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MODES OF THEORIZING IN STRATEGIC HUMAN RESOURCE MANAGEMENT: TESTS OF UNIVERSALISTIC, CONTINGENCY, AND CONFIGURATIONAL PERFORMANCE PREDICTIONS

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The field of strategic human resource management (SHRM) has been criticized for lacking a solid theoretical foundation. This article documents that, contrary to this criticism, the SHRM literature draws on three dominant modes of theorizing: universalistic, contingency, and configurational perspectives. Seven key strategic human resource practices are identified and used to develop theoretical arguments consistent with each perspective. The results demonstrate that each perspective can be used to structure theoretical arguments that explain significant levels of variation in financial performance.

During the last decade there has been a dramatic shift in the field of human resource (HR) management. This shift has broadened the focus of HR research from the micro analytic research that dominated the field in the past to a more macro or strategic perspective. The strategic perspective of HR, which has been labeled strategic human resource management (SHRM), has grown out of researchers' desire to demonstrate the importance of human resource practices for organizational performance.

The basic premise underlying SHRM is that organizations adopting a particular strategy require HR practices that are different from those required by organizations adopting alternative strategies (Dyer 1984a, 1984b; Fombrum, Tichy, & Devanna 1984; Jackson & Schuler, 1995; Jackson, Schuler, & Rivero, 1989; Schuler & Jackson, 1987a, 1987b, 1988; Schuler & MacMillan,

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1984). If this fundamental assumption is correct, then much of the variation in HR practices across organizations should be explained by the organizations' strategies, and organizations that have greater congruence between their HR practices and their strategies should enjoy superior performance. There is some support for this assumption. For example, Schuler and Jackson (1988) and Arthur (1992) demonstrated that organizations following different strategies utilize different HR practices. Other researchers have demonstrated that HR practices can influence organizationally relevant outcomes such as productivity and profitability (Arthur, 1994; Gerhart & Milkovich, 1990; Huselid, 1993, 1995; Terpstra & Rozell, 1993).

Despite the growing body of empirical SHRM research, the field has been criticized for lacking a solid theoretical foundation (Bacharach, 1989; Dyer, 1985). This criticism arises, in part, because three different modes of theorizing have been employed in the field, but the differences among the alternative perspectives have not been explicitly acknowledged. Some authors have adopted a universalistic perspective (cf. Dewar & Werbel, 1979) and argued for a "best practices" approach to SHRM (Delaney, Lewin, & Ichniowski, 1989; Huselid, 1993, 1995; Osterman, 1994; Pfeffer, 1994; Terpstra & Rozell, 1993). These researchers, like many micro-level HR researchers, posit that some HR practices are always better than others and that all organizations should adopt these best practices. For instance, Pfeffer argued that greater use of 16 management practices, such as participation and empowerment, incentive pay, employment security, promotion from within, and training and skill development, results in higher productivity and profit across organizations. Similarly, Osterman (1994) argued that a number of innovative work practices, such as teams, job rotation, quality circles, and total quality management, result in productivity gains for all American organizations. In general, the practices identified by Pfeffer and Osterman have been labeled "high performance work practices," or simply "best practices."

A second group of researchers has adopted a contingency perspective (Butler, Ferris, & Napier, 1991; Dyer, 1985; Fombrum et al., 1984; Golden & Ramanujam, 1985; Gomez-Mejia & Balkin, 1992; Lengnick-Hall & Lengnick-Hall, 1988; Milkovich, 1988; Schuler & Jackson, 1987a). Contingency theorists argue that, in order to be effective, an organization's HR policies must be consistent with other aspects of the organization. For example, contingency theorists have attempted to show how a number of HR practices are consistent with different strategic positions and how these practices relate to firm performance (Balkin & Gomez-Mejia, 1987; Begin, 1993; Gomez-Mejia & Balkin, 1992; Schuler & Jackson, 1987a).

A third group of SHRM theorists has developed arguments that are consistent with the configurational approach that is emerging in the organization theory and strategic management literatures. Configurational theories differ from universalistic and traditional contingency theories because configurational theories are guided by the holistic principle of inquiry, are usually based on typologies of ideal types, and explicitly adopt the systems assumption of "equifinality" (Doty, Glick, & Huber, 1993; Doty & Glick,

1994; Meyer, Tsui, & Hinings, 1993; Miller & Friesen, 1984; Venkatraman & Prescott, 1990). In general, configurational theories are concerned with how the *pattern* of multiple independent variables is related to a dependent variable rather than with how individual independent variables are related to the dependent variable. Wright and McMahan appeared to suggest that the configurational perspective was an appropriate approach for SHRM when they argued that SHRM is concerned with "the *pattern* of planned human resource deployments and activities intended to enable an organization to achieve its goals" (1992: 298, emphasis added) and that, in order to be effective, an organization must develop an HR system that achieves both horizontal and vertical fit. Horizontal fit refers to the internal consistency of the organization's HR policies or practices, and vertical fit refers to the congruence of the HR system with other organizational characteristics, such as firm strategy. An ideal configuration would be one with the highest degree of horizontal fit.

Configurational notions are currently incorporated in both theoretical and empirical SHRM studies. Numerous authors have attempted to develop a priori typologies of effective HR systems and link the performance of HR systems to firm strategy. For example, Miles and Snow (1984) and Arthur (1992) developed multiple equally effective combinations of HR practices and argued that the different sets of practices are suited for different firm strategies. Configurational ideas are incorporated in empirical SHRM studies when researchers attempt to identify configurations of HR practices that predict superior performance when used in association with each other, or the correct strategy, or both. For example, Arthur (1992) argued that there are two prototypical employment systems, or groups of HR practices. Although he did not specifically state the idea, Arthur (1992) appeared to argue that the closer an organization's HR practices resemble the correct prototypical system (for its business strategy), the greater the performance gains. Similarly, MacDuffie (1995) derived specific configurations, or "bundles," of HR practices that enhance firm performance. Finally, Ichniowski, Shaw, and Prennushi attempted to test the hypothesis that "combinations of HRM practices have bigger effects on productivity than the sum of the component effects due to individual practices" (1994: 9, emphasis deleted). This is clearly an argument in support of a configurational perspective.

This article advances the SHRM literature by clearly articulating the important differences among the universalistic, contingency, and configurational perspectives that are used in the literature and then empirically testing hypotheses that are consistent with the logic of each of the three perspectives. Seven important HR practices that are common to much of the theoretical work in SHRM are identified. The individual practices are used to formulate a series of universalistic and contingency arguments that are parallel to different arguments found in the SHRM literature. Configurational arguments are then formulated by organizing the individual HR practices into two ideal-type employment systems that are posited to enhance firm performance. The employment systems form the basis of a series of configurational predictions.

The article demonstrates that each theoretical perspective is valuable and that explicitly acknowledging the theoretical frameworks will aid in developing SHRM theories.

THEORETICAL PERSPECTIVES OF STRATEGIC HUMAN RESOURCE MANAGEMENT

To date, SHRM has predominately been an applied field. The field's dominant focus has been to demonstrate the importance of effectively managing the human resources of organizations. Thus, a growing number of articles are appearing in the publications aimed at the practitioner community. Although this applied focus has helped to highlight the contributions of SHRM to organizations, it has not fostered sound theoretical development. What has emerged is a growing literature discussing the benefits of SHRM without sufficient articulation of the specific theoretical underpinnings of the field. Presented below are more complete articulations of the three major modes of theorizing imbedded in the field: the universalistic, contingency, and configurational perspectives.

Universalistic Perspective

Universalistic arguments are the simplest form of theoretical statement in the SHRM literature because they imply that the relationship between a given independent variable and a dependent variable is universal across the population of organizations. Developing universalistic predictions requires two steps. First, important strategic HR practices must be identified. Second, arguments that relate the individual practices to organizational performance must be presented.

Strategic HR practices. Strategic HR practices are those that are theoretically or empirically related to overall organization performance. Although not all HR practices are strategic, there is growing consensus about which practices can be considered strategic. Drawing on the theoretical works of Osterman (1987), Sonnenfeld and Peiperl (1988), Kerr and Slocum (1987), and Miles and Snow (1984), we identified seven practices that are consistently considered strategic HR practices. These are: internal career opportunities, formal training systems, appraisal measures, profit sharing, employment security, voice mechanisms, and job definition. Nearly all of these are also among Pfeffer's (1994) 16 most effective practices for managing people.

The first practice, internal career opportunities, refers to the use of internal labor markets. In other words, organizations can choose to hire predominantly from within or from outside. The second practice, training systems, refers to the amount of formal training given to employees. Organizations can provide extensive formal training or rely on acquiring skills through selection and some socialization. Third, appraisals can be based on results or behavior. Behavior-based appraisals focus on the behaviors of individuals necessary to perform the job effectively, whereas results-oriented appraisals focus merely on the consequences of those behaviors. Fourth, profit-sharing plans, which tie pay to organizational performance, have been seen as an

integral part of a strategic HR system. Fifth, the degree to which employees are given employment security has many strategic implications. Although it is apparent in today's economy that even the most senior employees are not free from layoffs, there are particular groups of employees in organizations who undoubtedly have a greater sense of security in their jobs than other employees, either because of a formal or an informal policy of employment security. Sixth, voice mechanisms, both formal grievance systems and participation in decision making, have emerged as key factors. Finally, the degree to which jobs are tightly or narrowly defined is important. Tightly defined jobs are those in which the employees know the content of their jobs exactly. The job is limited in scope, and incumbents do not perform duties that are not considered part of the job. The job duties are more likely shaped by a well-defined job description than by individual action.

