The Relationship between Servant Leadership and the Diversity of Performance Measures

Tae-Jong Leem*

Department of Business Administration, Sahmyook University, Seoul, South Korea; tjleem@syu.ac.kr

Abstract

This study investigates the relationship between servant leadership, which has recently received much attention in the field of human resource management, and the diversity of performance measures, which has been consistently emphasised in the field of management accounting. For an empirical analysis, a sample of 88 respondents from the Korean Federation of Community Credit Cooperatives was considered. According to the results, non-financial and financial measures were used more frequently under a high level of servant leadership, suggesting that the use of servant leadership can facilitate the design and use of performance measurement systems, which in turn should improve organisational performance.

Keywords: Financial Measures, Nonfinancial Measures, Performance Measures, Servant Leadership

1. Introduction

In rapidly changing environments, there are certain limitations to the conventional approach in which a leader unilaterally gives an order and staff members achieve objectives and enhance competitiveness by executing that order. Unlike in the past, a leader can strengthen organisational performance by recognising knowledge workers as peer managers and co-owners instead of as subordinates¹. Rapidly changing social and economic environments require a form of open and ethical servant leadership that can take full advantage of given opportunities and optimize resources². Servant leadership refers to leadership that serves subordinates based on the spirit of human respect, provides them with opportunities to demonstrate creativity and potential, and helps the organisation form a true community³. Greenleaf²³ a consultant, introduced the concept of servant leadership in a 1970 essay entitled "The Servant as Leader". Although it initially received little attention from scholars and practitioners, it started to receive increased attention with the publication of the 1996 book On Becoming a Servant Leader.

Since the 2000s, several scholars have provided theorisation work; have developed measurement tools of servant leadership. On the other hand, some scholars have examined the effect of servant leadership on organisational effectiveness and found that servant leadership has considerable influence on employees' organisational commitment, organisational citizenship behaviour, job satisfaction, creativity, autonomy, and sense of ownership as well as customer satisfaction⁴⁻⁸. Although servant leadership directly affects employees' attitudes and behaviours, an organisation's control system is likely to be designed and used in accordance with servant leadership, and employees' behaviours and attitudes are likely to change if the organisation is regarded as an organic matter composed of several subsystems. Previous studies have analysed the relationship between servant leadership and organisational effectiveness when a control system is implemented in the form of a black box. From this perspective, there is a need to link leadership to an organisation's control system when examining the effect of leadership on that system.

By contrast, even more data are required to make appropriate decisions by reducing the level of uncertainty

^{*}Author for correspondence

in uncertain environments. In addition, it is imperative to include various performance measures linked to strategies in the Performance Measurement System (hereafter "PMS") for an organisation to implement its desired strategy. However, financial measures, which are conventionally used by firms to measure their performance, cannot provide a variety of long-term and future-oriented information because of their short-term, past-oriented, and fragmented nature9. For this reason, many firms include various nonfinancial measures to provide comprehensive long-term and future-oriented information when establishing their PMS. Many studies have consistently and clearly demonstrated that the use of various performance measures, including nonfinancial measures, can improve organisational performance¹⁰⁻¹⁴. This study's results suggest that the use of various performance measures, including both financial and nonfinancial measures, can reduce the level of uncertainty by providing a diverse range of information and play a key role in firms in achieving corporate objectives in an effective and efficient manner. In addition, many studies have analysed the effect of the PMS on management performance based on various variables for personal characteristics and found that the use of nonfinancial measures can influence organisational fairness, organisational immersion, and organisational citizenship behaviour^{15,16} by analysing the relationship between servant leadership and organisational validity by processing the use of various nonfinancial measures as a black box.

