Journal Of Financial And Strategic Decisions
Volume 10 Number 1 Spring 1997

EMPLOYEE MANAGEMENT STRATEGY, STAKEHOLDER-AGENCY THEORY, AND THE VALUE OF THE FIRM

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Abstract

The purpose of this research was to determine the extent to which a company's employee management strategy impacts firm financial performance. In essence, does the extent of a firm's compensation package, its human relations strategy, and/or its ability to challenge and motivate employees affect the enhancement of firm value? The theoretical foundation for this research derives from the stakeholder-agency concept of the firm. The results of previous empirical studies, while mixed, tend to suggest that, in some cases, *ESOPs*, profit sharing plans, and progressive people management strategies have a positive effect on limited measures of financial performance. This study improved upon previous work by using excess value, a superior market-based measure of firm financial performance, and extensive combinations of personnel management variables as well as control variables. Within the limitations of the study, the general conclusion of this research is that employee management strategy does impact firm financial performance. The appropriate strategies, however, for the most part, seem to be industry specific. Opportunities for future research are definitely available.

INTRODUCTION & LITERATURE REVIEW

The purpose of this research is to determine the extent to which a company's employee management strategy impacts firm financial performance. In essence, does the extent of a firm's compensation package (profit sharing, benefits, etc.), its human relations strategy, and/or its ability to challenge and motivate employees affect the enhancement of firm value?

The theoretical foundation for this study derives from the stakeholder-agency concept of the firm (Hill and Jones, 1992). The notion of stakeholder theory states that the multi-purpose corporation seeks to balance the interests of its various stakeholders so that everyone receives some degree of satisfaction (Abrams, 1951). The agency concept identifies not only the contracts but also the costs the resource holders must incur in order to insure proper action on their behalf (Jensen and Meckling, 1976). The combined stakeholder-agency construct provides a sound basis for evaluating, among other things, firm employee management strategy. Employees are a major stakeholder in most firms. Agency costs associated with employee management derive from two major sources: (1) the costs of direct and indirect compensation and (2) the costs of inefficiency which may be inversely related to compensation costs.

Previous research has focused on testing, in varying degrees, the impact of *ESOPs*, profit sharing plans, gain sharing plans, and to a much lesser extent, progressive people management strategies on firm profitability and productivity. Overall, the results of these studies, while mixed, tend to suggest that, in some cases, *ESOPs*, profit sharing plans, and progressive people management strategies have a positive effect on limited measures of financial performance (Conte and Kruse, 1991; Kravetz, 1991; Florkowski and Shastri, 1992; Adamson, 1993; Kumbhakar and Dunbar, 1993).

Prior studies were limited in that: 1) they focused on performance measures which are only tangentially related to overall, long-term enhancement of firm value, 2) the employee management strategy variables were examined in relative isolation and hence did not capture combination effects, and 3) the models employed did not include

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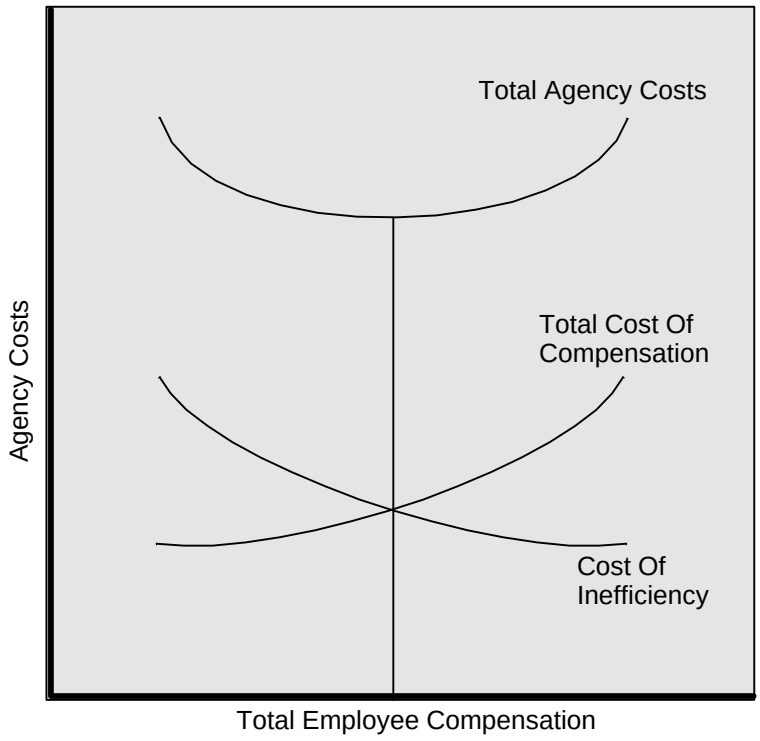
critical control variables such as risk, growth, and excess cash.

