

ASSESSING THE LINK BETWEEN STRATEGIC HUMAN RESOURCE MANAGEMENT (HRM) PRACTICES AND CORPORATE FINANCIAL PERFORMANCE

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Abstract

This study has examined the impact of seven strategic HRM practices (internal career opportunities, training programs, results-oriented appraisals, profit sharing, employment security, Participation and voice mechanisms, and job description) on corporate financial variables including three profitability variables (return on assets, return on equity, profit margin), one shareholder wealth variable (earnings per share), and three stock market variables (divided payout ratio, dividend yield on common stock ratio, and the stock price growth ratio).

The result of this study revealed that four of the seven strategic HRM practices (profit sharing, results-oriented appraisals, employment security, and training) have significant impact on return on assets, return on equity, and profit margin. It was also found that the same four strategic HRM practices have a qualified relationship with earnings per share, divided payout ratio, dividend yield on common stock ration, and the stock price growth ratio.

CONTACT AUTHOR:

Ahmed S. Maghrabi
Director of Personnel
PO Box 2865
Makkah, Saudi Arabia

6229823 Res.
609000 X 4610
Maghrabias@yahoo.com
Habil 0505511703

ASSESSING THE LINK BETWEEN STRATEGIC HUMAN RESOURCE MANAGEMENT (HRM) PRACTICES AND CORPORATE FINANCIAL PERFORMANCE: EMPIRICAL INVESTIGATION

Introduction

Scholars from different disciplines have suggested various conceptual frameworks as explanations for the links between progressive HRM practices and organizational outcomes. For example, Pfeffer (1994) claimed that employee participation and empowerment job design (team-based production system, extensive employee training, performance-contingent incentive compensation, and others) are widely believed to improve performances of organizations. Similarly, Huselid (1995) concluded that HRM practices affect turnover, productivity, and financial performance of organizations. However, not all HRM practices have the same effect on organizational outcomes. While some HRM practices have a significant effect, others have a marginal effect. According to Delery and Doty (1996), strategic HRM practices have the most significant effects on organizational outcomes such as productivity, turnover, and firm's financial performance.

Previous research did not focus on the relationship between strategic HRM practices and organizational financial performance. For example, Delaney and Huselid (1996) examined the relationship between HRM practices and organizational outcomes including financial variables, productivity, and turnover. Although the authors examined the relationship between strategic HRM practices and financial performance of organization, they limited their study to one job (the loan officer's job) and one industry (the banking industry). The authors also selected two financial variables (return on average assets and return on equity).

We extended Delery and Doty's (1996) study, and included various types of industries and more financial variables to examine the impact of strategic HRM practices on firm's financial performance. The results of our study provide a better understanding of the role of strategic HRM practices in creating and sustaining firm's performance and competitive advantage.

Background of This Study

This section deals with how HRM practices affect outcomes of firms, the emergence of strategic HRM practices, their impact on the financial performance of firms, the identification of strategic HRM practices, and certain financial variables.

How Do HRM Practices Affect the Overall Organizational Performance?

There is substantial uncertainty in regards to how HRM practices affect organizational performance, whether some practices have stronger effects than others, and whether synergies among such practices can improve organizational performance (Milgrom and Roberts, 1995). Conceptually, HRM practices can be classified in terms of their impact on employee skill and ability, motivation, and the method that work is structured. For example, organizations can adopt numerous HRM practices in order to enhance employee skills.

One such approach regards how efforts can focus on improving the quality of the individuals hired, or on raising the skills and abilities of current employees, or on both. Employees can be hired via sophisticated selection procedures designed to screen out all but the very best potential employees. Indeed, research indicates that selectively in staffing is positively related to firm's performance (Becker and Huselid, 1992). Another approach deals with how organizations can improve the quality of current employees by providing comprehensive training and development programs after selection. Considerable evidence suggests that investments in training produce important beneficial organizational outcomes (Knobe and Kalleberg, 1994).