Previous studies of leadership in the field of human resource management have focused mainly on the direct impact of leadership on organisational validity, whereas few studies have focused on the PMS. On the other hand, studies of the PMS in the management accounting field have shown consistent findings that the use of various performance measures improves performance. However, few studies have focused on the relationship between the use of various performance measures and leadership. Therefore, this study empirically analyses the relationship between servant leadership which have received increasing attention in recent years and the use of various performance measures. This study contributes to the literature by being one of the first to link servant leadership theory in the field of human resource management to the PMS in management accounting. In addition, the study verifies that servant leadership can improve organisational performance through a control system when servant leadership influences the diversity of performance measures.

Peter and Weterman (1970) argued that a difference in corporate performance depends on leadership, not the organisational system¹⁷.

2. Previous Studies and Research **Hypothesis**

2.1 Servant Leadership

Greenleaf¹⁸ defined servant leadership as "leadership to devote to satisfy the desires of employees, customers and community by placing highest priority on them while focusing on the service for others"18. A leader is an individual who sees and moves forward before anyone and thus must have the following two characteristics: direction guidance and serving. The main element of servant leadership is what a leader does with his or her given authority. That is, the main interest in servant leadership is not the authority itself¹⁹. Scholars have defined servant leadership in different ways. However, a majority have considered it something that encourage a leader to serve subordinates based on the spirit of human respect and form teamwork and communities by helping their growth and development.

A servant leader shall first communicate personally to understand the ability, desire, objective, and potential of subordinates to make them become the best and also help them achieve their objectives based on the understanding of distinct characteristics and interests of subordinates. Servant leadership focuses on strengthening the autonomy and common good of employees by emphasising the mutual relational force. Servant leadership leverages humble and ethical power, unlike conventional leadership, and focuses on establishing an environment that supports employees in a positive way to form sincere relationships between leaders and employees²⁰.

Scholars have viewed sub domains of servant leadership in different ways. However, common elements suggested by most studies include stewardship, commitment to growth, building a sense of community, foresight, ethical behaviour, and empathy¹⁸⁻²². "Stewardship" prioritises the desire of other people based on trust and serves voluntarily with full responsibility for the common good of the community. "Commitment to growth" means providing subordinates growth opportunities to develop their competency by themselves through authority sharing, encouragement, and support. "Building a sense of community" means to encourage discussion and cooperation to form a community with strong ties between organisational members and establish systems for sharing the meaning of a task. "Foresight" means to present some clear organisational vision and objective and allow organisational members to move forward in the same direction.

A servant leader allows subordinates make a commitment to their organisation by providing them with emotional stability and increasing their confidence in their superiors. In addition, a servant leader allows subordinates get immersed in their organisations with a sense of ownership after recognising the importance and meaning of their work8. By serving sincerely for other people, a servant leader ensures that subordinates model themselves after the leader²³. Subordinates engage in customer-oriented organisational citizenship behaviours by following actions of an altruistic servant leader⁷.

2.2 The Diversity of PMSs and Performance **Measures**

The PMS is a control and feedback system used officially to monitor organisational performance based on performance standards and modifies differences from actual performance²⁴. Predetermined objectives are compared with actual outcomes through the PMS, and any difference is reported to the administrator for appropriate corrections. An objective is the information sent by the management team to employees, and a report on the difference between an actual outcome and an objective is the information sent to the management team. A correction measure is then considered25. The management team collects and interprets information by using the PMS and makes various decisions based on that information. The reason why the PMS is important is that the behaviour of examinees varies according to which performance objective and standard are used²⁶. In addition, the fact that top managers who have authority use PMS information influence the behaviour of organisational members.

According to agency theory, organisational members prioritize their personal objectives over organisational objectives. The important focus of agency theory is how the PMS is used to motivate employees and mitigate the issue of controlling the organisation²⁸. Organisations motivate their members through the design and use of PMSs and attempt to harmonize personal objectives with organisational ones. However, financial measures,

which are often employed by organisations to measure their performance, cannot play the aforementioned role because of their short-term, past-oriented, and fragmented nature. In addition, financial measures cannot provide a sufficient amount of information to fundamentally address those issues in relation to management objectives^{9,29}. To address such limitations of financial measures, nonfinancial measures have been used in conjunction with financial ones to measure performance because of nonfinancial measures' long-term and futureoriented nature related to corporate strategies. Unlike financial measures, nonfinancial measures reflect an evaluation index based on data obtained directly from management sites without employing an accounting system. Nonfinancial measures have a disadvantage in that their comparability is not as good as that of financial measures. Nonetheless, they have an important advantage of providing a wide range of information based on raw data for measurement target.