This research attempted to overcome these limitations. First, this study relates excess value, a more superior measure of firm financial performance, to personnel management strategy variables. Excess value is a market, rather than accounting based, performance measure that captures those premiums or discounts granted to individual firms by the market (Cochran and Wood, 1984). Further, it includes intangible assets in its computation, thereby avoiding estimation errors which may occur in other measures such as Tobin's q. In an effort to be thorough, the more traditional firm performance measures of *ROE*, *ROA*, and cash flow were also used. Additionally, the comprehensive model contains not only the personnel management variables but also control variables such as risk surrogates (size and book-to-market), growth, and excess cash. Attempts to understand the effectiveness of the various employee management strategies in enhancing firm value and financial performance are of critical importance to corporate financial managers, investors, portfolio managers, and government policy makers.

RESEARCH DESIGN & ANALYSIS

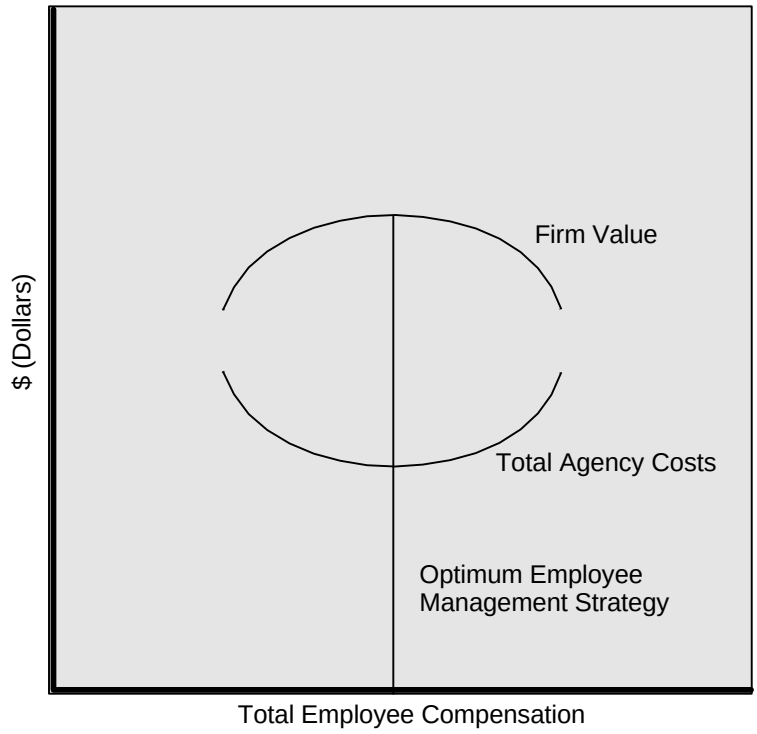
In terms of this study's framework, management can implement strategies in order to provide various forms of employee compensation (*ESOPs*, profit sharing, benefits, etc.) in an effort to align employee interests with those of management. Without these various employee management strategies, the costs of compensation are lower, but costs of inefficiency are higher. With a relatively large number of employee management strategies, the costs of compensation increase, but the costs of inefficiency are reduced (see Figure 1). Based on agency theory, the

FIGURE 1
Hypothesized Agency Costs–
Total Employee Compensation Relationship



optimum employee management strategy should be the combination that minimizes total agency costs thereby maximizing firm value (see Figure 2). Since employees are a major stakeholder, the effective management of employees has significant implications for the enhancement of overall firm financial performance.