However, the effectiveness of the skilled employees will be limited if these employees are not adequately motivated to perform their jobs. The structure of an organizational HRM system can affect employee motivation levels in several ways. For example, organizations can implement merit pay programs or incentive compensation systems which provide rewards to employees for meeting specific goals. A substantial body of evidence has focused on the impact of incentive compensation and performance management systems on firm's performance (Gerhart and Milkovich, 1992). In addition, protecting employees from arbitrary treatment, via a formal grievance procedure, may also motivate employees to work harder because they expect their efforts to be justly rewarded (Ichniowski, Shaw, and Prennushi, 1994).

Moreover, the manner in which a workplace is structured should affect organizational performance to the degree that skilled and motivated employees are directly involved in determining what work is performed and how this work gets accomplished. Employee participation systems (Wagner, 1994), internal labor markets that provide an opportunity for employees to advance within a firm (Osterman, 1987), and team-based production systems (Levine, 1995) are all forms of work through which the provision of job security encourage employees to work harder. It is also unlikely that rational employees will identify efficiency that enhances changes in work structures if such changes would eliminate their current jobs (Levine, 1995). Based on these arguments, we expect that strategic HRM practices significantly affect organizational performance.

The Emergence of Strategic HRM Practices

During the last decade, there has been a dramatic shift in the field of HRM. This shift has broadened the focus of research on HRM from micro analytic research that has dominated the field of HRM in the past to a more macro or strategic perspective. The strategic perspective of HRM has grown out of many researchers interest to demonstrate the importance of strategic HRM practices for organizational performance (Delery and Doty, 1996).

The basic premise underlying strategic HRM practices is that organizations adopting a particular strategy require HRM practices that are different from those

required by organizations adopting alternative strategy (Jackson and Schuler, 1995). If this fundamental assumption is true, then much of the differences in HRM practices across organizations should be explained by the organizational strategies. Thus organizations that have greater congruence between their HRM practices and their strategies should enjoy superior performance (Delery and Doty, 1996). There is some support for these assumptions. For example, Arthur (1992) concluded that organizations following different strategies utilize different HRM practices. Other researchers (e.g., Arthur, 1994; Huselid, 1995) asserted that HRM practices can influence organizational relevant outcomes such as productivity and profitability.

To emphasize the impact of HRM practices on organizational performance, numerous researchers have developed a universalistic perspective and argued for a “best practices approach” to strategic HRM practices, and proposed that all organizations should adopt these best practices. For example, Pfeffer (1994) argued that greater use of his 16 management practices (employment security, participation, empowerment, incentive pay, training programs, promotion from within, skill development, etc.) produces higher profit and productivity across organizations. Likewise, Osterman (1994) demonstrated that a number of innovative work practices (teams, job rotation, quality circles, total quality management, etc.) leads to productivity gains for all American organizations. In general, the practices identified by Pfeffer (1994) and Osterman (1994) have been labeled “high performance work practices” or simply “best practices”.

The Impact of Strategic HRM Practices on Organizational Financial Performance

Though we could go on at length about a company like Apple as a case in point (Kirkpatrick, 1998), executive frequently say, “don’t just give me anecdotes specifically selected to make some point. Show me the evidence!” Fortunately, there is a substantial and rapidly expanding body of evidence, some of it quite methodologically sophisticated, that speaks to the strong connection between how firms manage HRM practices and the economic results achieved. This evidence is drawn from studies conducted on profitability and stock price in large sample of companies from multiple industries including automobile, apparel, semiconductor, steel manufacturing, oil refining, and

service industry. It shows that substantial gains, on the order of 40 percent, can be obtained by implementing strategic HRM practices (Pfeffer, 1998).

According to an award-winning study of the high performance work practices of 968 firms representing all major industries, a one standard deviation increase in such practices is associated with \$27,044 more in sales, \$18,641 in market value, and \$3,8814 in profit per employee basis (Huselid, 1995). A subsequent study conducted on 702 firms in 1996 found even larger economic benefits. A one standard deviation improvement in the HRM practices was associated with an increase in shareholder wealth of \$41,000 per employee, about 14 percent market value premium (Huselid and Becker, 1997).