We view these seven practices as critical characteristics of employment systems in organizations and will use these practices individually and in combinations as the basis for hypotheses that are consistent with the alternative theoretical perspectives investigated here. There are other HR practices that might affect organizational performance. For example, Schuler and Jackson (1987a) presented a very comprehensive list of HR practices. However, the seven practices listed above appeared to have the greatest support across a diverse literature. Thus, in the interest of parsimony, we restricted our arguments and analyses to these seven practices.

Universalistic predictions. Theorists adopting a universalistic perspective posit that greater use of specific employment practices will always result in better (or worse) organizational performance. Many universalistic arguments seem reasonable. For example, conducting more valid performance appraisals or using more valid selection devices should always be better than using less valid measures.

Many researchers have supported universalistic predictions. Leonard (1990) found that organizations having long-term incentive plans for their executives had larger increases in return on equity over a four-year period than did other organizations. Abowd (1990) found that the degree to which managerial compensation was based on an organization's financial performance was significantly related to future financial performance. Gerhart and Milkovich (1990) found that pay mix was related to financial performance. Organizations with pay plans that included a greater amount of performance-contingent pay achieved superior financial performance. In combination, these studies indicate that organizations with stronger pay-for-performance norms achieved better long-term financial performance than did organizations with weaker pay-for-performance norms. Terpstra and Rozell (1993) posited five "best" staffing practices and found that the use of these practices had a moderate, positive relationship with organizational performance. Finally, Huselid (1993, 1995) identified a link between organization-level outcomes and groups of high performance work practices. Instead of focusing on a single practice (e.g., staffing), Huselid assessed the simultaneous use of multiple sophisticated HR practices and concluded that the HR sophistica-

tion of an organization was significantly related to turnover, organizational productivity, and financial performance. Overall, the level of support generated for universalistic predictions indicates that the universalistic perspective is a valid theoretical perspective for SHRM theorists.

The current study draws on research on HR system sophistication and high performance work practices to predict positive relationships between each of the seven strategic HR practices and organizational performance. Thus, we hypothesize

> *Hypothesis 1: There will be a positive relationship between financial performance and (a) the use of internal career ladders, (b) formal training systems, (c) results-oriented appraisal, (d) performance-based compensation, (e) employment security, (f) employee voice, and (g) broadly defined jobs.*

Contingency Perspective

Contingency arguments are more complex than universalistic arguments because contingency arguments imply interactions rather than the simple linear relationships incorporated in universalistic theories (Schoonhoven, 1981; Van de Ven & Drazin, 1985; Venkatraman, 1989). In other words, contingency theories posit that the relationship between the relevant independent variable and the dependent variable will be different for different levels of the critical contingency variable. The organization's strategy is considered to be the primary contingency factor in the SHRM literature. Thus, a contingency perspective requires a researcher to select a theory of firm strategy and then specify how the individual HR practices will interact with firm strategy to result in organizational performance.

A strategic contingency. We selected Miles and Snow's (1978) theory of strategy, structure, and process for the current study because this theory has several advantages. First, it has been shown to be a relatively powerful predictor of organizational effectiveness (Doty et al., 1993). Second, Miles and Snow (1984) explicitly stated that the theory had implications for an organization's HR policies. Third, the theory has commonly been used in the SHRM literature. Finally, existing studies present alternative interpretations of Miles and Snow's theory that allow it to be interpreted both as a contingency theory (Golden, 1992; Hambrick, 1983; Zajac & Shortell, 1989) and as a configurational theory (Doty et al., 1993; Segev, 1989). Thus, Miles and Snow's theory can be used with both the contingency perspective and the configurational perspective presented in this article.

Interpreting Miles and Snow's (1978) theory as a contingency theory requires a researcher to identify a single variable that differentiates the alternative strategies specified in the original theory. Most previous work has used rate of product, service, or market innovation as the central contingency variable (e.g., Hambrick, 1983; Zajac & Shortell, 1989). Firms that are highly innovative are considered prospectors, firms that are moderately innovative are considered analyzers, and firms that rarely innovate are considered de-

fenders. Thus, the strategic positioning of all firms can be characterized by a single contingency variable: innovation.

Contingency predictions. In contingency predictions, the relationship between the use of specific employment practices and organizational performance is posited to be contingent on an organization's strategy. The behavioral perspective (Jackson et al., 1989) implies that successful implementation of business strategy relies heavily on employee behavior. An organization's strategy necessitates behavioral requirements for success, and the use of HR practices in the organization can reward and control employee behavior. Therefore, the organization should implement HR practices that encourage the employee behaviors that are consistent with the organization's strategy. This alignment of strategy and HR practices allows organizations to achieve superior performance.

Agency theory (Eisenhardt, 1988; Fama, 1980; Fama & Jensen, 1983) leads to similar predictions. If an employer knows what employee behaviors it needs, then the organization will enact policies and procedures that elicit these behaviors. In agency theory terms, the organization would simply be aligning the interests of the employer (principal) and the employee (agent). Organizations that do a better job of aligning these interests will achieve greater performance.

There are many ways that HR practices can be used to elicit from employees behaviors that are consistent with an organization's strategy. Since behavior is a function of ability and motivation, an organization can set up HR practices that ensure that individuals with the required abilities are hired and retained and can also use HR practices to ensure that employees are motivated to behave in ways consistent with the business strategy. Kerr and Jackofsky (1989) used the organizational growth strategies described by Leontiades (1980) to illustrate that, given a specific strategy, it is more useful to rely on employee selection than on employee development. They argued that "effectiveness will be greater for steady-state firms utilizing development to align managers with strategies" (1989: 165). Thus,

> *Hypothesis 2: The relationship between human resource practices and financial performance will be contingent on an organization's strategy.*

Configurational Perspective

Configurational arguments are more complex than those of either of the previous two theoretical perspectives for several reasons. First, configurational theories draw on the holistic principle of inquiry (Doty et al., 1993; McKelvey, 1982; Meyer et al., 1993; Miller & Friesen, 1984; Venkatraman & Prescott, 1990) to identify configurations, or unique *patterns* of factors, that are posited to be maximally effective. These configurations represent nonlinear synergistic effects and higher-order interactions that cannot be represented with traditional bivariate contingency theories (Doty & Glick, 1994). Second, configurational theories incorporate the assumption of *equifinality* by positing that multiple unique configurations of the relevant factors can

result in maximal performance (Doty & Glick, 1994; Meyer et al., 1993). Third, these configurations are assumed to be ideal types that are theoretical constructs rather than empirically observable phenomena (Blalock, 1969; Doty & Glick, 1994; Meyer et al., 1993; McKinney, 1966; Weber, 1904). As a consequence of these differences, configurational theorists working in SHRM must theoretically derive internally consistent configurations of HR practices, or employment systems, that maximize horizontal fit, and then link these employment systems to alternative strategic configurations to maximize vertical fit.

Employment systems. A handful of SHRM researchers have developed theoretically derived employment systems (e.g., Kerr & Slocum, 1987; Osterman, 1987; Sonnenfeld & Peiperl, 1988). Drawing on the works of these previous theorists, we propose the following two employment systems: the market-type system and the internal system. These two systems, each of which can be described in terms of the seven employment practices discussed earlier, are summarized in Table 1.

TABLE 1
Characteristics of Employment Systems

HR Practices	Market-Type System	Internal System
Internal career opportunities	Hiring almost exclusively from outside the organization Very little use of internal career ladders	Hiring mainly from within the organization Extensive use of well-defined career ladders
Training	No formal training provided Little if any socialization taking place within the organization	Extensive formal training provided Great amount of socialization within the organization
Results-oriented appraisals	Performance measured by quantifiable output or results-oriented measures Feedback in the form of numbers and evaluative	Performance measured by behavior-oriented measures Feedback more for developmental purposes
Profit sharing	Profit sharing used extensively	Few incentive systems used Very little use of profit sharing
Employment security	Very little employment security given	Great deal of employment security among those who make it through the initial trial period Extensive benefits to those "outplaced" Formal dismissal policies
Participation	Employees given little voice in the organization	Employees likely have access to grievance systems Employees more likely to participate in decision making
Job descriptions	Jobs are not clearly defined Job definitions are loose	Jobs very tightly defined

The market-type system is characterized by hiring from outside an organization, providing little training, and evaluating performance through the use of results measures. Employees who work under this system are compensated or rewarded for individual performance as measured by the output measures. They are given little employment security and voice, and their jobs are usually broadly defined. This system is similar to the performance-based system outlined by Kerr and Slocum (1987), the baseball teams of Sonnenfeld and Peiperl (1988), and the type B system of Miles and Snow (1984).

The internal system is characterized by the existence of an internal labor market. Extensive socialization and training are common. Performance is assessed through behavior, and appraisal feedback is given for developmental purposes rather than evaluative purposes. A rather high degree of employment security is given. Employees are viewed as valuable sources of information and are provided a great deal of voice. Individuals in these jobs often have tightly defined job descriptions. This employment system is similar to the hierarchy-based system of Kerr and Slocum (1987), the clubs of Sonnenfeld and Peiperl (1988), and the type A system of Miles and Snow (1984).[1]

Strategic configurations. Miles and Snow's (1978) strategic typology can be interpreted as a configurational theory that identifies three ideal strategic types: the prospector, the analyzer, and the defender (Doty et al., 1993). The defender has a narrow and stable product-market domain and seldom makes major adjustments in its technology or structure. The emphasis is on better and more efficient ways to produce a given product or service and on defending a market. A defender does little research and development. When defenders pursue new products, they import the technology from outside the organization. Prospectors are characterized by their constant search for new products and markets. They continually experiment with new product lines and venture into new markets. These organizations are the creators of change in their markets and are the forces to which competitors must respond. As such, prospectors are more concerned with searching for new opportunities and will likely not be as efficient as defenders. Analyzers have characteristics of both defenders and prospectors. They usually operate in both stable product domains, like defenders, and new changing product domains—like prospectors. They are usually not the initiators of change, as are prospectors, but they follow the changes much more rapidly than do defenders.