Many studies have shown that the use of various performance measures, including nonfinancial measures, can improve organisational performance¹⁰⁻¹⁴. The use of various performance measures, including nonfinancial measures, can improve organisational performance by providing employees with information on which activities they should focus on and inducing employees to engage in many activities in a direction desired by the organisation. Increasing evaluation items can help minimise side effects while reducing the agency cost by providing various information. Organisational members have an incentive to focus on activities for those items to be measured, and the use of various performance measures can reduce adverse effects of the PMS³⁰.

2.3 The Establishment of Hypothesis

A servant leader is customer-oriented and focuses mainly on the service itself and subordinates³¹. A servant leader makes subordinates become altruistic servant leaders. Therefore, a servant leader is expected to evaluate performance and make decisions by using various nonfinancial measures for the competency development and growth of employees as well as shortterm financial measures. One of the characteristics of servant leadership is "foresight," which refers to motivating subordinates to behave in accordance with the corporate vision and objective by clarifying them clearly to those employees. In this regard, it is imperative to

evaluate performance and make decisions based on nonfinancial measures associated with the vision and objective as well as financial measures associated with nonfinancial ones. In addition, some other characteristics of servant leadership include "building a sense of community" and "developing people." "Building a sense of community" refers to encouraging discussion and cooperation for leaders to foster communities and establish systems for sharing the meaning of a task. "Developing people" means that leaders help employees grow through encouragement and affection. Leadership is realized through a system designed for some objective of the management, not for actions of individual managers. To establish a system in which employees cooperate and share the meaning of a task, employees should understand how their given tasks are associated with financial performance. In this regard, they must clearly understand performance measures related to their work such that they can focus on their assigned tasks. To help employees grow in the long term, it is imperative to use measures related with employee in evaluating performance and making decisions.

A servant leader is expected to use various nonfinancial measures in conjunction with financial measures in designing PMSs because of the nature of servant leadership. First, nonfinancial measures better reflect an organisation's vision and objective and are more descriptive for employees in understanding the meaning of cooperation and tasks. In addition, nonfinancial measures can specifically express requirements for employee learning and growth. In this regard, a servant leader is expected to make frequent use of various nonfinancial measures to evaluate performance and make decisions. Various nonfinancial measures are implied in financial measures, and therefore a servant leader should emphasise financial measures. Nonfinancial measures correspond to leading indicators, whereas financial ones, to lagging indicators. In the end, some improvement in nonfinancial measures is expected to enhance financial measures. Servant leadership is about prioritising the leader's service and commitment, employee growth, and community development, not about completely ignoring financial measures. Therefore, a servant leader eventually pursues improvements in financial measures and is likely to use financial measures as often as nonfinancial ones for evaluating performance and making decisions. A servant leader is linked to external organisations by serving various shareholders, including local communities³².

Based on the aforementioned discussion, the following hypotheses are proposed:

H1: The higher the level of servant leadership, the more likely the organisation is to use nonfinancial mea-

H2: The higher the level of servant leadership, the more likely the organisation is to use financial measures.

3. Study Design

3.1 Measurement of Variables

Servant leadership was measured as its level at which the survey respondents (subordinates) recognised their superiors. Servant leadership was measured using the Servant Organisational Leadership Assessment (SOLA) tool³³, which was subdivided into the following subdomains: valuing people, developing people, building a sense of community, displaying authenticity, providing leadership, and sharing leadership. A total of 24 items were measured based on a seven-point Likert-type scale^{19,33}.