Other researchers explored the links between individual strategic HRM practices and some financial variables. For instance, Cascio (1991) suggested that the financial returns associated with investments in strategic HRM practices are generally substantial. Boudreaue (1992) concluded that the value of a one-standard deviation increase in employee performance measured in dollars is equivalent to 40 percent of salary per employee. Therefore, the HRM practices that can produce such an increase are very significant.

Although most of the empirical work on this topic has been conducted in laboratories, Becker and Huselid (1992) presented field data suggesting that standard deviation may in fact be well in excess of 40 percent of salary. Similarly, Terpstra and Rozell (1993) found a significant and positive link between the extensiveness of recruiting, selection test validation, and the utilization of formal selection procedures and profits of organization.

Russell, Terborg, and Powers (1985) also demonstrated a link between the adoption of employee training programs and financial performance. Borman (1991) developed a similar link between performance appraisal and compensation. Gerhart and Milkovitch (1992) claimed that such performance appraisal and compensation have also been connected with increased organization's profitability. Moreover, the effect of HRM

practices on the firm performance was used to predict the survival of non-financial companies (Welbourne and Andrews, 1996).

Peffer and Veiga (1999) attested that the above results are not unique to firms in the United States. Similar results were obtained in a study of more than one hundred German companies operating in ten industries. Blimes, Wetzker, and Xhonneux (1997) found a strong link between investing in employees and stock market performance. Companies which placed workers at the core of their strategies produced higher long-term returns to shareholders than their industry peers.

The Identification of Strategic HRM Practices

Strategic HRM practices are those that are theoretically or empirically related to overall organization performance. Although not all HRM practices are strategic, there is a growing consensus among researchers about which can be considered strategic HRM practices (Delery and Doty, 1996). Drawing on the works of several researchers (Osterman, 1987; Sonnenfeld and Peiperl, 1998). Delery and Dory (1996) identified seven practices that are consistently considered strategic HRM practices. These HRM practices are: (1) internal career opportunities; (2) formal training systems; (3) appraisal measures; (4) profit sharing plans; (5) employment security; (6) employee participation and voice mechanisms; and (7) job description. All these practices are among Pfeffer's (1994) 16 most effective practices for managing people.

1. **Internal career Opportunities** – Internal career opportunities refer to the use of internal labor markets. In other words, organizations can choose to hire predominantly from within or from outside as well.
2. **Training systems** – training system 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.
3. **Results-oriented appraisal**- Appraisal is defined as the degree to which performance appraisals focused on outputs or results measures, rather than on behavioral measures.

4. **profit sharing** – Profit sharing refers to the extent to which employees received bonuses based on organizational profit-sharing plans can be an integral part of a strategic human resources system.
5. **Employment security** – Employment security refers to the degree to which employees are secure in their jobs.
6. **Participation** – Participation refers to the degree to which employees were allowed to have input their work and participation in decision making have emerged as key factors.
7. **Job description** – Job description refers to the extent to which jobs are clearly and precisely defined. The degree to which jobs are tightly or narrowly defined is very important. Tightly defined jobs are those jobs in which employees know the content of their jobs exactly. The job is limited in scope, and incumbents only perform duties that are considered part of the job. The job duties are shaped by a well-defined job description rather than by individual action.

We concur with Delery and Doty (1996) that these seven practices are the most critical characteristics of employment systems in organizations. Therefore, we used these practices as the basis for our hypothesis investigated in our study. Although there are other HRM practices that might affect the performance of organizations, the seven practices listed above appeared to have the greatest support across a diverse literature. We restricted our arguments and analyses to these seven strategic HRM practices.