Alignment of employment systems and strategic configurations. The strategic differences among the prospector, analyzer, and defender suggest

[1] It should be noted that the internal system described here is similar to other systems labeled broadly as internal labor markets. However, as a reviewer noted, this internal system is different from the adversarial system that was found in many industrial settings, in that employees are highly valued and are given the opportunity to participate in decisions. For a more thorough discussion of the many forms of internal labor markets, see Pinfield and Berner (1994).

that organizations pursuing these alternative strategies should implement different employment systems. Because defenders concentrate on efficiency in current products and markets, effective employment practices should emphasize a long-term commitment to an organization. The organization should value employees with greater firm- and product-specific skills and knowledge. The special skills and knowledge will be enhanced through formal training, well-established career paths within the organization, and performance appraisal and feedback systems that foster employee development rather than short-term results. These practices should create an environment that fosters long-term commitment to the organization and reduces the costs associated with replacement of workers and the knowledge, skills, and abilities they possess. To further limit "voluntary dysfunctional turnover" (Dalton & Todor, 1982), employees should be given a high amount of employment security and voice.

Prospectors, on the other hand, are constantly changing. They emphasize exploration into products and markets in which they traditionally have had little or no experience. Therefore, they are less aware of the specific behaviors that are necessary to perform well in these areas. Consequently, they will not be able to look inside their current organizations for the necessary skills and will have to hire from the outside to acquire the talent that will keep performance high. Because of the constant change in such an organization, there will be little emphasis on long-term commitment to it. The organization is constantly trying out new products and markets and will likely move on quickly if it appears that there is little opportunity for profit in an area. Thus, the organization will create a results-oriented appraisal system that measures performance on bottom-line measures.

In sum, the HR practices consistent with the internal system are appropriate for the defender strategy and include the use of (1) internal career opportunities, (2) formal training systems, (3) behavior-based appraisal, (4) hierarchy-based compensation (i.e., little profit sharing), (5) employment security, (6) employee voice, and (7) tightly defined jobs. Conversely, the prospector strategy requires the market system, which entails (1) few internal career opportunities, (2) lack of formal training systems, (3) output-based appraisal, (4) profit-sharing systems, (5) little employment security, (6) little employee voice, and (7) broadly defined jobs.[2]

Configurational predictions. The configurational predictions are based on the assumption that implementing the employment systems discussed above will result in higher organizational performance. However, there are

[2] The most parsimonious interpretation of Miles and Snow's (1978) theory implies that the analyzer is at the midpoint between the prospector and defender (Doty et al., 1993). Thus, in the configurational analysis reported later in the article, we included a third employment subsystem suitable for the analyzer that is specified as the midpoint between the market-type and internal employment subsystems. We will refer to this employment system as the middle-of-the-road system.

at least three different configurational arguments relating the employment systems to organizational performance.

The simplest configurational argument is based on the assumption that the employment systems are ideal types that are equally effective under all conditions (Doty & Glick, 1994). Given this interpretation, greater similarity to any ideal-type employment system will increase organizational performance. To be consistent with this interpretation, we predict that

> *Hypothesis 3: The greater the similarity to the ideal-type employment system that is most similar to an organization's employment system, the higher the financial performance.*

This first configurational assertion is different from traditional universalistic assertions in two ways. First, the configurational assertion relies on a systems perspective and is based on the holistic pattern of HR practices, whereas universalistic assertions are based on the individual HR practices. Second, this configurational assertion includes the assumption of equifinality and implies that multiple employment systems are equally effective for the same set of conditions. Universalistic assertions, in contrast, posit that certain individual HR practices are better in all conditions.

A somewhat more complex configurational interpretation incorporates vertical fit by constraining an organization's choice of employment system to be consistent with the organization's strategy. Thus, the organization must adopt the one ideal type of employment system that is most consistent with the organization's strategy. In other words, the organization must maximize both horizontal and vertical fit. Consistent with this second configurational interpretation, we hypothesize

> *Hypothesis 4: An employment system's similarity to the one ideal-type employment system that is appropriate for an organization's strategy will be positively related to financial performance.*

The second type of configurational assertion is similar to a traditional contingency argument in that both types of arguments assert that the effectiveness of a firm's HR practices are contingent on firm strategy. The configurational assertion differs from a traditional contingency assertion, however, because it retains the notion of discrete, ideal-type employment systems that result in maximal organizational performance. In other words, the second configurational argument is that a given employment system will enhance firm performance only when it is used in association with the appropriate firm strategy. Therefore, the closer the organization's employment system to the one ideal employment system that is congruent with the organization's strategy, the more effective the organization.

The most complex configurational interpretation is that two employment systems, the market type and the internal system, are polar opposites (Kerr & Slocum, 1987; McKinney, 1966) that define a continuum of effective hybrid employment systems. These hybrid employment systems are combinations

of the initial ideal-type employment systems. This third configurational interpretation implies that there are an infinite number of effective combinations, or hybrids, of the employment systems that result in horizontal fit. So long as the hybrid employment system an organization implements falls along the continuum, the employment system will be effective. However, the organization must maximize vertical fit in addition to horizontal fit. In order to maximize vertical fit, the extent to which the organization's employment system deviates from the ideal-type employment systems that define the continuum must be exactly proportional to the extent to which the organization's strategy deviates from the ideal-type strategies that are consistent with each ideal-type employment system. For example, if an organization's strategy falls halfway between an analyzer and prospector strategy, then the organization will be maximally effective only if its employment system falls halfway between the market type and middle-of-the-road employment systems. Thus, to maximize performance, the organization must choose the one hybrid employment system that is appropriate for its strategy. Consistent with this argument,

> *Hypothesis 5: An employment system's similarity to the one hybrid employment system that is appropriate for an organization's strategy will be positively related to financial performance.*

This third configurational interpretation is very similar to a traditional contingency assertion. Both types of assertions imply that there are an infinite number of combinations of HR practices that will lead to superior organizational performance if they are used in association with the correct strategy. The primary difference between the two types of assertions involves the relationships between the HR practices and firm strategy. Contingency arguments focus on the relationships between the *individual* HR practices and firm strategy. The configurational assertion, by contrast, retains a system perspective by focusing on the *pattern* of relationships among the HR practices and by constraining the variation in each HR practice to be exactly proportional to the variation in the *system* of HR practices.

Summary

The purpose of this study was to articulate and test three different theoretical frameworks in strategic human resource management. According to the universalistic framework, some HR practices are universally effective. Organizations that adopt these best practices will reap higher profits. In the contingency framework, the effectiveness of individual HR practices is contingent on firm strategy. An organization that adopts HR practices appropriate for its strategy will be more effective. Finally, in the configurational framework there are synergistic effects among HR practices. Thus, consistency within the configuration of HR practices and between the HR practices and strategy are necessary to enhance performance. Empirical tests

of these alternate theoretical perspectives are reported in the remainder of this study.

METHODS

Sample and Procedures

The current study was conducted in a single industry to control for between-industry differences. The banking industry was selected for several reasons. First, recent deregulation in this industry is likely to increase the heterogeneity of strategies used across the industry. Some banks offer a wide variety of services to a diverse set of customers; others offer a limited set of services to a largely homogeneous set of customers. Second, a given set of jobs is relatively stable and common across the industry. These common jobs provide some control for between-job variation across banks. Third, government regulations require all banks to report the same types of financial data in a consistent fashion. Thus, the representitiveness of a sample of banks will not be biased by failures to report the financial information on which the dependent variables in the current study are based. These three advantages of the banking industry were thought to compensate for the loss of generalizability that resulted from restricting the study to a single industry.

We selected an initial stratified random sample of 1,050 banks using the following procedure. First, the total population of banks was stratified into three assets categories: assets greater than $25 million and less than or equal to $100 million, assets greater than $100 million and less than or equal to $300 million, and assets greater than $300 million. We then randomly selected 350 banks from each asset category, a process resulting in a total sample of 1,050 banks.

The data from respondents in the banks were collected using two questionnaires. First, one questionnaire was sent directly to a senior HR manager in each bank. The HR questionnaire solicited information about the bank's business strategy and about the HR practices used for specific jobs within the bank. A description of the relevant jobs adapted from the *Dictionary of Occupational Titles* was included with the questionnaire to preclude confusion about the relevant jobs. After the HR questionnaire was returned, we sent a second questionnaire directly to the bank's president. This second questionnaire solicited general information and information about the bank's strategy. (See the Results section for response rates.)

Measures

The design of this study required a wide range of measures collected from four different data sources. Measures of the various HR practices were provided by the HR contact in each bank. Strategy measures were constructed from the data provided by bank presidents. The dependent measures and the control measures were drawn from the Sheshunoff Bank Search database, which contains information obtained from the call reports to the Federal Reserve that all banks must complete quarterly. The values used to construct

the ideal strategic profiles necessary for testing the configurational hypotheses were drawn from the values published by Segev (1989). Finally, the values used to construct the ideal HR profiles were specified by the data provided by the HR contact.

HR practices measures. Seven different HR practices were conceptualized and measured. (The Appendix presents the questionnaire items associated with all measures.) Internal career opportunities referred to the extent to which a bank had an internal career ladder or internal career opportunities and was measured as the mean of four 7-point Likert-type items. Higher scores indicated the existence of a well-defined internal career and staffing system with greater opportunities. The degree to which training, both formal and informal, was provided for employees in a job was assessed using the mean of four Likert-type items. Higher scores reflected more extensive and formalized training programs for employees. Appraisal was defined as the degree to which performance appraisals focused on output or results measures rather than on behavioral measures and was calculated as the mean of two items. Higher values represented a greater reliance on results or output measures. Profit sharing was measured with a single item that asked respondents the extent to which employees received bonuses based on an organization's profit. Higher responses represented a greater use of profit sharing in a bank. Employment security was conceptualized as the degree to which an employee could expect to stay in his or her job over an extended period of time and was measured as the mean of four items. Higher scores represented a greater degree of employment security. Employee participation, or voice, was defined as the degree to which employees were allowed to have input into their work and the degree to which the organization valued their input; it was measured as the mean of four items, with higher scores reflecting a greater amount of participation and voice. Finally, job description referred to the extent to which jobs were clearly and precisely defined. This measure was computed as the mean of four items and scored so that higher values reflected a higher degree of job description.

