding initially opposing positions; high cohesiveness within groups leads to reduced receptivity to information; cohesiveness may interfere with the ability to utilize information fully
Grinyer and Norburn (1977-78)	91 subjects of which two-thirds were CEOs or Executive Vice Presidents and one-third were senior managers reporting to a top executive; subjects drawn from 21 publicly held UK firms in 13 industries; field study using questionnaire	consensus on: objectives; role perception—responsibility for decision-making; degree of perceived formality of planning systems; information monitoring—number of items received and number of items used	return on net assets	higher financial performance is associated with use of more information processes (channels of information); use of informal channels is associated with high performance; agreement on desirable changes may not be high when a high percentage of companies suggest a change in the status quo; no evidence to support common perception of objectives with financial performance; when performance is good, there is little desire for change—struggling companies are the ones anxious to change

Table 1. Cont. Review of consensus literature

Study	Subjects and research method	Consensus type	Dependent variable	Key findings
DeWoot, Heyvaert, and Martou (1977-78)	original study based on 168 firms—analysis based on 123 firms followed by series of in-depth studies to document conclusions; extensive details not provided on the research method or interviewees	agreement on means for innovation activities	long term profitability—15-year trend (profit/owners' equity)	more 'efficient' groups making decisions on change are characterized by: heterogeneity of orientation (functional); frequent disagreement on means of innovation; low concentration of influence among decision-makers; problem-centered conflict-solving; no irrelevant disagreement; communication difficult but faster implementation  <i>Major conclusion:</i> economic development of a company is not explained by the number of innovations made but by its capacity for combining technical progress with corporate strategy.
Bourgeois (1980)	on-site interviews with 12 CEOs; field study with questionnaire completed by 67 top managers	consensus on goals, means	factor scores of performance index combining five-year growth in: return on total assets; capital; net earnings, EPS; and return on sales	consensus on means always leads to higher performance than disagreement on means; disagreement on less tangible goals tends to be associated with better performance; worst performance occurs with goals agreement—means disagreement combination
Bourgeois and Singh (1983)	on-site interviews with 24 CEOs and completion of questionnaires by 4-10 managers in each firm; total sample size not provided	'strategic discord'—disagreement among TMT on environment; goals; strategies	'organizational slack—consisting of available slack (e.g. dividends/net worth); recoverable slack (e.g. inventory/sales); potential slack (e.g. price/earnings)	infusions of slack seem to promote goal consensus and reduce strategic discord; slack resources provide the wherewithal and opportunity for policy conflicts and coalition formation necessary to achieve goal consensus.
Hrebiniak and Snow (1982)	247 top-level managers from 88 firms within four industries: plastics/resins; automotive; semiconductor; and air transportation questionnaire	agreement on firm's strengths and weaknesses with respect to environmental context	return on assets	positive relationship between top management's agreement on firm's strengths and weaknesses and return on assets; interaction among top managers and commitment to action plans and objectives have positive implications for strategy implementation



Forces Driving Industry Competition <sup>a</sup>

<sup>a</sup> Adapted from Porter (1980)

<sup>b</sup> Adapted from Andrews (1971)

Figure 1. Consensus in strategy formulation and organizational performance

industries are the presence of a large number of small and medium-sized firms and the absence of market leaders with the power to shape industry events. These industries have a low four-firm concentration ratio, i.e. the share of industry sales accounted for by the top four firms. Porter (1980) posits that several primary economic forces lead to a highly fragmented industry such as low overall barriers to entry, absence of economies of scale or experience curve effects, high transportation costs, high inventory or erratic sales fluctuations, no advantages of size in dealing with buyers or suppliers, and diseconomies of scale in some important aspect. These factors—reflected in Porter's (1980) 'five forces' model—all contribute directly or indirectly to intensify basic competitive forces and drive down overall industry profitability. The presence of such factors in the paints and allied products

industry was strongly confirmed through both the use of the field study (to be discussed) and secondary sources. The low profitability of the paint and allied products industry is evidenced in a U.S. Department of Commerce industry report which states that the 1978 profit-after-taxes as a percentage of sales for the paint industry was 2.25 percent compared to an average for all manufacturing industries of 5.25 percent. Similarly, profits as a percentage of net worth averaged about 16 percent for all manufacturing industries but only 8 percent for the paint industry. The report further suggests that the depressed profits were largely attributed to a price-cost squeeze, reflected by the 1978 Producers' Price Index for paint of 192.3 (1967=100) compared to the average for paint raw materials of 212.7 (*U.S. Industrial Outlook*, 1980: 138). Such lower levels of profitability

serve to constrain organizational resource levels and strategic opportunities because earnings generated from on-going operations are generally insufficient to obtain necessary resources to expand the organization's product-market scope.

Several studies in strategic management and organization theory (Beard and Dess, 1979, 1981; Lieberman and O'Connor, 1972; Rumelt, 1977) have documented the strong impact that measures of industry performance have on member firms. Despite the fact that the weighted average for all firms within an industry provides industry averages, individual firms within an industry may vary quite significantly in their performance. However, based on intensive field interviews the aforementioned factors operating at the industry level were characteristic of the industry environment faced by firms included in the present study.