FIGURE 2
Hypothesized Firm Value-Agency Costs–
Total Employee Compensation Relationship



Empirical Methodology

Multiple regression analysis was used to analyze the dataset. Data was drawn from the Compustat tapes, the Department of Labor, the National Center for Employee Ownership, and the Council on Economic Priorities for the year 1991. An overall cross-sectional analysis of 49 firms as well as limited industry analyses were conducted. The industries employed were Food and Personal Household Products. Significance was defined at the 10% level for all analyses.

Model And Variable Definitions

Equation 1

$$FP = B_0 + B_1 ESOP + B_2 PRSH + \sum_{i=3}^{4} B_i BEN_i + \sum_{i=5}^{6} B_i WOM_i + \sum_{i=7}^{8} B_i MIN_i + \sum_{i=9}^{10} B_i HR_i$$

$$+ B_{11} SIZE + B_{12} BOOK + B_{13} GROW + B_{14} XSCASH + B_{15} PENSN + E$$

where:

FP = financial performance measure of the firm (excess value, cash flow, and accounting ratios)
ESOP = presence of employee stock ownership plan
PRSH = presence of profit sharing plan
BEN = benefits strategy of firm
WOM = degree of women's advancement
MIN = degree of minority advancement
HR = human relations strategy of firm
SIZE = firm size (control variable)
BOOK = book-to-market ratio (control variable)
GROW = growth rate of earnings (control variable)
XSCASH = excess cash measure for firm (control variable)
PENSN = pension contribution as % of net income

Independent Variables

The data concerning the *ESOP* and profit sharing variables was obtained from the Form 5500 data from the Department of Labor. The data was coded as follows: firms with an *ESOP* were a "1", those without were a "0". Likewise, firms with profit sharing plans were a "1" and firms without were a "0". Data concerning the degree of advancement and the quality of benefits and human relations was obtained from the Council on Economic Priorities. Firms basically receive one of three "grades" in these areas: A, C, or F. The data was coded as follows: an "A" grade was a "1", "0" otherwise; a "C" grade was a "1", "0" otherwise; and if a firm received an "F" grade it was the "base level". The data for the control variables and pension expense was available on the Compustat tapes.

Dependent Variables

These are the variables which will be used as performance measures for evaluating employee strategies. The data for the variables can be obtained from the Compustat tapes.

Excess value was first used by Thomadakis (1977) and Errunza and Senbet (1981) and was found significant by Cochran and Wood (1984) in distinguishing social responsibility performance. Excess value captures those premiums or discounts granted to individual firms by the market. It is measured as:

Equation 2

EV = (Market Value Equity + B.V. of Debt - Total Assets) / Sales

Proponents of excess value argue it is a superior measure of shareholder wealth as compared to the more traditional measures of firm financial performance. Excess value is a market performance measure sometimes used in place of or as a proxy for Tobin's q. Tobin's q has the potential for numerous estimation errors. One particular problem associated with the use of Tobin's q in any study based upon stakeholder theory is the exclusion of intangible assets in the denominator of Tobin's q. Due to the inappropriateness of Tobin's q for this study, the more applicable proxy, excess value, will be employed (Wolf, 1993).

A cash flow performance measure used in previous studies (see Lang, Stultz, and Walking (1991) and Lehn and Poulsen (1989)) will be included here. It will be calculated as follows:

Equation 3

CASH = (Op. Income before Depr. - Int. - Taxes-Div.) / (B.V. of Assets)

Accounting rates of return are often used in research as performance measures even though they do have limitations.

Because they are so often measured, return on assets and return on equity will be tested.