Strategy measures. The design of the current study required two different types of strategy variables. First, a single measure of strategy was required to test the contingency hypotheses. Following previous contingency interpretations of Miles and Snow's theory (Hambrick, 1983, Shortell & Zajac, 1990), we defined the strategic contingency variable as rate of product/market innovation. Innovation was measured as the mean of six Likert-type items adapted from Segev (1989) and presented in the Appendix. A second, larger set of strategy measures was required to test the configurational hypotheses. Thus, in addition to the six previously mentioned items, nine strategy measures adapted from Segev (1989) were included in the questionnaire (see the Appendix). Each of the strategic items included in the questionnaire used a seven-point Likert-type response scale.

Performance measures. The current study incorporated two financial measures important to the banking industry as dependent variables: return on average assets (ROA) and return on equity (ROE). The financial measures

were obtained from the Sheshunoff Bank Search database. The measures of ROA and ROE were the year-end measures for 1992, the year in which the surveys were completed.

Control variables. Several control variables were included in the analyses. These data were also obtained from the Sheshunoff Bank Search database. Bank size was measured as the total dollar value of assets. Bank age was the number of years from the founding date. A dummy variable was included to indicate whether a bank was part of a holding company (1 = yes, 0 = no). Finally, we included a series of dummy variables to control for the Federal Reserve district in which a bank was located.

Ideal profiles. Tests of the configurational hypotheses required the construction of two sets of ideal profiles: ideal strategic profiles and ideal employment system profiles. These ideal profiles contain the value of each measure that best characterizes the relevant ideal type (Doty & Glick, 1994). The ideal strategic profiles, operationally defined as the values for each ideal type reported by Segev (1989), are reported in Table 2. We theoretically specified the values for the ideal employment system profiles using the approach initially suggested by Govindarajan (1988) and operationally defined them using the values reported in Table 2. The ideal profile for the middle-of-the-road system was specified as the mean value for each of the relevant variables.

TABLE 2
Values for the Ideal Profiles

(a) Ideal Strategic Profiles Variables	Prospector	Analyzer	Defender
Technological progress	5.64	4.82	4.86
Product/market breadth	5.68	5.18	1.59
Product innovation	6.95	4.68	1.68
Quality	5.47	5.30	5.86
Price level	6.61	4.40	1.32
Active marketing	6.52	5.54	3.14
Long-range financial strength	4.11	5.83	4.88
Resources level	4.86	5.18	4.30
Investment in production	2.91	4.59	6.18
Internal analysis level	3.68	5.62	6.82
External analysis level	6.95	5.24	2.05
Level of risk	6.00	2.62	2.68
Proactive management style	6.76	4.90	2.86
(b) Ideal Employment System Profiles	**Market-Type**	**Middle-of-the-Road**	**Internal**
Results-oriented appraisals	4.44	3.41	2.38
Profit sharing	6.33	4.26	2.19
Job descriptions	3.38	4.49	5.60
Employment security	2.79	3.90	5.01
Internal career opportunities	3.86	4.67	5.48
Training	3.08	4.24	5.40
Participation/voice	4.60	5.36	6.12

The market-type and internal systems were specified as plus or minus one standard deviation from the mean of each variable. This approach ensures that for each variable the relevant position of the employment system is consistent with the substantive theory and that the values for individual profiles are consistent with those for the banks in the sample.

Configurational fit measures. We computed the measures of configurational fit that assessed the similarity of an organization to an ideal profile using the mathematical models presented by Doty and associates (Doty & Glick, 1994; Doty et al., 1993). Ideal-types fit was used to test Hypothesis 3 and was operationally defined as the additive inverse of the deviation between a real organization's employment system and the ideal employment system that the organization most closely resembled. Contingent ideal-types fit, used to test Hypothesis 4, was measured as the additive inverse of the deviation between an organization's employment system and the ideal employment system that was appropriate for the ideal strategic type most similar to the organization's strategy. Finally, contingent hybrid-types fit, used to test Hypothesis 5, was defined as the additive inverse of the deviation between the organization's employment system and a hybrid ideal employment system most consistent with the organization's strategy. In each of the three measures of configurational fit, the computation of the final similarity indexes was restricted to the HR practice measures.

Analysis

A key concept in the SHRM literature is that employment systems should be designed to maximize performance in the jobs that are most critical to an organization's performance. Thus, we limited the current analyses to the job of loan officer because this job was common to all banks, was determined to be one of the most important jobs in banks, and was critical to bank performance (Delery, 1993). The approach taken here is similar to those of Osterman (1994) and Arthur (1992, 1994). Osterman argued that there should be variation in the practices used to manage different employee groups within an organization but that it should be most important to investigate the use of practices for "core" employee groups. Arthur (1992) limited his studies in steel minimills to maintenance and production workers, likely to be the core employees in that context. Limiting the analyses to a single job may reduce the generalizability of results, but the alternative—measuring HR practices as a composite that was a weighted sum of the practices used across broad job catgories—was likely to dilute the observed relationships between the HR practices and organizational performance. Thus, limiting the analyses to a single, critical job in an organization is consistent with prior work and should increase the accuracy of the tests of the relevant theoretical perspectives.

Each hypothesis was tested using hierarchical regression analyses. The tests were based on changes in the level of explained variation before and after the variable of interest was added to the set of control variables. Significant changes in the adjusted R^2 provided support for the hypotheses.

RESULTS

A total of 216 usable questionnaires were returned from the HR contacts. This total represented a 21 percent response rate. These respondents had an average tenure with their banks of 12.24 years and an average tenure in their current jobs of 5.32 years. A total of 114 usable questionnaires were returned from the bank presidents. This total represented a 53 percent response rate from banks that received the second questionnaire and an 11 percent response rate from the overall sample. Bank presidents had an average tenure with their bank of 13.43 years and an average tenure as president of 5.89 years.

Response Bias Check

The analyses used to test the hypotheses in the current study drew on data from multiple sources and thus were based on different sample sizes. Given these differences, we conducted two analyses to check for response bias. First, we assessed whether characteristics of individual banks made their HR managers less likely to complete and return the survey. Following the work of Osterman (1994), we used a logistic regression with the dependent variable defined as a dummy variable coded 1 if an HR director responded and 0 if he or she did not. The independent variables included whether the bank was federally or state chartered, total equity, total deposits, total loans, total cash, total assets, total income, holding company ownership, and age. None of the variables were significant. Next, we investigated whether there were characteristics of banks that made their presidents less likely to complete and return the questionnaire. As above, we used a logistic regression analysis; the variables included in the equation included ROA, ROE, total assets, age, and holding company ownership. Again, no significant differences were detected. The lack of significant results in these two analyses indicated that response bias was not a significant problem in the current data.

Universalistic Hypotheses

Table 3 presents means, standard deviations, correlations, and reliabilities (where appropriate). Moderate correlations between several of the HR practices indicate that these practices are not completely independent. Three of the HR practices are significantly related to either or both ROA and ROE: results-oriented appraisal ($r = .13$, $p < .05$; $r = .09$, $p < .10$), employment security ($r = .17$, $p < .01$; $r = .08$, n.s.), and profit sharing ($r = .22$, $p < .01$; $r = .16$, $p < .01$). These results support some of the relationships specified in Hypothesis 1.

We conducted two additional types of analyses to further test Hypothesis 1. First, ROA and ROE were used as the dependent variables in a set of hierarchical regressions. The seven HR practices were independently entered into the equation after the set of control variables had been entered. These results indicate that three of the seven HR practices explained a significant incremental level of the variance in ROA. The use of results-oriented appraisals was positively related to ROA ($\Delta R^2 = .02$, $F = 4.64$, $p < .05$) and marginally

TABLE 3
Means, Standard Deviations, Reliabilities, and Correlations among Variables[a]

Variables	Mean	s.d.	1	2	3	4	5	6	7	8	9	10	11	12
1. Appraisals	3.41	1.03	(.80)											
2. Job descriptions	4.49	1.13	−.38**	(.78)										
3. Job security	3.90	1.12	−.02	−.25**	(.66)									
4. Career opportunities	4.65	0.82	−.34**	.34**	−.10	(.64)								
5. Training	4.24	1.16	−.24**	.31**	−.10	.41**	(.83)							
6. Participation	5.37	0.77	−.19**	.17**	.00	.30**	.30**	(.80)						
7. Profit sharing	4.28	2.07	.00	−.03	.06	.02	.10	.18**						
8. Assets	12.10	1.28	−.01	.24**	−.31**	.11	.09	−.08	−.14*					
9. Age	66.53	39.27	.05	.07	−.09	.12*	.19**	.12*	−.07	.27**				
10. Holding company	0.53	0.50	−.08	.24**	−.20**	.06	.11	−.04	−.22**	.57**	.22**			
11. Innovation	4.36	0.97	.01	.19*	−.29**	.33**	.23**	.13	.01	.27**	.12	.24**	(.91)	
12. ROA	1.07	0.55	.13*	−.02	.17**	−.07	.01	.03	.22**	−.12*	.12*	.04	−.05	
13. ROE	12.87	7.03	.09†	.03	.08	.00	.08	.06	.16**	−.03	.12*	.20**	.09	.90**

[a] Cronbach's alphas appear on the diagonal for multiple-item measures.
† $p < .10$
* $p < .05$
** $p < .01$

positively related to ROE ($\Delta R^2 = .013$, $F = 3.49$, $p < .10$). This pattern indicates that banks using results-oriented appraisals to manage their loan officers achieved higher returns. Employment security and profit sharing were both positively related to ROA ($\Delta R^2 = .023$, $F = 6.06$, $p < .01$, and $\Delta R^2 = .086$, $F = 24.38$, $p < .001$, respectively), and profit sharing was significantly related to ROE ($\Delta R^2 = .07$, $F = 20.34$, $p < .001$). This result suggests that the greater employment security given to loan officers, the greater the returns to banks. In addition, banks that used profit sharing to a greater extent also performed better.