### Organization strategy and performance

Building largely on the works of Herbert Simon (1957), many authors have supported the notion that strategy is formulated by consensus-building among members of the top management team (TMT) within an organization. Organization theorists have also supported the notion that the strategy of an organization is formulated by the chief executive officer (CEO) in conjunction with members of the organization's dominant coalition (Thompson, 1967)—which is composed of the most influential members of the TMT (Hambrick and Snow, 1977). In the strategic management literature, Ansoff (1965) emphasized the importance of consensus on an appropriate set of objectives as an integral part of the strategy formulation process. More recently, Bower and Doz (1979) also supported the generation of a consensus around strategic objectives and policies as a prime requisite of strategy.

Several factors which may lead to a lack of consensus among the TMT in the determination of competitive methods and company objectives deserve mention. First, environmental assessment may be considered to be an *antecedent* activity to the formulation of company objectives and competitive methods. This sequence of activity is a cornerstone of the normative literature (see Pearce, 1981, for a recent review). Clearly, environmental perceptions vary with such factors as individual differences, individual repertoires,

and social expectations (Downey and Slocum, 1975) and they serve to influence the objectives and competitive methods espoused by TMT members. Similarly, the extent to which individuals 'attend' to different sectors of the environment (Cyert and March, 1963; Weick, 1979) influence perceptions. Such perspectives or interests are, to a large extent, determined by one's formal role in the organization. Astley *et al.* (1982) contend that the organization's division of labor creates 'local' perspectives on each topic. Therefore one may posit that a higher level of dissimilarities among members of a TMT with regard to such 'individual differences' as education, aspiration levels, etc. may lead to a lower level of consensus in strategy-making. Also, if the roles among members of the TMT are highly differentiated—resulting in a higher division of labor—one may expect a lower level of consensus or shared perspectives among the TMT. Second, the organization's own system for obtaining and processing information (Ference, 1970; Child, 1975; Mintzberg, 1978) and political processes among members of the top management (Carter, 1971; Hambrick, 1981) serve to influence perceptions and preference orderings. If all (or several) members of the TMT are not privy to the same 'strategy-related' information, or if the information must pass through several layers in the organizational hierarchy (leading to information distortion) before reaching members of the TMT, a lower level of consensus is likely to result. Further, in-fighting or hidden agenda by members of a TMT would tend to suppress consensus on competitive methods and company objectives. Such behavior would make compromise difficult and lead to 'entrenched' positions on the strategic direction for a firm.

With regard to the hypothesized positive relationship between performance and *both* consensus on organizational objective and competitive methods, Porter (1980), Pfeffer and Leblebici (1973), and Bourgeois (1981) provide the primary rationale. Porter argues that it is rarely possible for a firm to pursue more than one of three generic strategies—overall low cost, differentiation, focus—and that 'effectively implementing any of the three generic strategies usually requires total commitment and supporting organizational arrangements that are diluted if there is more than one primary approach' (1980: 35). Further, his suggestions for 'tightly managed decentraliza-

tion' and 'strategic discipline' for firms competing in a fragmented industry imply a need for consensus among a firm's top management team. Pfeffer and Leblebici (1973) assert that competition increases the external pressure or constraints placed on an organization. They hypothesize that greater competition 'leads to a demand for even more interlocking of organizational behavior and more coordination and control within the organization' (1973: 270). In a similar vein, Bourgeois (1981) contends that organizational slack serves as a resource for goal conflict resolution and as a means for facilitating experimentation with new strategies, and Richards (1979) and Chakravarthy (1982) assert that when slack is relatively low, the firm is primarily concerned with conserving limited resources. Consequently, available strategic choices are constrained and the organization is less able to pursue divergent ends and means for achieving those ends. Thus, a high level of consensus should lead to a higher level of performance because during periods of resource scarcity a 'unified direction' for the organization becomes of primary importance. However, reversing the cause-effect relationship, one could argue that higher levels of performance lead to consensus among TMTs on either objectives or competitive methods if for no other reason than 'everybody likes to be identified with a winner'. Alternatively, low performance may lead to disagreement regarding what type(s) of strategy to pursue.

Andrews (1971) and others have recognized the interactive nature of strategy formulation and strategy implementation. Clearly, the end result of the process of strategy formulation should lead to the development of appropriate structures and systems as well as the allocation of resources to ensure its successful implementation. Uytendaele, Ackerman, and Rosenblum (1977) consider strategy formulation to be an 'intellectual' activity and strategy implementation (or organization building, as they call it) to be an 'administrative' activity. Thus the outcome of the *process* of strategy formulation is of little use if it is not properly implemented *and* resources required to implement a given strategy act as constraints on future strategy. (Thus we have a feedback loop in Figure 1 between Performance and Strategy Formulation.) Given the scarcity of resources in firms which must compete in highly competitive environments such as the paints and allied

products industry, a chosen strategy must be implemented *effectively*—allocation of the *proper* resources (e.g. capital and personnel) and *organization* structure and systems and *efficiently* (i.e. minimal wastage of human and capital resources). Therefore, in addition to conserving resources and providing a unified direction for the firm, a high level of consensus in strategy-making should also result in a *shared understanding* among the TMT for a given strategy which, therefore, facilitates implementation (Day, 1983; Fiall, 1982).