Selected Organizational Financial Variables

Prior work on the measurement of corporate financial performance is extensive. Weiner and Mahoney (1981) stated that a number of independent variables is almost infinite when measuring firm performance. For example, some researchers used profitability variables to measure financial performance of organizations (e.g., Gerhart and Milovitch, 1992; Huselid, 1995; Delery and Doty, 1996; Pfeffer, 1998). Other studies used sales per employee and market value (Huselid, 1995), increase in shareholder wealth (Huselid and

Becker, 1997), and stock market performance (Blimes, Wetzker, and Xhonneux, 1997; Welbourne and Andrews, 1996). Hence, the selection of variables used in measuring financial performance of a corporation is left to researchers.

Based on previous research, corporate financial performance is less straightforward. Therefore, we selected return on investment (ROI), return on assets (ROI), and profit margin (PRM) as measures of organizational profitability. We also used earning per share (EPS) as a measure of the shareholder wealth. In addition we selected the divided payout ration (DRCSR), and stock price growth (SPG) as measures of the stock market performance.

Hypotheses

The literature review suggests that HRM practices affect firm's performance. Therefore, strategic HRM practices should be related to at least some relevant outcomes of firms. Arthur (1994) claimed that because progressive HRM practices increase employee discretionary effort, strategic HRM practices would affect firm's outcomes such as turnover and productivity. Bartel (1994) asserted that because returns from investments in HRM practices exceed their real costs, lower turnover and greater productivity should in turn enhance the firm's financial performance. Based on these arguments, the following hypotheses have been formulated:

- **Profitability variables**

H₁: *There is a positive and significant relationship between return on assets (ROA) and strategic HRM practices (internal career opportunities, formal training programs, result-oriented appraisals, profit sharing, employment security, employee participation and voice, and a well-defined job description).*

H₂: *There is a positive and significant relationship between return on equity (ROE) and strategic HRM practices (internal career opportunities, formal training programs, result-oriented appraisals, profit sharing, employment security, employee participation and voice, and a well-defined job description).*

H₃: There is a positive and significant relationship between profit margin (PRM) and strategic HRM practices (internal career opportunities, formal training programs, result-oriented appraisals, profit sharing, employment security, employee participation and voice, and well-defined job description).

Shareholder wealth variable

H₄: There is a positive and significant relationship between earning per share (EPS) and strategic HRM practices (internal career opportunities, formal training programs, result-oriented appraisals, profit sharing, employment security, employee participation and voice, and a well-defined job description).

Stock market performance

H₅: There is a positive and significant relationship between divided payout ratio (DPR) and strategic HRM practices (internal career opportunities, formal training programs, result-oriented appraisals, profit sharing, employment security, employee participation and voice, and a well-defined job description).

H₆: There is a positive and significant relationship between dividend yield on common stock ration (DOCSR) and strategic HRM practices (internal career opportunities, formal training programs, result-oriented appraisals, profit sharing, employment security, employee participation and voice, and a well-defined job description).

H₇: There is a positive and significant relationship between stock prices (SPG) and strategic HRM practices (internal career opportunities, formal training programs, result-oriented appraisals, profit sharing employment security, employee participation and voice, and a well-defined job description).

Research Methods

The research methods used in this study included sample and procedure of data collection, survey questionnaire, measures, and data analysis. Each method was carried out according to the following procedures:

Sample and Procedure

While Delery and Doty's (1996) study was limited to the banking industry, our study included various types of industries because strategic HRM practices may vary across industries. In addition, the results of one industry need to be validated in other industries to rule out industry as an important factor. While the previous study was also limited to a single job within the banking industry (the loan officer's job), our study included various jobs because the best HRM practices for one job may differ from those that are the best for other types of jobs. The descriptions of one job may also limit the external validity of the findings of any study uses one job.