To further test Hypothesis 1, we entered all the HR practices simultaneously into two hierarchical regression equations, one predicting ROA and one predicting ROE. The results of these two additional analyses, which are presented in Table 4, are entirely consistent with the individual analyses discussed above. When entered simultaneously, the HR practices were able to explain an additional 12.55 percent of variance ($p < .01$) in ROA and an additional 9 percent of variance ($p < .01$) in ROE over what the controls explained. Thus, the results provide relatively strong support for Hypothesis 1.

Results of these two regressions can also be discussed in terms of ROA and ROE. Banks one standard deviation higher than the average on profit sharing are estimated to be 0.17 and 1.96 higher on ROA and ROE, respectively. Additionally, banks one standard deviation higher on results-oriented appraisals and job security are estimated to be 0.08 and 0.09 higher on ROA, and 0.98 and 0.63 higher on ROE. In sum, banks one standard deviation

TABLE 4
Simultaneous Hierarchical Regression Results Testing Hypothesis 1[a]

	ROA		ROE	
Variables	β	ΔR^{2b}	β	ΔR^{2b}
Controls		.28**(.23)		.31**(.25)
HR practices		.13**(.11)		.09**(.07)
Results-oriented appraisals	.14*		.14†	
Profit sharing	.31**		.28**	
Job descriptions	.04		.01	
Employment security	.16**		.09	
Internal career opportunities	.00		.06	
Training	−.01		.00	
Participation/voice	−.07		−.03	
Full equation		.41**(.34)		.40**(.32)

[a] $N = 192$. Controls included 11 dummy-coded variables capturing Federal Reserve district, total assets (log), age, and holding company ownership.

[b] Adjusted R^2 is in parentheses.

† $p < .10$

* $p < .05$

** $p < .01$

higher on all three of these significant HR practices are estimated to be 0.34 higher than average on ROA and 3.57 higher on ROE.

Contingency Hypothesis

Hypothesis 2 states that the relationships between HR practices and performance are contingent on an organization's strategy. These contingency predictions can be evaluated by determining whether an HR practice-strategy interaction term significantly increases the level of explained variation in a hierarchical regression analysis. Thus, we ran a total of 14 hierarchical regression analyses, seven predicting ROA and seven predicting ROE. In the first step of each analysis, the control variables, the strategy measure, and a single HR practice measure were included. In the second step, the interaction term between the single HR practice and the strategy measure was added to the regression equation.

The results indicate that none of the interaction terms significantly increased the explained variation in ROA, and only the appraisal-strategy interaction term explained a significant portion of the variance in ROE ($\Delta R^2 = .038, F = 5.55, p < .05$). No other interactions were significant. These analyses provide virtually no support for Hypothesis 2.

One explanation for the null results is that the combination of HR practices a firm uses is more important than specific, individual practices. For example, Huselid (1993, 1995) argued that a more accurate assessment of the relationships between HR practices and performance can be made when all HR practices are simultaneously included in analyses. Therefore, we conducted two post hoc hierarchical regressions (one for ROA and one for ROE) in which all seven HR practices were included in the first step and the interaction terms between each of the HR practice measures and the innovation measure were included in the second step.[3] The increase in the level of explained variation was marginally significant for ROE ($\Delta R^2 = .087$, $F = 1.82$, $p < .10$) and approached marginal significance for ROA ($\Delta R^2 = .081$, $F = 1.68$, $p = .13$). Two of the individual interaction terms in the equation predicting ROE and three of the interaction terms in the equation predicting ROA were significant, as were both of the overall equations. Table 5 presents these results. When the interaction terms that were not significant in either equation were removed from the analyses, the interaction between innovation and career opportunities, results-oriented appraisals, and participation explained an additional 7 percent of variance in ROA ($\Delta R^2 = .071, F = 3.53, p < .05$) and an additional 7.4 percent of the variance in ROE ($\Delta R^2 = .074, F = 3.71, p < .05$).

An analysis of the interaction terms showed that prospector banks had higher ROA and ROE when using results-oriented appraisals. Conversely,

[3] We conducted the analyses after mean-centering all variables (Cronbach, 1987; Jaccard, Turrisi, & Wan, 1990; Stone, 1988), because there was relatively high multicollinearity among the independent variables, particularly among the interaction terms.

TABLE 5
Results of the Contingency Regressions[a]

	ROA		ROE	
Variables	β	ΔR^{2b}	β	ΔR^{2b}
Controls				
Innovation	−.20	.32**(.21)	−.14	.33**(.21)
HR practices		.10†(.06)		.10†(.06)
1. Results-oriented appraisals	.33**		.35**	
2. Profit sharing	.21*		.19*	
3. Job descriptions	−.08		−.09	
4. Employment security	.19		.15	
5. Internal career opportunities	.01		.04	
6. Training	.00		.08	
7. Participation/voice	.03		.02	
Interactions[c]		.08(.04)		.09†(.05)
Innovation × 1	.22*		.29**	
Innovation × 2	.03		−.06	
Innovation × 3	−.09		−.07	
Innovation × 4	.03		.02	
Innovation × 5	.29*		.26*	
Innovation × 6	−.03		−.09	
Innovation × 7	−.22*		−.17	
Full equation		.43**(.27)		.51**(.32)

[a] $N = 101$. Controls included 11 dummy-coded variables capturing Federal Reserve district, total assets (log), age, and holding company ownership.

[b] Adjusted R^2 is in parentheses.

[c] Numbers refer to HR practices listed above.

† $p < .10$

* $p < .05$

** $p < .01$

defender banks had higher ROA and ROE when relying less on results-oriented appraisals. In a similar fashion, defender banks obtained higher ROA and ROE the more they allowed loan officers to participate in decision making. The reverse was true of prospectors. Finally, ROA and ROE were greatest for prospector banks when there were greater internal career opportunities for loan officers. Again, the reverse was true for defenders.

From the regression equations presented in Table 5, the mean effect on ROA and ROE of having HR practices consistent with strategy was estimated. For instance, the results show that among prospector banks (banks one standard deviation above the mean on the strategy variable), those that were also one standard deviation above the mean on internal career opportunities and results-oriented appraisals were estimated to have an ROE 6.52 higher than those at the mean on those practices.

These post hoc results indicate that there is support for some of the contingency relationships posited in Hypothesis 2. Thus, the contingency perspective should not be rejected out of hand. These results must be viewed

with caution, however, given the lack of support for the individual HR practice interaction tests. Future studies will have to investigate these relationships more fully.

Configurational Hypotheses

Prior to testing the configurational hypotheses, we classified each bank according to the ideal employment system it most closely resembled. Table 6 reports the number of banks with employment systems most similar to each ideal employment system and the means and standard deviations of each HR practice for each group of banks. In addition, the *F*-values reported in Table 6 indicate that there are significant differences among the groups of banks.

The first configurational hypothesis, Hypothesis 3, states that similarity to the one ideal-type employment system most similar to an organization's employment system will be positively related to organizational performance. In other words, if a bank's employment system resembled the market-type system more than other systems, the greater that similarity, the stronger the performance.

To test Hypothesis 3, we first computed the appropriate similarity measure (i.e., ideal-types fit) and then entered this measure in the second step of a hierarchical regression. (The first step of the hierarchical regression contained each of the control variables.) The ideal-types measure of fit did not add significantly to the explained variation in either analysis (ROA: $\Delta R^2 = .008$, $F = 1.91$, n.s.; ROE: $\Delta R^2 = .008$, $F = 1.95$, n.s.). Thus, Hypothesis 3 was not supported.

TABLE 6
Description of HR Types and Comparison of Means[a]

	Employment Systems						
	Market		Middle-of-the-Road		Internal		
HR Practices	**Mean**	**s.d.**	**Mean**	**s.d.**	**Mean**	**s.d.**	***F***
Results-oriented appraisals	4.22	1.07	3.38	0.93	2.84	0.88	18.31**
Profit sharing	6.28	0.85	4.48	1.78	1.62	1.01	80.96**
Job descriptions	3.55	1.27	4.55	1.00	5.06	0.89	20.41**
Employment security	3.44	1.14	3.94	1.06	4.09	1.20	3.43*
Internal career opportunities	4.31	0.79	4.63	0.74	5.14	0.86	10.86**
Training	3.59	1.20	4.25	1.08	4.78	1.22	9.69**
Participation/voice	5.23	0.92	5.35	0.74	5.54	0.69	1.63
Total *N*	32		145		37		

[a] The values reported in this table were computed after each bank was classified according to the ideal employment system it most closely resembled. These values differ from the ideal employment system profiles presented in Table 2 because, unlike ideal system values, the values presented above were calculated after banks had been classified.

* $p < .05$

** $p < .01$

Hypothesis 4 posits that similarity to the one ideal-type employment system that was appropriate for an organization's strategy would be positively related to organizational performance. To test this hypothesis, we computed the contingency ideal-types measure of fit and entered the result into hierarchical regression equations predicting ROA and ROE. The results show that this measure was unable to explain a significant amount of variance in either ROA ($\Delta R^2 = .00$, $F = .00$, n.s.) or ROE ($\Delta R^2 = .002$, $F = .22$, n.s.). Thus, Hypothesis 4 was not supported.