## Hypotheses

It has been argued that the industrial context within which a firm competes is an important basis for studying the relationship between organizational performance and consensus among the top management team on company objectives and competitive methods. Fragmented industries are characterized as being intensely competitive—a context for which Porter (1980) recommends a 'tightly managed decentralization' and 'strategic discipline' for the top management of member firms. Therefore, with regard to the relationship between consensus and performance, it is hypothesized:

*H<sub>1</sub>: There will be a positive relationship between the consensus among the TMT on company objectives and measures of organizational performance.*

*H<sub>2</sub>: There will be a positive relationship between the consensus among the TMT on competitive methods and measures of organizational performance.*

A primary thrust of this paper is that the hypothesized relationships in  $H_1$  and  $H_2$  are necessary *but not* sufficient conditions for explaining variance in performance between firms in the present industrial context. Therefore, the following two hypotheses ( $H_3$  and  $H_4$ ) assert that consensus on *both* company objectives and competitive methods are required.

*H<sub>3</sub>: The positive relationship between the consensus among the TMT on company objectives and measures of organizational performance will vanish when consensus on competitive methods is controlled.*



H<sub>4</sub>: The positive relationship between the consensus among the TMT on competitive methods and measures of organizational performance vanish when consensus on company objectives is controlled.

These hypotheses are consistent with the normative ideal of rationality and comprehensiveness in that consensus by the top management team on both 'unity of purpose' (company objectives agreement) and 'utility of action' (competitive methods agreement) would lead to high levels of organization performance (Bourgeois, 1980).<sup>1</sup> If when controlling for the presence of consensus on one variable the partial correlation vanishes, one may conclude that agreement on both is necessary to explain variations in performance. That is, in testing H<sub>3</sub> and H<sub>4</sub>, if significant zero-order correlations associated with H<sub>1</sub> and H<sub>2</sub> were to vanish, one could conclude that the initial positive relationships were dependent on the other 'consensus' variable. Alternatively speaking, each 'consensus' variable accounts for variance in performance (H<sub>1</sub> and H<sub>2</sub>). The level of statistical significance for acceptance of the zero-order correlation coefficients (H<sub>1</sub> and H<sub>2</sub>) and the first-order partial correlation coefficients (H<sub>3</sub> and H<sub>4</sub>) is  $p < 0.05$ .

## RESEARCH METHOD

### Sample and research design

Several criteria guided the researcher in the selection of organizations for the research sample. These criteria provided a rigorous test of the hypotheses and also increased the potential for adequate control of potential confounds.

1. The four-digit Standard Industrial Classification (SIC) code was chosen as an appropriate measure of the industrial environment within which a given firm competes. This unit of analysis has been used frequently in

<sup>1</sup> The present research posits that consensus on *competitive methods* and consensus on *company objectives* are of equal importance. Bourgeois (1980) hypothesized that agreement on ends was more important than agreement on means, primarily because of the 'rational-comprehensive' model with its sequencing of ends prior to means and the systems theory concept of equifinality which 'suggests that strategies can be different not only from one organization to the next, but within the same organization from time to time' (1980: 234).

2. The output of the firms had to be concentrated in one line of business to help avoid any confusion between competitive methods used in multiple businesses. The specific criterion used followed Rumelt's (1974) 'single business' or 'dominant business' categorization, i.e. at least 70 percent of the firm's total sales had to be within a given four-digit SIC industry.
3. The organization had to be an autonomous, self-contained entity. Since all the sample firms had to conform to this criterion, the researcher was also able to consider corporate-level and business-level strategies as synonymous for these firms (Hofer, 1975).

Twenty-seven manufacturing organizations were initially contacted which were non-diversified, privately held and competed within the same four-digit SIC industry: paints and allied products (SIC 2851). On-site interviews with the Chief Executive Officers (CEOs)—or a designated executive—were conducted to identify members of the dominant coalition (Thompson, 1967) or top management team. The composition of the TMT was determined by first providing the CEO with a definition of 'strategic decisions' and a stimulus set of 'potential strategic decisions for manufacturing firms' (e.g. development of new products, selection of distribution channels) on which he was asked to add or delete items. The CEO was then asked to identify those individuals within his firm whom he felt had the most influence in making such decisions. The interviews also helped to determine firm-specific information concerning the company's strategy, perceived environmental threats, and opportunities; to establish rapport with the CEOs to ensure cooperation in the latter phase of the research; and to refine the research instruments. Of the 27 organizations initially contacted by mail, 24 CEOs granted on-site interviews, and the responses from 19 firms were received in time to be included in the data analysis. From the 90 questionnaires mailed to the TMTs of these 19 firms, 74 usable responses (or 80 percent) were returned. The participating firms ranged in size from \$2 million to \$65 million in annual sales, with an average of \$11.9 million.

The anecdotal data obtained from interviews with industry executives added richness in the understanding of a firm's strategy and competition within an industry. The sentiments expressed by executives reflected the intensely competitive nature of this industry. For example, one executive stated that profit margins were being depressed because of the 'overcapacity in many consumer product segments of the industry' attributable to 'small barriers of entry resulting from nominal quality control requirements for product consistency'. Several executives commented on the threat of increased competition from substitute products (e.g. wallcovering, plastics). Also, one executive asserted that '98% of my products' raw materials are sensitive to increases in the costs of energy' and that he, as an owner and manager of a small firm, had little control over such costs.