Analysis Of Results

As stated earlier, this study attempts to place employee management strategy within the Stakeholder-Agency Theory framework. The goal was to try and identify optimal strategies for enhancing firm financial performance. At this time, the aggregate and industry results are somewhat mixed (see Tables 1-3). It is clear, however, that the choice of firm financial performance measure as well as industry differentiation significantly affect those employee management characteristics that are statistically significant. (Note: The tables only contain employee management variables which were statistically significant with at least one of the firm financial performance measures.) While this study analyzed particular variables and particular industries, it was also intended to provide a broader analysis than had previously been done in this area. In the broader context of employee management strategy and firm performance, this research tends to support an interior solution in terms of maximizing firm value and performance. While the analysis at times indicates that "end solutions" in certain employee management strategy areas are associated with increases in firm performance, at no time do the results indicate that "all F's" or "all A's" are the optimal approach. For instance, at no time are all of the employee management strategy variables significantly positive. In addition, at no time are all of the "graded" employee management strategy variables significantly positive at the "A" levels. Rather, a mix is observed. In some cases, firm performance may be improved by providing "A" level Benefits and Human Relations, but not by providing an *ESOP*. Basically, in terms of the overall employee management package available, "all" and "nothing " optimal solutions are not observed.

TABLE 1
Aggregate Analysis

Significant Employee Management Variable	Financial Performance Measure Parameter Estimate (p-value)			
	Excess Value	Cash Flow	ROE	ROA
ESOP	-.290(.0749)	NS	NS	NS
Minority A	-.310(.0818)	NS	.189(.0654)	NS
Benefits C	NS	NS	.165(.0689)	NS
Human Relations A	NS	NS	-.158(.0880)	NS

NOTES: Sample size (n) = 49
NS indicates "Not Significant"

TABLE 2
Food Industry Analysis

Significant Employee Management Variable	Financial Performance Measure Parameter Estimate (p-value)			
	Excess Value	Cash Flow	ROE	ROA
ESOP	NS	-.018(.0925)	NS	NS
Minority C	NS	.063(.0003)	NS	.222(.0004)
Benefits C	NS	-.039(.0022)	NS	NS
Human Relations C	NS	.031(.0138)	NS	NS
Woman A	NS	NS	NS	.167(.0806)
Pension Exp.	NS	NS	NS	-.323(.0111)

NOTES: Sample size (n) = 17
NS indicates "Not Significant"

Instead, a "some" solution seems to be optimal (see Figure 2). One explanation for this may be that employees may respond to something more than a "sweatshop" or autocratic atmosphere. That is, the employees may become more efficient/productive if they believe their overall well-being matters. On the other hand, a very "progressive" strategy may create a "sub-optimal" environment and performance suffers. It is also possible that the cost of supporting a "progressive" strategy may outweigh the efficiency increases from the additional components. This "moderate" employee management strategy-firm performance relationship provides support for the Stakeholder-Agency Theory contention that a "middle ground" or "interior solution" exists which minimizes total agency costs and thus maximizes firm value, financial performance, and investor wealth (Jensen and Meckling, 1976).

TABLE 3
Personal Household Products Industry Analysis

Significant Employee Management Variable	Financial Performance Measure Parameter Estimate (p-value)			
	Excess Value	**Cash Flow**	**ROE**	**ROA**
ESOP	NS	NS	-.621(.0024)	-.274(.0179)
Minority A	NS	NS	.468(.0069)	.272(.0234)
Benefits A	NS	NS	.435(.0082)	.305(.0128)
Human Relations A	NS	NS	.520(.0060)	.204(.0391)
Minority C	1.275(.0123)	.196(.0097)	NS	NS
Human Relations C	.782(.0123)	NS	NS	NS
Pension Exp.	-8.459(.0022)	-1.526(.0047)	NS	1.087(.0371)
Profit Sh.	-0.973(.0227)	NS	.777(.0064)	.258(.0735)
Benefits C	NS	.412(.0023)	NS	NS
Women C	NS	.129(.0517)	.328(.0320)	NS

NOTES: Sample size (n) = 13
NS indicates "Not Significant"