The third configurational hypothesis, Hypothesis 5, predicts that similarity to the one hybrid employment system appropriate for an organization's strategy will be positively related to organizational performance. To test this hypothesis, we computed the contingent hybrid-types measure of fit and then entered this measure into hierarchical regression equations in the same manner as in previous analyses. The results of these regressions do not support Hypothesis 5. Similarity to the appropriate hybrid employment system did not explain a significant amount of variance in either ROA ($\Delta R^2 = .001$, $F = .11$, n.s.) or ROE ($\Delta R^2 = .02$, $F = 2.01$, n.s.).

One plausible explanation for the null results associated with the configurational perspective is that too many or too few ideal employment systems were included in the analyses. Altering the set of ideal types included in the test of a theory can have a substantial effect on the results of the test (Doty, 1994). Thus, prior to abandoning the configurational perspective, we conducted an exploratory post hoc analysis.

The most parsimonious configurational theory would posit that a single ideal employment system will result in maximal organizational performance. To determine if any one of the employment systems described in this article was superior to the others, we calculated the similarity between the organizations' employment systems and each of the ideal employment systems. Each of the similarity measures was then entered into a separate hierarchical regression equation predicting the financial measures. The results of these analyses show that deviations from the internal and the market-type employment systems were both related to ROA ($\Delta R^2 = .03$, $F = 7.33$, $p < .01$; $\Delta R^2 = .06$, $F = 15.51$, $p < .01$) and ROE ($\Delta R^2 = .02$, $F = 5.44$, $p < .05$; $\Delta R^2 = .05$, $F = 13.20$, $p < .01$). The more closely an organization's employment system resembled the market-type system, the higher the ROA and ROE. The reverse was true for the internal system. These results show that ROA and ROE are estimated to be 0.14 and 1.67 higher, respectively, for banks that are one standard deviation from the mean closer to the market-type employment system than the average bank. Although this effect is not nearly as large as those for the universalistic and contingency results, it still represents a sizable difference on these measures.

These results indicate that the market-type system is superior to both of the other two employment systems and provide limited support for the configurational perspective. However, when the individual HR practices were used simultaneously to predict performance, they explained a greater portion of the variation in the dependent variables than did the market-type

system. Thus, the market-type system should not be labeled the best system but rather should be viewed as the starting point for constructing an ideal-type employment system in future studies.

DISCUSSION

The results of this study provided relatively strong support for a universalistic perspective and some support for both the contingency and configurational perspectives. Three individual HR practices, profit sharing, results-oriented appraisals, and employment security, had relatively strong universalistic relationships with important accounting measures of performance. Contingency relationships between strategy and three HR practices—participation, results-oriented appraisals, and internal career opportunities—explained a significant portion of the variation in the same performance measures. Finally, similarity to the market-type employment system was also positively related to firm performance. In combination, these results demonstrate that managing human resources as prescribed by each of the different perspectives enhances organizational performance.

It is clear from the statistical analyses that there is strong support for the universalistic perspective. More important, the results of these analyses show that differences in HR practices are associated with rather large differences in financial performance. For instance, financial performance was estimated to be approximately 30 percent higher for banks one standard deviation above the mean on each of the three significant practices than it was for those banks at the mean. These results appear to be even stronger than those of previous research (Huselid, 1995). In addition, the present results are consistent with the theoretical work to date.

The universalistic support for the effectiveness of results-oriented appraisals is consistent with agency theory (Eisenhardt, 1988; Fama, 1980; Fama & Jensen, 1983), control theory (Snell, 1991), and the transaction cost perspective (Jones & Wright, 1992). Each of these theoretical perspectives implies that results-oriented appraisals will enhance performance when measures of the desired results are either readily available or are less costly to obtain than other performance measures. Banks regularly collect and calculate results-oriented measures for the job of loan officer, such as default rate and number of nonperforming loans. Thus, the monitoring costs associated with these measures are extremely low. Behavioral measures for loan officers, on the other hand, are much more difficult to define and expensive to monitor. Each of the three theories implies that the use of behavioral control mechanisms for loan officers would be counterproductive, perhaps as a consequence of these difficulties.

The universalistic relationship between the use of profit sharing and performance also supports both an agency theory and a behavioral theory explanation. Agency theory posits that basing employee rewards on profits ensures that employee interests are aligned with owner interests. The cost of monitoring profits for a profit-sharing plan is negligible because government regulations require banks to report profit measures. In addition, many profit-

sharing plans do not distribute profits equally among employees. Instead, profits are distributed differentially according to employee performance. As discussed above, measures of loan officer performance are readily available. In terms of the behavioral perspective, profit sharing may be seen as universalistic because, by definition, all banks strive for profit. By tying individual compensation to organizational profit, the organization is rewarding behavior that is consistent with its overall performance.

The third HR practice that had a universalistic effect on performance was employment security. The effects of employment security are somewhat more difficult to explain in terms of the theories mentioned above. Granting employment security without monitoring employee performance does not assure that employees will engage in the appropriate behaviors. However, employment security may marginally align the interests of employees and owners. If the employees fail to perform in a way that generates continued profits for the organization, the organization may cease to exist, thereby ending the guarantee of employment security. Further, employment security sends a signal that an organization is committed to its workforce. If employees reciprocate this commitment, the organization should have a workforce with a high level of commitment and motivation. This is a key principle behind the rise of high performance–high commitment work systems (Lawler, 1986; Lawler, Mohrman, & Ledford, 1992), and it is the cornerstone of several organizations' HR management strategy. For instance, Lincoln Electric has for many years successfully employed an HR system that is characterized by lifetime employment.

The contingency results provide support for the strategic focus of the SHRM literature. The post hoc analyses revealed that the links between organizational performance and three HR practices—performance appraisal, participation, and internal career opportunities—are contingent on strategy. In general, banks that were able to align their HR practices with strategy are estimated to have nearly 50 percent higher ROA and ROE than those banks whose HR practices were just one standard deviation out of alignment. Specifically, banks that implemented a prospector strategy involving high innovation reaped greater returns from more results-oriented appraisals and lower levels of employee participation than did banks that relied on a defender strategy. Banks implementing a defender strategy performed better if they relied less on results-oriented appraisals and gave their loan officers higher levels of participation in decision making and voice. These findings are consistent with the behavioral perspective of Miles and Snow's (1984) strategic theory.

The direction of the relationship between internal career opportunities and strategy was opposite that hypothesized. Miles and Snow (1984) and Sonnenfeld and Peiperl (1988) both explicitly stated that internal career paths should be more consistent with the defender strategy. The reverse was true in the current study. Prospector banks with more internal career opportunities for their loan officers had higher returns than did defenders. One explanation for this unexpected finding involves the high mobility of talented employees within the banking industry. Talented employees may

be likely to change jobs unless their banks offer internal career opportunities. Prospectors were able to keep talent in the organization only if that talent saw future opportunities. In addition, greater opportunities for advancement into a variety of different positions may help prospector banks attract specially skilled employees. Defender banks would most likely not be able to match the variety of opportunities, given their focus on stable markets, and consequently they would focus on other aspects for recruitment. Additional theoretical and empirical work is needed to more fully explore the relationship between internal career opportunities, strategy, and performance.

The configurational results suggest that some configurations of HR practices are better than others. For example, the more closely a bank's employment system resembled the market-type system, the higher its performance. Conversely, HR systems that more closely resembled the internal system resulted in decreased organizational performance. In terms of ROA and ROE, a decrease in distance from the market-type system of one standard deviation from the mean is estimated to result in a 13 percent increase in financial performance.

Our interpretations of the configurational results are the most speculative. First, most configurational theorists argue for multiple effective configurations of the relevant parameters. For example, our a priori arguments and the arguments of Miles and Snow (1984), Sonnenfeld and Peiperl (1988), and others identify multiple maximally effective HR configurations. The configurational analyses we conducted, however, identified a single HR configuration that resulted in better performance. Thus, although the configurational results support the notion that future SHRM researchers should consider employment systems, the current results do not allow us to argue for multiple, equally effective employment systems.

A second limitation to the configurational results presented in this article involves level of explained variation. The key assertion imbedded in configurational theories is that the ideal configurations represent nonlinear synergistic effects of the dimensions used to construct the configurations (Meyer et al., 1993). In the current results, however, the variation explained in the configurational analyses did not exceed the variation explained when the individual dimensions were simultaneously used to predict performance. Thus, we cannot make strong arguments that synergy among the HR practices under investigation enhance organizational performance. So although the configurational approach appears to hold promise for SHRM researchers, additional theory development and testing are necessary to validate the efficacy of the configurational perspective.[4]

[4] We do not discuss the use of difference scores as a plausible explanation for the null results because the configurational fit methodology differs substantially from the traditional difference score approach. For example, in the current study we calculated the deviation between each real organization and one of two discrete points in multidimensional space. Thus, the point of reference for the deviation analysis associated with the ideal-types model of fit does not vary for each organization in the sample, as it would for the difference score approach. As a result of such substantive differences, many of the limitations typically associated with the use of difference scores are not limitations of the configurational fit methodology.

CONCLUSIONS

The primary purpose of this study was to demonstrate that, contrary to current criticisms, the strategic human resource management literature is not an atheoretical wasteland. We have demonstrated that three different modes of theorizing are incorporated in that literature: universalistic, contingency, and configurational perspectives. The results reported in this study indicate that each of these perspectives is viable and leads to different assumptions about the relationships among HR practices, strategy, and organizational performance. Future theorists should clearly articulate the perspective they are using to structure their arguments and test their arguments with an analytical strategy that is consistent with the relevant perspective.