### Operationalization of variables and research instrumentation

#### *Company objectives and competitive methods*

A review of questionnaire items used by previous researchers (Bourgeois, 1980; Child, 1975; Khandwalla, 1976) was used to develop an initial listing of 'company objectives'. The strategic dimensions proposed by Porter (1980) provided a framework for determining 'competitive methods' for firms within an industry. These dimensions, which included such elements as brand identification, channel selection, technological leadership, and service served as a starting point for the list of 'competitive methods'.

Several steps were taken to increase the researcher's confidence in the industry specificity and face validity of the items on both instruments. First, open-ended questions were directed at the CEOs during the on-site interview such as: 'How would you describe your firm's strategy?', 'Is there one best way to achieve success in your industry?', and 'What yardstick(s) do you use to measure the success of your strategy?' Second, the stimulus set of 'potential strategic decisions for manufacturing firms' was presented to each CEO, or designated executive, and he was asked to comment on how important each one was to his firm. Third, 'pretests' with four other non-sample CEOs and academic colleagues were conducted.

The 'company objectives' and 'competitive methods' instruments consisted of 15 and 21 items, respectively, on 5-point scales ranging from '1=Not at All Important' to '5=Extremely Important'. Each respondent was asked to indicate 'how important each of the following objectives/competitive methods is to your firm'. It is important to note that the purpose of the instrument was to obtain an indication of the extent of consensus or 'shared perspectives' regarding the relative importance of different aspects of what a given firm's strategy *actually is*. The purpose was *neither* to determine the *process* by which consensus (or lack thereof) was obtained *nor* individual preference orderings among TMT members concerning what the strategy of a given firm *should be*. Table 2 includes a listing of items that appeared on both instruments.

The measurement of 'consensus on company objectives' and 'consensus on competitive methods' required three steps: (1) the calculation of the mean standard deviation of responses among TMT members in a given firm for *each* item on the two scales; (2) the summation of the standard deviations for *all* items on each instrument to yield an aggregate firm score and (3) since a standard deviation measures the 'dispersion' or differences in perception among the individual respondents within a given firm, the TMT score was subtracted from a constant number to give the numerical values a positive relationship to the variable being measured. That is, the lower the *dispersion* of responses to the items composing each instrument within a given TMT, the higher the level of consensus.

#### *Firm performance*

The research uses what may be considered to be 'self-reported objective' and 'subjective' measures of organizational performance. The questionnaire items used to measure 'self-reported objective' performance were adapted from Lawrence and Lorsch (1967). Primary consideration had to be given to brevity and an appreciation for the confidential nature of the information requested from the CEOs of the privately held sample firms. The researcher requested 'total firm sales' figures at two points in time, 1976 and 1980, from which 'annual sales growth' was calculated, and the *average* 'after tax return on total assets

Table 2. Company objectives and competitive methods items on research instruments

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*Company objectives*

1. Net profit over *five* years
2. Rate of sales growth
3. Recognition as an innovative firm
4. Retaining key personnel
5. Employee satisfaction/morale
6. Development of new products
7. Net profit over *one* year
8. Firm prestige/reputation
9. Market penetration
10. Management development/selection
11. Lowest cost relative to competitors
12. Employee compensation and benefits
13. Growth in assets and reserves
14. Dividends distributed
15. Community service/goodwill in community

*Competitive methods*

1. New product development
  2. Customer service (e.g. credit/technical assistance)
  3. Operating efficiency
  4. Product quality control
  5. Experienced/trained personnel
  6. Maintain high inventory levels
  7. Competitive pricing
  8. Broad range of products
  9. Developing/refining existing products
  10. Brand identification
  11. Innovation in marketing techniques and methods
  12. Control of channels of distribution
  13. Procurement of raw materials
  14. Minimizing the use of outside financing
  15. Serving special geographic markets
  16. Capability to manufacture speciality products
  17. Products in high price market segments
  18. Advertising
  19. Reputation within industry
  20. Forecasting market growth
  21. Innovation in manufacturing processes
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from 1976 to 1980'. It was felt that such data could be quickly obtained, and that the CEO would be willing to provide such data.

The 'subjective' measures of organizational performance consisted of four items. First, *all* TMT members were asked to respond to three items. These items asked the respondent to compare his firm to 'firms of similar sales volume in your industry and region'. The time frame for all three items was 'average over the past 5 years' and the individual items were: (1) Firm Total Sales Growth, (2) Firm After-tax Return on Total Assets, and (3) Overall Firm Performance/Success. The five-point interval scale for each

item ranged from 5 ('Top 20 percent') to 1 ('Lowest 20 percent'). The value for each of these measures for a given firm represented the sum of responses of the members of the TMT divided by the number of respondents comprising the TMT. The fourth item was adapted from Lawrence and Lorsch (1967). It represents an overall or 'global' assessment of firm performance and asked the CEO: 'compared to your competitors, what percent of ideal or optimal performance do you personally feel that your firm is achieving in your industry?' The subjective measures of overall or global performance were used to (1) determine the extent to which such measures are

correlated with economic performance and (2) provide the respondents with an opportunity to incorporate implicitly non-economic considerations (e.g. employee welfare, social responsibility) and aspiration levels (Cyert and March, 1963, Kirchoff, 1979) in their assessment).