A stratified random sample was selected of 1,050 firms according to a procedure used in previous research studies. First, the total population of industries was stratified into three categories: (1) Assets greater than \$25 million and less than or equal to \$100 million; (2) Assets greater than \$100 million and less than or equal to \$300 million; and (3) Assets greater than \$300 million. Subsequently, 350 firms were randomly selected from each asset category, resulting in a total sample of 1050 firms. The data from HR managers were collected by using the survey questionnaire which was adapted from Delery and Doty's (1996) study. Each mailed questionnaire was given a certain code that identifies each surveyed firm. Data concerning the responses of HR managers, the financial variables, and the control variables were collected for only complete questionnaires returned by the responding HR managers of the surveyed firms.

Measures

This study required measures for the strategic HRM practices (independent variables) and the firm's seven financial dimensions (dependent variables).

Strategic HRM practices – The adapted survey questionnaire was used to measure the seven HRM practices identified in this study. Each HRM practice was measured by the mean scores assigned by respondents to the items associated with each practice. Each item was used into a statement that has a five-point Likert scale. Higher

scores indicated the existence of the measured item (The Appendix Presents the survey questionnaire items associated with all measures).

Corporate financial performance – This study incorporated various financial measures in order to measure the seven financial variables identified in this study. Financial data for the responding firms (identified by certain codes) were collected from Compact Disclosure, Moody's Industrial Manual, the Standard & Poor's Guide and annual reports. The measures of financial variables were the year end measures for 1998, the year in which the surveys were completed.

Control variables – The control variables used in this study included the size and the age of the firm. The firm's size was measured as the total dollar value of assets. The firm's age was measured by the number of years from the founding dated of each firm.

Results

A total of 345 (33%) usable questionnaires were received from the responding HR managers of the surveyed firms. Data analysis in this study included the obtained responses of the responding HR managers to the seven strategic HRM practices, and the required data for the seven financial variables and the two control variables.

Industry breakdown of the responding firms is presented in Table 1. The matrix correlation presented in table 2 shows moderate correlations between several strategic HRM practices are not completely independent. Table 2 also shows correlations between the four strategic HRM practices (employment security, profit sharing, training, and results-oriented appraisals) and some of the financial variables included in this study.

Although we can use hierarchical regressions, we conducted factor analysis due to the correlations between some of the strategic HRM practices and between the four strategic HRM practices and the financial variables. The mean scores of the response of the responding HR managers for the seven strategic practices and the seven financial ratios obtained for the 345 firms were used as input for the SPSS-PCA computer program in order to extract the principal components. Subsequently, the varimax rotation was utilized to obtain factor loadings from the extracted principal components. Generated

factor loading pertaining to the strategic HRM practices and the financial variables are presented in Table 3 and Table 4, respectively.

Each factor loading for each of the seven financial variables (the dependent variables) was regressed against the factor loadings for the seven strategic HRM practices (the independent variables). The outcomes of the seven multiple regression analyses are presented in Table 5. The results provide a strong support for the first three hypotheses (H_1, H_2, H_3), and a qualified support for the last three hypotheses (H_4, H_5, H_6).

Table 1: Industry Breakdown

<i>Type of industry</i>	<i>Percentage of firms</i>
Food and kindred products	6.3
Textiles & Apparel	4.1
Paper & allied products	5.2
Chemicals & allied industries	6.1
Financial institutions	6.2
Pharmaceutical	5.2
Petroleum	3.4
Rubber & miscellaneous plastics	4.3
Stone, Clay, & Glass	2.7
Primary metals	3.4
Fabricated metals except machinery	5.3
Industrial & commercial machinery	9.2
Electrical Goods	7.3
Consumer Electronics	5.4
Communications Equipment	5.1
Transport equipment	8.2
Instruments & precision equipment	7.2
Other miscellaneous manufacturing	5.4
Total	100.00

Table 2: Correlations among Strategic HRM Practices and Financial Variables in American Firms

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14
HRM PRACTICES														
1. Appraisals	1.00													
2. Job descriptions	-.24**	1.00												
3. Job security	-.19**	.11	1.00											
4. Career Opportunities	-.31**	.28**	-.10	1.00										
5. Training programs	-.18**	.21**	-.10	.32	1.00									
6. Employee participation	.21**	.18**	.06	.27**	.32**	1.00								
7. Profit sharing	.08	-.05	.06	.17*	.11	.16**	1.00							