A second contribution of this study is that it explicitly links characteristics of an organization's employment system to organizational performance. To date, only a few other studies have attempted to make this link. For example, Huselid (1995) and Arthur (1994) showed that HR practices can have a significant impact on organizationally relevant performance measures. Like Huselid's and Arthur's findings, the current findings indicate that some HR practices always have a positive effect on organizational performance. Further, this study is one of the few to document that the relationships between some HR practices and organizational performance are contingent on firm strategy. Thus, the results of the current study suggest different theoretical frameworks are necessary to represent the different forms of relationships between HR practices and organizational performance.

The current study differs from these previous studies, however, because our results suggest a stronger relationship between HR practices and measures of financial performance. Arthur (1992, 1994) did not assess the relationship between HR practices and financial performance, and Huselid's (1995) results explained only 1 to 3 percent of the variation in financial performance. In contrast with these previous studies, the universalistic, contingency, and configurational analyses incorporated in the current study explained as much as 11, 10, and 6 percent, respectively, of the variation in financial performance. Thus, the current work indicates that HR practices may be even more important than was previously suspected. The current results must be interpreted with caution, however, because the inclusion of other determinants of both the HR practices and financial performance may reduce the variation explained by the HR practices alone.

The results of this study also have applied implications for organizations. First, organizations that adopt best HR practices can generate greater returns. Such practices include profit sharing, results-oriented appraisals, and greater employment security. Huselid (1995) pointed out that although organizations may not be able to sustain a competitive advantage because these practices are imitable (Barney, 1991), many organizations are not currently using these more effective practices. Thus, in the short run, organizations that adopt a greater number of these practices are likely to gain a short-term competitive advantage and enjoy superior performance. Pfeffer (1994), however, pointed

out that the implementation of these practices is not always an easy task. Therefore, he argued that it is unlikely that organizations can quickly or easily imitate the practices of the best organizations. If this is true, it may be even more important for newly established, or "greenfield," facilities to spend a great deal of time and effort ensuring that their employment systems are in fact consistent with high performance (Ichniowski et al., 1994).

The universal adoption of all HR practices, however, is not completely appropriate. The results presented in this study indicate a more complex relationship between the management of human resources and organizational performance. Some HR practices are more appropriate under certain strategic conditions and less appropriate under others. Thus, the current results support the primary assertion in the SHRM literature. Human resource managers must align some key organizational HR practices with business strategy (Jackson & Schuler, 1995). At least three practices, internal career opportunities, results-oriented appraisals, and participation/voice, may exhibit this contingency relationship. Future research will likely identify other HR practices that must be consistent with an organization's strategy.

Future SHRM research will undoubtedly increase the complexity of the HR manager's job. HR managers should not only keep current with the most effective universalistic practices, but should also be aware of the HR practices that work in concert with the greater goals of the organization's strategy. However, future SHRM research will likely provide more evidence that the manner in which an organization manages its employees has a bottom-line impact. Such research should aid HR managers in their quest to achieve greater status and control in their organizations.

Despite the contributions of this study, several factors limit the generalizability and usefulness of the findings. First, we limited the study to the banking industry to control for between-industry differences. Thus, the results may not be valid in other industries. Although several authors (Huselid, 1995; Pfeffer, 1994) have argued that it is unlikely that the best HR practices vary across industries, the current findings need to be validated in other industries to rule out industry as an important contingency factor. Second, this study was limited to a single job within the banking industry, that of loan officer, selected because it represented a core job within banks and is critical to bank performance. This approach is consistent with previous work (Arthur, 1992, 1994; Osterman, 1994), but characteristics of this job may limit the generalizability of the findings. For example, a loan officer's job is very professionalized and requires considerable training and education. The HR practices that are best for this type of job may differ from those that are best for semiskilled or trade-oriented jobs. Thus, future studies should investigate whether alternative HR practices are better suited for other types of jobs. Third, this study is limited because it included a relatively small set of the population of HR practices currently used by organizations. Although the HR practices included in this research are generally thought to be strategic and were derived from existing theory, other HR practices may constitute best practices, may have important contingency relationships with firm strat-

egy, or may be critical to the specification of alternative ideal configurations of HR practices.

A fourth limitation of this study is the use of a cross-sectional research design. Although we have argued that the effective use of HR practices should lead to stronger performance, our cross-sectional design does not allow us to rule out the possibility that organizations performing well adopt a greater number of high-quality HR practices. The issue of causality can be better addressed in longitudinal designs. Doing so would be an enormous task given the large number of organizations needed; however, we urge future researchers to adopt such designs. Additionally, future studies that include other organizational attributes that are related to both HR practices and organizational performance are needed to provide more accurate estimates of the full effect of HR practices on organizational performance.

REFERENCES

Abowd, J. M. 1990. Does performance-based managerial compensation affect corporate performance? ***Industrial and Labor Relations Review,*** 43: 52–73.

Arthur, J. B. 1992. The link between business strategy and industrial relations systems in American steel minimills. ***Industrial and Labor Relations Review,*** 45: 488–506.

Arthur, J. B. 1994. Effects of human resource systems on manufacturing performance. ***Academy of Management Journal,*** 37: 670–687.

Bacharach, S. 1989. Organizational theories: Some criteria for evaluation. ***Academy of Management Review,*** 14: 496–515.

Balkin, D. B., & Gomez-Mejia, L. R. 1987. Toward a contingency theory of compensation strategy. ***Strategic Management Journal,*** 8: 169–182.

Barney, J. 1991. Firm resources and sustained competitive advantage. ***Journal of Management,*** 17: 99–120.

Begin, J. P. 1993. Identifying patterns in HRM systems: Lessons learned from organizational theory. In J. Shaw, P. Kirkbride, & K. Rowland (Eds.), ***Research in personnel and human resource management,*** suppl. 3: 3–20. Greenwich, CT: JAI Press.

Blalock, H. M., Jr. 1969. ***Theory construction: From verbal to mathematical formulations.*** Englewood Cliffs, NJ: Prentice-Hall.

Butler, J. E., Ferris, G. R., & Napier, N. K. 1991. ***Strategy and human resources management.*** Cincinnati: South-Western.

Cronbach, L. J. 1987. Statistical tests for moderator variables: Flaws in analyses recently proposed. ***Psychological Bulletin,*** 102: 414–417.

Dalton, D. R., & Todor, W. D. 1982. Turnover: A lucrative hard dollar phenomenon. ***Academy of Management Review,*** 7: 212–218.

Delaney, J. T., Lewin, D., & Ichniowski, C. 1989. ***Human resource policies and practices in American firms.*** Washington, DC: U.S. Government Printing Office.

Delery, J. E. 1993. ***An interorganizational investigation of human resource management practices: The relationship between business strategy, job and task characteristics, and human resource management practices.*** Unpublished doctoral dissertation. Texas A&M University, College Station.

Dewar, R., & Werbel, J. 1979. Universalistic and contingency predictions of employee satisfaction and conflict. ***Administrative Science Quarterly,*** 24: 426–448.

Doty, D. H. 1994. Structuring in threes: A partial resurrection of Mintzberg's theory. ***Proceedings of the Southern Management Association***: 382–384.

Doty, D. H., & Glick, W. H. 1994. Typologies as a unique form of theory building: Toward improved understanding and modeling. ***Academy of Management Review,*** 19: 230–251.

Doty, D. H., Glick, W. H., & Huber, G. P. 1993. Fit, equifinality, and organizational effectiveness: A test of two configurational theories. ***Academy of Management Journal,*** 36: 1196–1250.

Dyer, L. 1984a. Linking human resource and business strategies. ***Human Resource Planning,*** 7(2): 79–84.

Dyer, L. 1984b. Studying human resource strategy: An approach and an agenda. ***Industrial Relations,*** 23: 156–169.

Dyer, L. 1985. Strategic human resources management and planning. In K. Rowland & G. Ferris (Eds.), ***Research in personnel and human resource management,*** vol. 3: 1–30. Greenwich, CT: JAI Press.

Eisenhardt, K. M. 1988. Agency- and institutional-theory explanations: The case of retail sales compensation. ***Academy of Management Journal,*** 31: 488–511.

Fama, E. F. 1980. Agency problems and the theory of the firm. ***Journal of Political Economy,*** 88: 288–307.

Fama, E. F., & Jensen, M. C. 1983. Separation of ownership and control. ***Journal of Law and Economics,*** 26: 301–325.

Fombrum, C. J., Tichy, N. M., & Devanna, M. A. 1984. ***Strategic human resource management.*** New York: Wiley.

Gerhart, B., & Milkovich, G. T. 1990. Organizational differences in managerial compensation and financial performance. ***Academy of Management Journal,*** 33: 663–691.

Golden, B. R. 1992. The past is the past—Or is it? The use of retrospective accounts as indicators of past strategy. ***Academy of Management Journal,*** 35: 848–860.

Golden, K., & Ramanujam, V. 1985. Between a dream and a nightmare: On the integration of the human resource management and strategic business planning processes. ***Human Resource Management,*** 24: 429–452.

Gomez-Mejia, L. R., & Balkin, D. B. 1992. ***Compensation, organizational strategy, and firm performance.*** Cincinnati: South-Western.

Govindarajan, V. 1988. A contingency approach to strategy implementation at the business-unit level: Integrating administrative mechanisms with strategy. ***Academy of Management Journal,*** 31: 828–853.

Hambrick, D. C. 1983. Some tests of the effectiveness and functional attributes of Miles and Snow's strategic types. ***Academy of Management Journal,*** 26: 2–26.

Huselid, M. A. 1993. ***Estimates of the impact of human resource management practices on turnover and productivity.*** Paper presented at the annual meeting of the Academy of Management, Atlanta.

Huselid, M. A. 1995. The impact of human resource management practices on turnover, productivity, and corporate financial performance. ***Academy of Management Journal,*** 38: 635–672.

Ichniowski, C., Shaw, K., & Prennushi, G. 1994. ***The impact of human resource management practices on productivity.*** Columbia Business School working paper 015, Columbia University, NY.