Additional limited research was also done on the *ESOP* variable. The results indicated that as the percentage of outstanding stock controlled by employees through an *ESOP* increased, the firm's financial performance as measured by *EV* was reduced. This was the case when the sample included firms with and without *ESOPs* or just those firms with *ESOPs* (see Tables 4 and 5). One explanation for this may be that as employees increase their percentage of ownership they may begin to "feather their own nest" or squander firm resources for their own personal benefit. Another possible explanation for this observed result may be that firms that are performing relatively well (i.e., they have a high *EV*) don't need to implement an *ESOP* as a motivational strategy. On the other hand, firms performing poorly (i.e., low *EV*) may be more inclined to implement an *ESOP* in an effort to improve employee and firm performance. At this time, the exact relationship is not clear. In addition, when the sample consisted of only firms with *ESOPs*, it was found that an increase in firm financial performance as measured by *EV* was associated with an employee stock ownership level of between 4% and 6% (see Table 5). This, too, may provide support for an "interior solution" within the context of the Stakeholder-Agency framework of firm value maximization. For instance, when the degree of employee ownership is too low (0-3%), it may not provide enough motivation. That is, employees don't own enough of the company to make a substantial difference. When employees own relatively high levels of firm stock (more than 6%), they may begin to "feather their own nest" or squander firm resources for their own personal benefit. A "middle ground" (4-6% degree of ownership) may provide the balance between these two extremes and thereby aligns the objectives and interests of the employees and shareholders. As a result, firm performance is improved. Theoretically, within this employee ownership range, the total agency costs are minimized thus maximizing firm value.

TABLE 4
Percentage Of Outstanding Stock Controlled By Employees Through *ESOP* And Financial Performance Measure Of Firm (All Companies With Or Without An *ESOP*)

Financial Performance Measure	Percentage Variable Parameter Estimate(p-value)
Excess Value	-.031 (.0088)
Cash Flow	NS
ROE	NS
ROA	NS

NOTES: Sample size (n) = 61
NS indicates "Not Significant"

TABLE 5
Percentage Of Outstanding Stock Controlled By Employees Through *ESOP* And Financial Performance Measure Of Firm (Only Companies With An *ESOP*)

Financial Performance Measure	Percentage Variable Parameter Estimate(p-value)	Degree Of Ownership (4-6% Range) Parameter Estimate(p-value)
Excess Value	-.018 (.0415)	.775 (.0798)
Cash Flow	NS	NS
ROE	NS	NS
ROA	NS	NS

NOTES: Sample size (n) = 39
NS indicates "Not Significant"

SUMMARY & CONCLUSIONS

This research sought to conceptually expand upon and to overcome the limitations of previous studies on this topic. Regression analyses were employed relating excess value, a superior market measure of firm financial performance, to an extensive combination of employee management strategy variables as well as control factors. Data was drawn from the Compustat tapes, the Department of Labor, the Council on Economic Priorities, and the National Center for Employee Ownership for the year 1991.

Within the limitations of the study, the principal conclusions are:

(1) Employee Stock Ownership Plans (*ESOPs*), in the aggregate, tend to have a significant, negative impact on shareholder wealth. The effect of an *ESOP* can vary by industry and by the proportion of employee stock ownership. When the percentage of ownership is in the 4-6% range, the financial performance of *ESOPs* approximates that of non-*ESOP* firms.

(2) Profit sharing plans, collectively, seem to have no significant effect on financial performance. Within industries, though, profit sharing programs appear to vary widely with respect to their impact on firm profitability measures.

(3) The level of employee benefits, either in the aggregate or for specific industries, seems to have no significant effect on shareholder wealth enhancement. Average benefits, in total, are superior to high or low levels with respect to profitability measures. The effects of benefits, however, on profitability vary by industry.

(4) Collectively, the human relations strategy has no direct impact on shareholder value, but this relationship can vary significantly by individual industry.

(5) The degree of women's advancement, either in the aggregate or for specific industries, seems to have no significant effect on wealth enhancement. However, this variable does impact profitability measures with the effects differing by industry.

(6) In total, low and average degrees of minority advancement tend to have a significant, positive impact on shareholder value. A high degree of advancement is superior to low and average degrees with respect to profitability. The effects on financial performance vary by industry.

(7) Pension expense as a percentage of net income has no significant effect on financial performance in the aggregate. However, it does affect shareholder wealth and profitability for specific industries. The particular effect varies widely.

In general, it appears that employee management strategy does impact firm financial performance. The appropriate strategies, however, for the most part, seem to be industry specific.

Of course, more research is needed on this very critical area of business management. Larger samples, spanning more industries and extending over longer time periods, will be required to shed more light on these issues. Additionally, variables such as training expense per employee, levered versus unlevered *ESOPs*, and others could be included in future research.

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