The level of use of various performance measures was measured by examining whether various performance measures were used for a broad range of purposes and whether performance measures were accurately measured. For this, six drivers of value (various performance measures) for five objectives (a broad range of objectives) based on the modified tool in Ittner et al. and a seven-point Likert-type scale for the level of measurement quality were employed12. These six drivers were short-term financial performance (e.g., annual earnings, return on assets, and cost reduction), customer relations (e.g., market share, customer satisfaction, and customer retention), employee relations (e.g., employee satisfaction and workforce capability), operational performance (e.g., productivity, safety, and the cycle time), product and service quality (e.g., customer service and the interest rate), and social responsibility (e.g., social welfare and the observance of laws). The five objectives referred to the importance to long-term success, problem identification, capital investment, performance evaluation, and extent goals set.

3.2 Sample Selection and Data Collection

A survey was conducted with the Korean Federation of Community Credit Cooperatives. The questionnaire was distributed to employees of the Federation of Community

Credit Cooperatives, and these employees were expected to clearly understand the overall concept of the PMS. A copy of the questionnaire was sent to each respondent in each branch by e-mail and fax, and a total of 88 responses were returned.

4. Empirical Analysis

4.1 Descriptive Statistics

Among the sample of 88 firms, 13 (14.8%) had total assets less than KRW 50 billion; 42 (47.7%) had between KRW 50 billion and KRW 100 billion; and 33 (37.5%) had more than KRW 100 billion. For the respondents' departments, the general administration department had 46 respondents (52.3%); the treasury department, 18 (20.5%); the loan department, 11 (12.5%); the savings department, 9 (10.2%); and others, 4 (4.5%). For the respondents' positions, 51 (58%) were directors; 14, (15.9%) assistant/ general managers; and 23 (26.1%), managers.

Table 1 shows the descriptive statistics for servant leadership. The minimum value for all items was 1, whereas the maximum one was 7. The lowest mean value was 4.31, whereas the highest mean value, 5.10. The overall mean value was 4.84, and the standard deviation was 1.34. These results suggest a high level of servant leadership for the sample.

Table 2 shows the descriptive statistics. Among performance measures, "short-term financial results" had the highest level of use overall and the highest mean value for the remaining purpose of use except for "importance

Table 1. Descriptive statistics for servant leadership

Table 1.							
	n	Min	Max	Mean	S.D.		
sr1	88	1	7	4.77	1.574		
sr2	88	1	7	4.74	1.466		
sr3	88	1	7	5.03	1.393		
sr4	88	1	7	4.91	1.490		
sr5	88	1	7	4.95	1.461		
sr6	88	1	7	5.02	1.438		
sr7	88	1	7	5.10	1.501		
sr8	88	1	7	4.94	1.556		
sr9	88	1	7	5.03	1.504		
sr10	88	1	7	4.99	1.587		
sr11	88	1	7	4.91	1.475		
sr12	88	1	7	4.57	1.413		
sr13	88	1	7	4.91	1.544		
sr14	88	1	7	4.93	1.610		
sr15	88	1	7	4.93	1.581		
sr16	88	1	7	4.31	1.556		
sr17	88	1	7	4.60	1.608		
sr18	88	1	7	4.69	1.481		
sr19	88	1	7	4.85	1.505		
sr20	88	1	7	4.83	1.540		
sr21	88	1	7	4.76	1.568		
sr22	88	1	7	4.72	1.568		
sr23	88	1	7	4.91	1.490		
sr24	88	1	7	4.66	1.604		
sr	88	1.08	6.96	4.84	1.340		