Jaccard, J., Turrisi, R., & Wan, C. K. 1990. ***Interaction effects in multiple regression.*** Sage University Paper series on quantitative applications in the social sciences, 07-069. Newbury Park, CA: Sage.

Jackson, S. E., & Schuler, R. S. 1995. Understanding human resource management in the context of organizations and their environments. In M. R. Rosenzweig & L. W. Porter (Eds.), ***Annual review of psychology,*** vol. 46: 237–264. Palo Alto, CA: Annual Reviews.

Jackson, S. E., Schuler, R. S., & Rivero, J. C. 1989. Organizational characteristics as predictors of personnel practices. ***Personnel Psychology,*** 42: 727–786.

Jones, G. R., & Wright, P. M. 1992. An economic approach to conceptualizing the utility of human resource management practices. In K. Rowland & G. Ferris (Eds.), ***Research in personnel and human resource management,*** vol. 10: 271–300. Greenwich, CT: JAI Press.

Kerr, J. L., & Jackofsky, E. F. 1989. Aligning managers with strategies: Management development versus selection. ***Strategic Management Journal,*** 10: 157–170.

Kerr, J. L., & Slocum, J. W. 1987. Linking reward systems and corporate cultures. ***Academy of Management Executive,*** 1(2): 99–108.

Lawler, E. E. 1986. ***High-involvement management: Participative strategies for improving organizational performance.*** San Francisco: Jossey-Bass.

Lawler, E. E., Mohrman, S. A., & Ledford, G. E. 1992. ***Employee involvement and total quality management.*** San Francisco: Jossey-Bass.

Lengnick-Hall, C. A., & Lengnick-Hall, M. L. 1988. Strategic human resource management: A review of the literature and a proposed typology. ***Academy of Management Review,*** 13: 454–470.

Leonard, J. S. 1990. Executive pay and firm performance. ***Industrial and Labor Relations Review,*** 43: 13–29.

Leontiades, M. 1980. ***Strategies for diversification and change.*** Boston, MA: Little, Brown.

MacDuffie, J. P. 1995. Human resource bundles and manufacturing performance: Organizational logic and flexible production systems in the world auto industry. ***Industrial and Labor Relations Review,*** 48: 197–221.

McKelvey, B. 1982. ***Organizational systematics: Taxonomy, evolution, classification.*** Berkeley: University of California Press.

McKinney, K. D. 196. ***Constructive typology and social theory.*** New York: Appelton-Century-Crofts.

Meyer, A. D., Tsui, A. S., & Hinings, C. R. 1993. Guest co-editors' introduction: Configurational approaches to organizational analysis. ***Academy of Management Journal,*** 36: 1175–1195.

Miles, R. E., & Snow, C. C. 1978. ***Organizational strategy, structure, and process.*** New York: McGraw-Hill.

Miles, R. E., & Snow, C. C. 1984. Designing strategic human resource systems. ***Organizational Dynamics,*** 13(1): 36–52.

Milkovich, G. T. 1988. A strategic perspective on compensation management. In G. Ferris & K. Rowland (Eds.), ***Research in personnel and human resource management,*** vol. 6: 263–288. Greenwich, CT: JAI Press.

Miller, M., & Friesen, P. H. 1984. ***Organizations: A quantum view.*** Englewood Cliffs, NJ: Prentice-Hall.

Osterman, P. 1987. Choice of employment systems in internal labor markets. ***Industrial Relations,*** 26: 46–67.

Osterman, P. 1994. How common is workplace transformation and who adopts it? ***Industrial and Labor Relations Review,*** 47: 173–188.

Pfeffer, J. 1994. ***Competitive advantage through people: Unleashing the power of the work force.*** Boston: Harvard Business School Press.

Pinfield, L. T., & Berner, M. F. 1994. Employment systems: Toward a coherent conceptualization of internal labor markets. In G. Ferris (Ed.), ***Research in personnel and human resource management,*** vol. 12: 41–78. Greenwich, CT: JAI Press.

Schoonhoven, C. B. 1981. Problems with contingency theory: Testing assumptions hidden within the language of contingency theory. ***Administrative Science Quarterly,*** 26: 349–377.

Schuler, R. S., & Jackson, S. E. 1987a. Linking competitive strategies with human resource management practices. ***Academy of Management Executive,*** 1(3): 207–219.

Schuler, R. S., & Jackson, S. E. 1987b. Organizational strategy and organizational level as determinants of human resource management practices. ***Human Resource Planning,*** 10(3): 125–141.

Schuler, R. S., & Jackson, S. E. 1988. Linking remuneration practices to innovation as a competitive strategy. ***Human Resource Management Australia,*** 10(May): 6–21.

Schuler, R. S., & MacMillan, I. C. 1984. Gaining competitive advantage through human resource management practices. ***Human Resource Management,*** 23(3): 241–255.

Scott, W. R. 1987. The adolescence of institutional theory. ***Administrative Science Quarterly,*** 32: 493–511.

Segev, E. 1989. A systematic comparative analysis and syntheses of two business-level strategic typologies. ***Strategic Management Journal,*** 10: 487–505.

Shortell, S. M., & Zajac, E. J. 1990. Perceptual and archival measures of Miles and Snow's strategic types: A comprehensive assessment of reliability and validity. ***Academy of Management Journal,*** 33: 817–832.

Snell, S. A. 1991. Executive use of human resource management controls to improve firm performance: Moderating effect of administrative information. ***Academy of Management Best Papers Proceedings:*** 277–281.

Sonnenfeld, J. A., & Peiperl, M. A. 1988. Staffing policy as a strategic response: A typology of career systems. ***Academy of Management Review,*** 13: 588–600.

Stone, E. F. 1988. Moderator variables in research: A review and analysis of conceptual and methodological issues. In G. Ferris & K. Rowland (Eds.), ***Research in personnel/human resources management,*** vol. 6: 191–230. Greenwich, CT: JAI Press.

Terpstra, D. E., & Rozell, E. J. 1993. The relationship of staffing practices to organizational level measures of performance. ***Personnel Psychology,*** 46: 27–48.

Van de Ven, A. H., & Drazin, R. 1985. The concept of fit in contingency theory. In L. L. Cummings & B. M. Staw (Eds.), ***Research in organizational behavior,*** vol. 7: 333–365. Greenwich, CT: JAI Press.

Venkatraman, N. 1989. The concept of fit in strategy research: Toward verbal and statistical correspondence. ***Academy of Management Review,*** 14: 423–444.

Venkatraman, N., & Prescott, J. E. 1990. Environment-strategy coalignment: An empirical test of its performance implications. ***Strategic Management Journal,*** 11: 1–23.

Weber, M. 1949. Objectivity in social science and policy. In E. A. Shis & H. A. Finch (Eds. & trans.). ***Max Weber on the methodology of the social sciences:*** 1–188. Glencoe, IL: Free Press.

Wright, P. M., & McMahan, G. C. 1992. Alternative theoretical perspectives on strategic human resource management. ***Journal of Management,*** 18: 295–320.

Zajac, E. J., & Shortell, S. M. 1989. Changing generic strategies: Likelihood, direction, and performance implications. ***Strategic Management Journal,*** 10: 413–430.

APPENDIX
Measures

Strategy Configurational Items

The Segev (1989) categories appear first, followed by the item or items used for this research.

Technological progress: Is innovative in the way services are delivered.

Product/market breadth: Offers a wide variety of services. Has a very diverse customer group.

Product innovation: Is innovative in terms of the number of new services offered. Is innovative in terms of the novelty of new services offered.

Quality: Offers high-quality services in comparison to the competition.

Price level: Gives customers more for their money than competitors.

Active marketing: Allots a large amount of resources to marketing.

Long-range financial strength: Is able to raise large amounts of financial resources for long-term investments.

Resources level: Has an abundant supply of material resources.

Investment in production: Invests heavily in equipment and facilities.

Internal analysis level: Is able to assess organizational performance, focusing on internal trends and developments.

External analysis level: Is able to systematically track opportunities and threats in the environment in order to design long-range strategies.

Level of risk: Is willing to make commitments which involve many resources and risky projects.

Proactive managerial style: Attempts to shape its environment, as opposed to merely reacting to trends.

Innovation Strategy Measure

Is innovative in the way services are delivered. Offers a wide variety of services. Has a very diverse customer group. Is innovative in terms of the number of new services offered. Is innovative in terms of the novelty of new services offered. Allots a large amount of resources to marketing.

HR Practices

Internal career opportunities: Individuals in this job have clear career paths within the organization. Individuals in this job have very little future within this organization (reverse-coded). Employees' career aspirations within the company are known by their immediate supervisors. Employees in this job who desire promotion have more than one potential position they could be promoted to.

Training: Extensive training programs are provided for individuals in this job. Employees in this job will normally go through training programs every few years. There are formal training programs to teach new hires the skills they need to perform their jobs. Formal training programs are offered to employees in order to increase their promotability in this organization.

Results-oriented appraisals: Performance is more often measured with objective quantifiable results. Performance appraisals are based on objective, quantifiable results.

Employment security: Employees in this job can expect to stay in the organizations for as long as they wish. It is very difficult to dismiss an employee in this job. Job security is almost guaranteed to employees in this job. If the bank were facing economic problems, employees in this job would be the last to get cut.

Participation: Employees in this job are allowed to make many decisions. Employees in this job are often asked by their supervisor to participate in decisions. Employees are provided the opportunity to suggest improvements in the way things are done. Superiors keep open communications with employees in this job.

Job descriptions: The duties of this job are clearly defined. This job has an up-to-date job description. The job description for this job contains all of the duties performed by individual employees. The actual job duties are shaped more by the employee than by a specific job description (reverse-coded).

Profit sharing: Individuals in this job receive bonuses based on the profit of the organization.

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