FINANCIAL VARIABLES

8. ROA	.22**	-.09	.21**	.10	.08	.16	.24**	1.00						
9. ROE	.23*	.07	.18*	.13*	.20**	.14*	.17*	.29**	1.00					
10. PMR	.14*	.08	.26**	-.12	.19*	.10	-.16*	-.22**	.43**	1.00				
11. EPS	.18**	.12	.17*	.09	.18*	-.11	-.214*	.43**	.22**	.11	1.00			
12. DPR	.15*	.16*	.14*	.10	.21**	-.09	.17*	.43**	.18**	.12	.09	1.00		
13. DOCSR	.17*	.11	.22**	.09	.11	-.06	.22**	.43**	.22**	.06	.11	.04	1.00	
14. SPG	.19*	.07	.16*	.11	.17*	.10	.18*	.12	.08	.11	.14	.03	.10	1.00

* $P < .05$; ** $P < .01$

ROA: Return on assets; ROE - Return on equity; RPM - profit margin; EPS - Earnings per share; DPR divided payout ratio; DOCSR dividend yield on common stock ratio; SPG = Stock price growth.

Table 3: Confirmatory factor analysis of HR managers' responses to the 23 items in the survey instrument

Strategic HRM practices	Factor Loadings
Internal Career Opportunities (alpha=.88):	
1. Individuals in this job have clear career paths within the organization.	.7434
2. Individuals in their job have very little future within this organization (Reverse coded).	.8765
3. Employees' career aspirations within the company are known by their Immediate supervisors.	.6742
4. Employees in their jobs who desire promotion have more than one potential position they could be promoted to.	.8967
Training Programs (alpha=.87):	
1. Extensive training programs are provided for employees in the job.	.8364
2. Employee in their jobs will normally go through training programs every few years, or as needed.	.9252
3. There are formal training programs to teach new hires the skills they Need to perform heir jobs.	.9121
4. Formal training programs are offered to employees to increase their promotability in their company.	.7126
Results-Oriented Appraisals (alpha=.79):	
1. Performance is more often measured with objective, quantifiable results.	.5915
2. Performance appraisals are based on objective, quantifiable results.	.8566
Employment Security (alpha=.87):	
1. Employees in their jobs can expect to stay in the organization for as long as they wish.	.8148
2. It is very difficult to dismiss an employee in this or her job.	.7631
3. Job security is almost guaranteed to employees in their jobs.	.8753
4. If the company were facing economic problems, employees in their job would be the last to get cut.	.7652
Employee Participation (alpha=.90):	
1. Employee in their jobs are allowed to make many decisions and practice grievances.	.8641
2. Employees in their jobs are often asked by supervisor to participate in decisions	.7211
3. Employees are provided the opportunity to suggest improvements in the way things are done.	.7431
4. Superiors keep open communications with employees in their job.	.8672

Table 3: continues

Strategic HRM practices	Factor Loadings
Job Description (alpha=.89):	
1. The duties of each employee job are clearly defined.	.7931
2. Each job description for each employee has an up-to-date job description.	.7786
3. The job description for each employee job contains all of the duties required by each individual employees.	.6977
4. The actual job duties are shaped more by the employee than by a specific job description (reverse-coded).	.8011
Profit Sharing Plants (alpha=.91):	
1. Individuals in their jobs receive bonuses based on the profit of their company.	.8861
Factor eigenvalue:	(11.3; 7.4; 8.3; 5.4 3.0; 2.1; 1.4)

Table 4: Factor Analysis for the Selected Financial Variables

Financial Ratios	Factor Loadings
Profitability Variables:	
1. Return on assets	.9321
2. Return on equity	.9424
3. Profit margin	.8778
Shareholder Wealth Variable:	
1. Earnings per share	.7461
Stock market performance variables:	
1. Divided payout ratio	.9022
2. Dividend yield on common stock ratio	.7318
3. Stock prices	.7815
Factor eigenvalue:	(17.3; 14.8; 12.6)