Given the nature of the sample—privately held manufacturing firms—the reliability and validity of the performance measures were addressed. The relationships between the 'self-reported' objective and subjective measures of firm profitability and firm sales growth were statistically significant— $r=0.58$ ,  $n=14$  ( $p<0.01$ ), and  $r=0.60$ ,  $n=15$  ( $p<0.01$ ), respectively. Further, six of the eight zero-order correlations between overall or 'global' measures of firm performance and the objective and subjective measures of firm profitability and firm sales growth were significant at a level of at least  $p<0.05$ , indicating a high level of reliability of the measures. To examine the convergent validity of the subjective measures of performance, three members of the 1980 Management Information Committee (MIC) of the National Paint and Coatings Association were asked to assess the performance of eight firms in the present sample on three of the measures. The correlation coefficients and corresponding levels of statistical significance of the relationship between the *combined* assessments of the MIC members and the subjective measures were  $r=0.440$  ( $p=0.137$ ),  $r=0.449$  ( $p=0.134$ ), and  $r=0.680$  ( $p=0.032$ ) for overall performance—5 point scale, the subjective measure of profitability, and the subjective measure of sales growth, respectively. These findings lend additional support to the convergent validity of the subjective measures. (For a complete discussion of the use of subjective measures of organizational performance in the present research context see Dess and Robinson, 1984.)

## RESULTS

This section first presents descriptive information pertaining to each of the 19 sample firms (Table 3) and the results obtained from the testing of the four research hypotheses (Table 4).<sup>2</sup> Then the

<sup>2</sup> One may question the value or appropriateness of including firms with only two respondents. An analysis was conducted excluding such firms and the results, available from the author, were very similar to the results of all 19 firms with

data analyzed using an *alternative* analytical procedure used by Bourgeois (1980)—analysis of variance. The relative advantages of the *present* analytical procedure—correlational analysis—are addressed.

Two of the six correlation coefficients regarding  $H_1$  (consensus on company objectives and performance) are significant at a level of  $p<0.05$  and the correlation between consensus on company objectives and the objective measure of profitability approached statistical significance ( $p=0.067$ ). Three of the six correlation coefficients relating to  $H_2$  (consensus on competitive methods and performance) are significant at a level of  $p<0.05$ . Thus, one may conclude that there is moderate support for the hypothesized positive relationships between multiple measures of organizational performance *and* consensus on 'company objectives' *and* consensus on 'competitive methods'.

The positive relationship between 'consensus on company objectives' and measures of firm performance ( $H_1$ ) was essentially unchanged when the control variable 'consensus on competitive methods' was held constant ( $H_3$ ). Similarly, the positive relationship between 'consensus on competitive methods' and measures of firm performance ( $H_2$ ) was essentially unchanged when the control variable of 'consensus on company objectives' was held constant ( $H_4$ ). Therefore, one may conclude that the original correlations were *independent* of the control variables. Therefore, lack of support for  $H_3$  and  $H_4$  implies that consensus on either company objectives *or* competitive methods represents both a *necessary* and *sufficient* condition for organizational performance. Alternatively, the correlation between consensus on competitive methods *and* consensus on company objectives was non-significant ( $r=0.088$ ,  $n=19$ ,  $p=0.36$ ) and each 'consensus' variable *independently* accounts for economic performance, but they do *not* do so jointly.

the exception of correlations regarding 'overall performance—CEO rating'. The primary reason for this exception is because the CEO for firm No. 11 (one of the firms with only two respondents) rated his firm at only 5 percent 'of ideal performance'. However, his firm was approximately an 'average' performer compared to the entire sample for the other measures. Since the mean and standard deviation for this variable was 71.4 percent and 24.5 percent, respectively, this 'outlier' (approximately 2.6 standard deviations below the mean) had a major impact on the correlational results for this performance variable.