Table 2. Descriptive statistics for performance measures

Performance	Importance to Long-term Success		Use in decision making				Extent Goals		Measurement			
Category			Problem Identification		Capital Investment		Performance Evaluation		Set		Quality	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
Short-term financial results	6.11	.823	5.60	1.227	5.85	1.034	5.86	.985	6.11	.850	5.89	.890
Customer relations	6.53	.642	5.41	1.110	5.11	1.245	5.28	1.164	5.36	1.095	5.16	1.092
Employee relations	6.40	.751	5.16	1.231	4.77	1.266	5.14	1.315	5.07	1.230	4.94	1.097
Operational performance	6.09	.905	5.37	1.187	5.45	1.203	5.58	1.201	5.61	.988	5.44	1.038
Service quality	6.30	.805	5.47	1.093	5.16	1.202	5.34	1.154	5.42	1.036	5.28	1.114
Social responsibility	6.11	.890	5.45	1.174	5.19	1.212	5.20	1.306	5.18	1.120	5.17	1.147

to long-term success. For "importance to long-term success," "customer relations" (6.53), "employee relations" (6.40), and "service quality" (6.30) were employed more frequently than "short-term financial results" (5.29). This indicates that the Korean Federation of Community Credit Cooperatives was using both financial and nonfinancial measures to measure performance. However, there was a difference in the level of use depending on the purpose of use.

4.2 Hypothesis Testing

To analyse reliability, internal consistency was measured using Cronbach's alpha. Cronbach's alpha values were 0.987, 0.799, 0.862, 0.856, 0.887, 0.867, and 0.896 for servant leadership, importance to long-term success, problem identification, capital investment, performance evaluation, extent goals set, and measurement quality, respectively. All these values exceeded the recommended threshold of 0.7, indicating sufficient reliability.

To clarify factor extraction, varimax rotation was employed, and only those items with factor loadings 0.4 or higher were considered. Servant leadership was measured using 24 items. The eigenvalue was higher than 1(18.6), and factor loadings exceeded 0.7. The cumulative variance was 77.4%. The validity of variables was considered sufficient for this analysis in accordance with the results of the factor analysis. Table 3 shows the analysis of variance.

Table 3. Results of the analysis of variance

Panel A: Servant Leadership and Nonfinancial Measures

	Servant Le	F-value	p-value	
	High (n = 43)	Low $(n = 45)$		
Nonfinancial	5.59	4.95	13.925	0.000**
measures	(0.653)	(0.928)		

Panel B: Servant Leadership and Financial Measures

	Servant Le	F-value	p-value	
	High(n = 43)	Low(n = 45)		
Financial measures	6.00 (0.592)	5.73 (0.844)	2.918	0.091**

Note 1) The proposed value is the mean value, and values in parentheses indicate standard deviations.

Note 2) *and **indicate significance at p < 0.05 and p < 0.01, respectively

5. Conclusion

This study investigates the relationship between servant leadership, which has recently received increasing attention in human resource management, and the diversity of performance measures, which has been consistently emphasised in management accounting. According to the results, nonfinancial and financial measures were more likely to be employed for a high level of servant leadership. This suggests that the use of servant leadership affects the design and use of PMSs, which in turn can enhance corporate performance.

Today's corporate environment is rapidly changing, and employees have different objectives. In such an environment, a leader is likely to have difficulty achieving organisational objectives by simply giving orders and supervising. Here what is needed is for the leader to serve first, share a vision, understand employees, and devote himself or herself to help them grow. In this way, a community with strong ties can be formed, and the organisation can grow through voluntary efforts of employees. The results suggest that PMSs must be introduced and used in accordance with characteristics of servant leadership to realize a form of servant leadership that comprehensively reflects the aforementioned concept. Servant leadership increases the use of various nonfinancial measures in conjunction with financial measures for various purposes. Further, it emphasises short-term financial performance and focuses on employee relations, customer relations, and service quality improvements, which are considered crucial from a long-term perspective.

This study contributes to the literature by being the first to empirically analyse the relationship between servant leadership and the PMS. The results have important practical implications, and the study has some limitations. The analysis could not take into consideration other variables influencing the PMS than servant leadership. In addition, the representative nature of data represents another limitation in that data were collected using only one copy of the questionnaire for each organisation. Further, the analysis did not consider longitudinal data. In this regard, future research should address these limitations. In addition, a follow-up study should analyse servant leadership, the PMS, and organisational performance comprehensively by reflecting this study's results.

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