Table 5: Regression analysis for the factor loadings of financial variables against those of strategic HRM practices

Independent Variables	Dependent Variables: Finance Variables						
	ROA	ROE	PRM	EPS	DPR	DOCSR	SPG
	Beta	Beta	Beta	Beta	Beta	Beta	Beta
1. Objective Appraisals	.1682 (.05)	.2341 (.01)	.2825 (.01)	.3421 (.05)	.2321 (.10)	.2456 (.10)	.3768 (.05)
2. Job Descriptions	.0725 N.S.	.0874 N.S.	.0363 N.S.	.0454 N.S.	.0554 N.S.	.0941 N.S.	.1002 N.S.
3. Job Security	.2372 (.01)	.3118 (.01)	.2841 (.05)	.2321 (.05)	.2718 (.05)	.2312 (.05)	.2417 (.05)
4. Career Opportunity	.1125 N.S.	.0984 N.S.	.0376 N.S.	.0682 N.S.	.0862 N.S.	.0926 N.S.	.1108 N.S.
5. Training programs	.2635 (.05)	.34282 (.101)	.2277 (.05)	.1928 (.10)	.2574 (.05)	.1433 (.10)	.2962 (.01)
6. Employee participation	.0647 N.S.	.0274 N.S.	.0753 N.S.	.0311 N.S.	.0137 N.S.	.1102 N.S.	.0105 N.S.
7. Profit sharing plans	.3511 (.01)	.2422 (.05)	.1922 (.10)	.1533 (.10)	.1426 (.10)	.1394 (.10)	.1468 (.05)
R-squared	.6425	.5428	.4823	.44107	.4164	.3847	
Adjusted R-square	.6211	.5167	.4278	.4122	.3864	.3582	
F-Ratio	.4745	.3251	.2628	.1842	.1748	.1298	
Significant F-Ratio	.001	.0001	.001	.05	.05	.05	

• Significant levels are between two parentheses

• N.S.: Not significant

Discussion

The results of this study provided relatively strong support for the universalistic perspective of the best HRM practices. Four individual strategic HRM practices (employment security, profit sharing, training, and result-oriented appraisals) have strong and positive relationships with the three profitability variables (return on assets, return on equity, and profit margin). The same four strategic HRM practices have qualified and positive relationships with the four financial variables (earnings per share, divided payout, dividend yield on common stocks, and stock price).

Although previous research investigated the relationship between HRM practices and the firm's financial performance, researchers focused on one or two financial variables and one industry. The results of our comprehensive studies support the results of previous studies. With respect to the relationships between strategic HRM practices and profitability variables (Return on assets, return on equity, and profit margin), our results support the results of previous studies such as Pfeffer (1998), Huselid (1995), Terpstra and Rozell (1993), and Gerhart and Milcovich (1992). Likewise, our results concerning the relationships between strategic HRM practices and other financial ratios (earnings per share, divided payout, dividend yield on common stocks, and stock price) support the findings of previous studies such as Pfeffer (1998), Huselid and Becker (1997), and Blimes, Wetzker, and Khonneux (1997).

The relationship between profit sharing and financial performance of organizations supports the explanation of agency theory (Eisenhardt, 1998) and behavioral theory (Katz and Kahn, 1978). Agency theory suggests that basing employee rewards on profits ensures that employee interests are aligned with the owner's interests. However, many profit sharing plans do not distribute profits equally among employees. Instead, profits are distributed differently according to employee performance. In terms of the behavioral perspective, profit sharing may be seen as universalistic because all business firms strive for profit. By tying employee compensation to firm profit, the firm is rewarding the behavior that is consistent with its overall performance (Delery and Doty, 1996).