Table 3. Characteristics of the 19 sample firms

Firm number	Approx. sales (million dollars)	No. of respondents	Performance measures <sup>a</sup>						Consensus on company objectives <sup>b</sup>	Consensus on competitive methods <sup>b</sup>		
			1	2	3	4	5	6				
1	5	2 of 6 <sup>d</sup>	4.80	4.80	15.2%	8.4%	4.80	90%	43.16	(1) <sup>c</sup>	32.84	(12)
2	7	4	4.00	3.75	21.0%	10.3%	4.25	90%	35.77	(18)	34.05	(10)
3	11	6	4.17	4.17	16.7%	NA	4.84	90%	42.36	(2)	38.37	(3)
4	5	4 of 7	3.57	2.00	8.1%	4.0%	4.14	80%	37.33	(14)	32.42	(13T)
5	NA	3 of 7	4.29	3.29	NA	NA	4.43	NA	40.04	(8)	37.81	(4)
6	4	4	3.25	3.25	15.9%	8.0%	3.75	75%	39.20	(10)	34.32	(9)
7	65	6 of 8	5.00	5.00	23.6%	40.0%	5.00	90%	42.25	(3)	35.77	(6)
8	3	3	4.33	3.67	23.8%	2.5%	4.67	75%	41.22	(6)	38.58	(2)
9	4	5	4.40	3.80	30.5%	13.0%	4.50	75%	39.82	(9)	33.68	(11)
10	22	4	4.25	3.00	20.5%	5.9%	4.00	84%	37.19	(15)	32.42	(13T)
11	4	2	4.00	3.00	15.1%	8.4%	3.00	5%	35.03	(19)	39.35	(1)
12	7	6	4.40	2.60	37.7%	6.3%	3.80	30%	36.98	(16)	31.02	(16)
13	2	3	1.33	3.67	4.6%	8.6%	3.67	70%	36.85	(17)	31.73	(15)
14	NA	4	1.50	2.00	NA	NA	2.00	NA	40.05	(7)	29.25	(17)
15	8	5	4.75	4.20	12.1%	4.3	4.20	92%	36.76	(13)	34.35	(8)
16	NA	2	3.50	4.00	NA	NA	5.00	NA	41.50	(4)	35.15	(7)
17	26	6	2.84	2.50	6.5%	1.8%	2.67	65%	38.54	(11)	35.91	(5)
18	6	3 of 4	3.67	2.67	20.0%	9.0%	3.67	60%	38.19	(12)	27.99	(18)
19	NA	2 of 4	2.00	2.50	NA	NA	2.00	NA	41.48	(5)	28.70	(19)
Mean	11.9		3.68	3.34	18.1%	9.2%	3.91	71.4%	39.14		33.86	
S.D.	16.4		1.07	0.88	8.8%	10.1%	0.92	24.5%	2.45		3.32	

<sup>a</sup> Organizational Performance Measures

1. Sales Growth (Subjective Measure)
2. Return on Assets (Subjective Measure)
3. Sales Growth (Objective Measure) (%)
4. Return on Assets (Objective Measure) (%)
5. Overall Performance (Five-Point Scale—Top Management Team)
6. Overall Performance (Chief Executive Officer Assessment) (%)

<sup>b</sup> The higher the numerical score for each 'consensus variable', the higher the level of consensus.<sup>c</sup> Ranks are in parentheses.<sup>d</sup> Number responding out of the total receiving questionnaires for a given firm.

Table 4.

	Sales growth (subjective measure)	Return on assets (subjective measure)	Sales growth (objective measure)	Return on assets (objective measure)	Overall performance (5-point scale)	Overall performance (CEO rating)
(a) Relationships between consensus on company objectives, competitive methods and firm performance						
Consensus on company objectives	0.1002 (19)*	0.4177* (19)	0.1430 (15)	0.4214 (14)	0.2935 (19)	0.4954* (15)
Consensus on competitive methods	0.4703* (19)	0.4721* (19)	-0.1023 (15)	0.0959 (14)	0.4616* (19)	-0.0844 (15)
(b) Partial correlations between consensus on company objectives, consensus on competitive methods and firm performance						
Consensus on company objectives <sup>b</sup>	0.0668 (16)	0.4218* (16)	0.1535 (12)	0.4165 (11)	0.2860 (16)	0.5066* (12)
Consensus on competitive methods <sup>c</sup>	0.4656* (16)	0.4311* (16)	-0.1166 (12)	0.0649 (11)	0.4575* (16)	-0.1481 (12)

<sup>a</sup> Degrees of freedom<sup>b</sup> Controlling for Consensus on Competitive Methods<sup>c</sup> Controlling for Consensus on Company Objectives<sup>\*</sup>  $p < 0.05$ .

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## Supplementary analyses

An alternative analytical approach to testing the last two hypotheses, used by Bourgeois (1980), would be to split the sample of the median level of consensus on objectives and consensus on competitive methods and conduct *F*-tests on the mean performance levels for the four groups. However, partial correlation analysis (Table 4) offers two comparative advantages: (1) it preserves all of the information in the original data, and (2) it consumes fewer degrees of freedom. Other arguments which favor the use of correlational techniques with such data can be found in Cohen and Cohen (1975).

Nonetheless, to be consistent with Bourgeois' earlier work, a series of six 2 (high versus low consensus on competitive methods) by 2 (high versus low consensus on company objectives) analyses of variance were conducted: one for each of the six performance measures. In order

to preserve space, the results of each of these analyses will not be presented here. However, Table 5 presents the means and the ANOVA summary table for the analysis using a subjective measure of 'overall' or 'global' organizational performance as the dependent variable. This particular analysis was chosen because it yielded the strongest results of the six performance measures. But, as can be seen, neither of the main effects were significant and the two-way interaction was only marginally significant. Therefore, although Bourgeois' (1980) earlier work in this area used ANOVA to test the hypotheses, the correlational analysis conduct herein has the distinct, aforementioned advantages, and only the implications of these results will be addressed in the next section. The results in Table 4 indicate that the empirical results obtained from the study of a research question may, to some extent, be dependent upon the analytical procedure used.

Table 5. Consensus on competitive methods versus objectives: mean scores, cell size and cell rank on overall performance

	Consensus on competitive methods		
	Low	High	Row means
Consensus on company objectives			
Low	Rank = 2 <i>M</i> = 3.86* <i>n</i> = 5	Rank = 3 <i>M</i> = 3.53 <i>n</i> = 4	3.71
High	Rank = 4 <i>M</i> = 3.33 <i>n</i> = 4	Rank = 1 <i>M</i> = 4.61 <i>n</i> = 6	4.10
Column means	3.62	4.18	

\**M* = mean value of criterion variable (overall performance—5-point scale)

### Analysis of variance

Source of variation	Sum of squares	d.f.	Mean square	<i>F</i>	Significance of <i>F</i> test
Main effects	1.919	2	0.965	1.397	0.278
Methods consensus	0.439	1	0.439	0.635	0.438
Objectives consensus	1.217	1	1.217	1.761	0.204
Two-way interactions	3.013	1	3.013	4.362	0.054
Explained	4.943	3	1.648	2.385	0.110
Residual	10.362	15	0.691		
Total	15.304	18	0.850		

## DISCUSSION

Although the present research design does not enable the writer to draw causal inferences, it does provide insights into relationships of the strategic management process. Therefore in discussing the results, the requirements for establishing causal relationships will be relaxed. The results do *not* support the primary proposition behind our hypotheses: consensus on *both* company objectives and competitive methods is necessary to explain performance differences between firms in the intensely competitive paints and allied products industry. Rather, consensus on *either* objectives or competitive methods is positively related to organizational performance. The empirical results for  $H_3$  (i.e. consensus on company objectives *when controlling* for consensus on company methods is associated with firm performance) is consistent with the concept of equifinality. This notion implies the existence of several equally viable alternative means by which an organization's 'agreed-upon' objectives may be achieved. Consensus on 'competitive methods' as a sufficient condition for organizational performance ( $H_4$ ) is consistent with Bourgeois' (1980) findings and the 'political' or 'incremental' approach to strategy formulation. Thus agreement on means may be of importance in and of itself, and attempts at consensus on objectives may create dysfunctional conflict. Clearly, these findings (i.e. the relative importance of 'objectives' and 'competitive methods' consensus) would have important implications for managers, and further research could determine the dominance of one over the other.

The results support previous findings that consensus on competitive methods has an important relationship to performance. However, the results would not support the suggestion by Bourgeois 'that strategy makers should concentrate on reaching consensus concerning means rather than ends (corporate goals) when formulating strategies' (1980: 227). Rather, the results imply that it is equally important for the top management team to seek consensus on *either* the company's objectives or its competitive methods. Further, the results would suggest that additional efforts on the part of management to achieve a consensus among members of the TMT on both objectives and methods may not enhance the organization's performance beyond that

obtained by achieving a consensus on only one. Reversing the cause-effect relationship, the results suggest that higher levels of performance lead to consensus among TMTs on either objectives or competitive methods. Alternatively, low performance may lead to disagreement regarding what type(s) of strategy to pursue.

### Comparison of the present study with Bourgeois (1980)

Two important but related differences between the present study and Bourgeois (1980)—in addition to the analytical procedures discussed earlier—are the (1) performance indicators used and the (2) composition of the sample of firms. The present research consisted of 19 non-diversified, privately held firms competing in the same industry. Multiple measures of 'self-reported' objective and subjective indicators were used to assess profitability, sales growth, and overall or 'global' performance. The lack of secondary performance data is a limitation of the study, but the measures do appear to have a reasonably high level of reliability and validity. On the other hand, Bourgeois' study consisted of 12 publicly held firms competing in 11 different industries and organizational performance was measured by factor scores which combined a number of financial performance variables using secondary data. The performance indicators were dominated by measures of growth in profitability. Growth in net earnings, growth in EPS, and growth in ROS had factor loadings of 0.977, 0.977 and 0.981, respectively, over a 5 year period. Although Bourgeois measured performance using an 'improvement indicator' to 'suppress between-industry performances biases inherent in absolute figures' (1980: 238), it is not too surprising that the high-technology firms had an average performance factor score of +0.444 ( $n=4$ ) and the manufacturing firms had an average factor score of -0.237 ( $n=5$ ). Perhaps the former group's higher average performance may be attributed as much (or more) to their competing in faster-growing and more profitable industries as to the strategies espoused or implemented by their managements. These results clearly suggest that relative impact of corporate-level strategy (i.e. *what* businesses do we compete in?) and business-level strategy (i.e. *how* do we compete in a given business?) on organizational

performance needs to be addressed when studying a sample of firms which compete in heterogeneous industries.