The effective relationship between results-oriented appraisals and the firm's financial performance is consistent with agency theory (Eisenhardt, 1988), control theory (Snell, 1991), and the transaction cost perspective (Jones and Wright, 1992). Each theoretical perspective claims 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 (Delery and Doty, 1996).

The effects of employment security on the firm financial performance are more difficult to explain in terms of the theories mentioned above. Granting employment security without monitoring employee performance does not guarantee the employee engagement in appropriate behavior. However, employment security may marginally align the interest of employees and owners. If employees fail to perform in a way that produces continued profits for the firm, the firm may not exist, thereby ending the guarantee of employment security. Moreover, employment security sends a signal or a message indicating that a firm is committed to its employees. If employees reciprocate this commitment, the firm should have a workforce with a high level of commitment and motivation (Delery and Doty, 1996).

The effects of training programs are consistent with the perspectives of the resource-based theory (Barney, 1991), resource-dependency theory (Pfeffer and Cohen, 1984), and human capital theory (Becker, 1964). Resource-based theory assumes that each organization is a collection of unique resources that provides the organizational returns. This theory also argues that a firm is a collection of evolving capabilities that is managed in pursuit of above-average returns. According to the resource-dependency theory, differences in firm's performances across time are driven primarily by their unique resources and capabilities rather than by the structure or characteristics of industry. Resources are inputs into a firm's production process (e.g. the skills of individual employees).

Human capital theory views employees as human capital. Human capital refers to the knowledge and skills of the entire workforce of a firm. Much of the development of U.S. industry can be attributed to the effectiveness of its human capital. One-third of the U.S. gross national product (GNP) in the past and present is was and still attributed to increases in the educational level of the U.S. workforce (Hitt, Ireland, and Hoskisson, 1998).

Implications

The results of this study imply that the seven strategic HRM practices are viable and can lead to different assumptions pertaining to the relationships between these respective practices and organizational performance. The explicit relationships between the characteristics of the employment system of an organization and its performance also imply that strategic HRM practices can have significant effects on organizationally relevant performance measures.

Conclusions

Organizations that adopt best or strategic HRM practices can generate greater returns. Such practices include profit sharing, employment security, results-oriented appraisals, and training programs. However, we concur with Pfeffer (1994) who asserted that the implementation of these practices is not always an easy task. Therefore, we argue that it is unlikely that organizations can quickly or easily imitate the practices of the best organizations. Consequently, organizations that adopt a greater number of these practices are likely to gain a competitive advantage and enjoy superior performance.

Recommendations for Future Research

We recommend longitudinal studies to address the causal relationship between the HRM practices and organizational performance. In addition, future studies including other organizational attributes related to both HRM practices and organizational performance are needed to provide more accurate estimates of the full effect of HRM practices on organizational performance.

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Appendix Measures

Strategic HRM Practices

1. **Internal career opportunities (4 items):** 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.
2. **Training (4 items):** 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.
3. **Results-oriented appraisals (2 items):** Performance is more often measured with objective quantifiable results. Performance appraisals are based on objective, quantifiable results.
4. **Employment security (4 items):** 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 be terminated.
5. **Participation (4 items):** Employees in this job are allowed to make many decisions. Employees in this job are often asked by 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.
6. **Job description (4 items):** 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).
7. **Profit sharing (1 item):** Individuals in their jobs receive bonuses based on the profit of the organization.

Financial Variables

1. Profit margin (PRM) was measured by: Sales minus costs of goods sold divided by net sales.
2. Return on total assets (ROA) was measured by: Net profit after tax divided by total equity.
3. Return on equity (ROE) was measured by: Net profit after tax divided by total equity.
4. Earnings per share (EPS) was measured by: Net earnings divided by the amount of common stock.
5. Dividend payout ratio was measured by: Annual dividends per share divided by annual earnings per share.
6. Dividend yield on common stock was measured by: Annual dividends per share divided by current market price per share.
7. Stock price growth was measured by: The average of growth in stock prices across the 1998.