A comparison of the two studies illustrates Martin's (1982) imagery of the research process as a 'garbage can model' in which problems, resources, methodologies, and solutions interactively constrain each other. The present study controlled for 'industry' at the four-digit SIC level. Thus, given resource constraints (e.g. travel expenses) the firms available were privately held. Bourgeois (1980), on the other hand, did not control—at least not to as great an extent—for the industry context within which his sample firms competed. Therefore, he was not as constrained in his selection of firms, and he was therefore able to include publicly held firms for which there was available secondary performance and product-market data. However, in the interpretation of the current results we may be more confident that the findings are generalizable to a more specific industry context. In the Bourgeois' study, however, there may be a greater potential for an aggregation error. By combining data associated with 12 firms competing in different industries (with the exception of two boat manufacturers—SIC 3732) in his analysis, the direction of the relationship between the 'consensus' variables and performance may be different for some subgroups (i.e. firms competing in similar industries) of the sample than other subgroups. Therefore when the data from all firms are aggregated in the analysis, the relationships may be obscured.<sup>3</sup>

### Implications for future research

The fragmented nature of the paints and allied products industry—with the resultant intense competitive pressure and low industry profitability—provided the primary basis for the hypothesized positive relationships between firm performance and consensus regarding both organizational objectives and competitive methods. The writer concurs with Porter (1980) in that the industry within which a firm competes is a salient context variable and is critical in the development of contingency theories in strategic management

(Harrigan, 1983). In this context additional research should provide comparisons *across* industries to determine if the associations between 'consensus' and performance found in the present study are industry-specific or applicable to a wide variety of competitive environments.<sup>4,5</sup> The importance of studying the generalizability of strategic management research findings from one industry setting to another is well illustrated by Fredrickson and Mitchell (1984) and Fredrickson (1984) in their field studies of strategic decision processes in unstable (SIC 2421—Sawmills and Planing Mills) and stable (SIC 2851—Paints and Allied Products) industries. In the former study there was a *negative* relationship between 'comprehensiveness . . . defined as the extent to which organizations attempt to be exhaustive or inclusive in making and integrating strategic decisions' and organizational performance. In the latter study there was a *positive* relationship between 'comprehensiveness' and organizational performance. Not only do these studies provide further support for a contingency approach to strategic management research, but these findings are consistent with much of the strategic management/organization theory literature. That is, firms competing in unstable industries face greater uncertainty, and therefore are less able to benefit from comprehensive strategic planning. Moreover these data support the notion that such attempts may be dysfunctional and detract from performance for these types of firms. Similarly, in the present context one may posit, for example, that organizations competing within an industry experiencing high growth may benefit from a relatively high level of dissensus (disagreement) in assessing the relative importance of company objectives and competitive methods. Additional organizational slack may lead to more experimentation with

<sup>4</sup> Since the research design did *not* permit the study of the relationships between *characteristics* (e.g. low overall entry barriers, high transportation costs) of fragmented industries and 'consensus' and performance variables, it would not be possible to suggest that the present findings are generalizable to all fragmented industries. Rather, the author proposes that the generalizability of the findings to industries characterized by low profitability and growth is an empirical question.

<sup>5</sup> A conceptual paper coauthored by the first author (Dess and Origer, 1987) suggests relationships between consensus in strategy formulation, organization structure, and the environmental dimensions of munificence, complexity, and dynamism. Theory and empirical support for these dimensions are provided in Dess and Beard, 1984.

<sup>3</sup> Problems associated with aggregation errors are further discussed by Schendel and Patton (1978) in their study of the brewing industry.



new strategies and increase the number of alternatives considered and evaluated. Thus the firm may successfully enter new product-market domains (Andrews, 1971).

The present research has *inferred* the level of consensus within a TMT on the basis of 'shared perspectives' of the importance of competitive methods and objectives. Like attaining higher levels of profitability or sales growth, equifinality characterizes consensus. Thus there are many ways to achieve consensus and all may *not* be equally effective for a given organization. For example, Brodwin and Bourgeois (1984) assert that CEOs may use one of five basic approaches which range from the 'Commander Approach', in which the CEO focuses on formulating the strategy and applying rigorous analysis, to the 'Crescive Approach', in which the CEO concentrates on strategy planning and implementation at the same time and attempts to guide his managers into 'coming forward as champions of sound strategies' (1984: 179). Exploratory field studies using multiple sources of data (e.g. archival data, multiple interviews) could investigate the relationship between the *process* by which consensus—both a shared understanding and *commitment*—is attained and performance outcomes. Again, emphasizing the important role of the industry context, one could argue that during periods of industry decline, and the resulting acute resource scarcity of member firms, it would appear that a 'Commander Approach' may be appropriate because the firm's very survival may be at stake. However, during periods of relative prosperity a greater tolerance for divergent perspectives and the satisfaction of the 'interests' of members of the dominant coalition may take precedence.

The theoretical background for the present research is largely based on the normative ideal of strategy formulation in which a high level of consensus on the determination of goals and competitive methods is necessary for organizational performance (Ansoff, 1965; Bower and Doz, 1979). Such a position is, of course, consistent with the Classical School of Management, e.g. unity of direction (Fayol, 1949). However, the findings of this study and much of the cited literature are not consistent with the normative ideal. Here, *each* 'consensus' variable (objectives and competitive methods) was correlated with performance but both 'consensus'

variables were uncorrelated. Similarly, Bourgeois (1980) found that the highest-performing firms had a high level of consensus on means and a low level of consensus on objectives, and Grinyer and Norburn (1977-78) and DeWoot, Heyvaert, and Martou (1977-78) found that consensus on goals was negatively correlated with performance, and consensus on means for innovation activity was negatively correlated with performance, respectively. These findings appear to present a challenge to a long-standing 'assumption base' (Davis, 1971) that pervades the normative literature. Future research should delimit the conditions under which consensus is positively or negatively related to performance.

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