Comprehensive Performance Measurement Systems on Procedural Fairness, Role Clarity and Managerial Performance

1st Luk Luk Fuadah  
Accounting Department  
Sriwijaya University  
Palembang, Indonesia  
lukluk_fuadah@unsri.ac.id

2nd Anton Arisman  
Accounting Department  
STIE MDP  
Palembang, Indonesia  
ariman@stie-mdp.ac.id

3rd Lukita Tri Permata  
Accounting Department  
UIGM  
Palembang, Indonesia  
lukitapermata@gmail.com

Abstract—The purpose of this study is to examine the effect of comprehensive performance measurement systems (CPMS) on procedural fairness, role clarity and managerial performance in Indonesian Banking. This study survey managers from Banking in Palembang to collect the data. The findings show that the comprehensive performance measurement systems effect on procedural fairness and role clarity. The findings also show that procedural fairness and role clarity effect on managerial performance. Thus, the findings provide more information related to comprehensive performance measurement systems in banking sector in Palembang. The limitation of this research is just focused on banking sector. For future research, to investigate to other sectors such as manufacturing, government etc. The other limitation is the framework of this research only investigates several variables including procedural fairness, role clarity, managerial performance, and comprehensive performance measurement systems. The limitation of this research is that it cannot be generalized because it only examines the banking sector. This research also only examines CPMS, role clarity, procedural fairness, and managerial performance. Suggestions for further research can conduct research in other sectors besides the banking sector. Further research can also conduct research with other variables, namely organizational commitment, organizational culture etc.

Keywords: comprehensive performance measurement systems, procedural fairness, role clarity, managerial performance

I. INTRODUCTION

Comprehensive performance measurement systems are one of the performance measurement system not only focus on financial but also non-financial. It provides information for managers and employees to manage their companies operation [46]; [14]. The techniques in comprehensive performance measurement systems until now still used and well known such as performance hierarchies [30]; balance scorecard - BSC [21] and tableau de bord [11]. The difference between Balance scorecard and tableau de Bord, Balanced Scorecard is one of tool to measure performance not only financial but also non-financial, but Tableau de Bord is one of tool to manage and control process of production [42].

Previous empirical studies examined the effect of performance measurement systems on managerial performance. Performance measures on job satisfaction through fairness in evaluation procedure and trust in supervisor [22]. Comprehensive performance measurement systems through role clarity and psychological empowerment on managerial performance [14], through mental model building and mental model confirmation [15]. This study, therefore, attempts to investigate the gap in the literature. This study also want to know the behavior of managers in Indonesia, especially at banking sector. Therefore, the aim of this study is to investigate the influence of comprehensive performance measurement systems and managerial performance, on role clarity and procedural fairness as a mediation role in the banking sector.

This study uses organizational justice theory and goal setting theory. Based on organizational justice theory conclude that procedural fairness has positively affected attitudes and behavior [28]; [9], [29] mention that goal setting theory assumes that human action is directed by conscious goal and attention.

Data collected by survey to banking companies in Palembang. The result showed that there is an effect between comprehensive performance measurement systems with role clarity and procedural fairness. The result also show that there is an effect between role clarity and procedural fairness with managerial performance. This study is replicated and extent the previous reseach from [14]. [14] found that comprehensive measurement systems are associated with managerial performance through role clarity and psychological empowerment [14]. [14] investigates Service Business Unit managers within Australian manufacturing companies. This study investigates managers from Banking sector in Palembang. This study also examines not only role clarity but also procedural fairness in the relationship between comprehensive performance measurement systems and managerial performance. This research was conducted to determine the condition of the variables studied on managerial performance such as comprehensive performance measurement systems, role clarity and procedural fairness.
The rest of the paper proceeds as follows. Section 2 explains the previous research and lays out the hypotheses. Section 3 suggests the research method and model in order to prove the hypotheses. Empirical evidence is provided in Section 4. In Section 5, we summarize and conclude.

The definition of “role” is a set of expectations or norms applied to the incumbent by others in the organization, high role clarity employees possess a clearer understanding of their requirements [2]. Role clarity is a divide into two constructs such as process clarity and goal clarity. The definition of process clarity is the extent of how individuals perform in his or her job. The definition of goal clarity is the outcome goals and objectives of the job are well defined and clearly stated [40].

Role clarity refers to individuals’ beliefs about the expectations and behaviours related with their work role [20]. In this study to examine whether Comprehensive Performance Measurement Systems (CPMS) is related to two aspects of role clarity: goal clarity (the outcome for goals and objectives of the job are clearly stated and well defined) and process clarity or how to perform his or her job [40]. It is expected that more comprehensive performance information will help to clarify managers’ role expectations and the appropriate behaviours to fulfill the role of expectations.

Several researchers argue that more comprehensive information can help to improve role clarity. [8] argues that management accounting systems can be used to inform people about what is expected of their role. Specifically, comprehensive performance information can serve to clarify individuals’ roles in the organisation by making specific the goals and appropriate behaviours relation with the work role [50].

CPMS can increase goal clarity by providing information about the organization’s strategies and operations, which helps them to better understand their own role within the organization. Access to comprehensive performance information allows managers to look the “big picture” and develop a reference point for understanding their roles within their organization [3]. More CPMS can help to clarify and communicate strategic intent and can capture different dimensions of performance, which is important in describing the organization’s operations [21]; [30]. Performance feedback about business unit operations increases managers’ level of certainty over the requirements of their work role [20]. As such, more CPMS should increase the manager’s understanding of what comprises their role and what is expected of them, and thus increase goal clarity.

CPMS can increase process clarity by providing performance information to improve managers’ understanding of the drivers of performance, the effect of their actions on parts of the value chain, and the links between different parts of the organization’s operation. In particular, more CPMS can educate managers about the economics of the business and the drivers of costs, revenues and performance [21]; [30]. [1] described that the integration of steps in all value chains will help people in knowing cross-functional relationships. Likewise, [32] revealed that the balanced scorecard is useful for running a business with information that is oriented and comprehensive performance. As such, more Comprehensive performance information is expected to improve the manager’s views of their work role and thus increase role clarity, which leads to H1.

Goal theory provides theoretical support for hypothesis [22]. This theory suggests that human action is directed by understanding goals and intention and that the presence of performance criteria and goals reduces ambiguity, minimizes misinterpretation and interpretive leeway as the exact meaning of criteria and expectation, and consequently increase role clarity. [29] suggest that the setting of goal is assumed to enhance role clarity and harmony. [4], [14] and [24] found that performance measurement system has relationship with role clarity.

H1: There is a positive relationship between comprehensive performance measurement systems and role clarity.

B. CPMS and procedural fairness

The use of performance measures (whether financial or non financial) in the private sector has been found to be associated with procedural justice [17]; [37]; [22]; [23]. They found a positive relationship between the use of performance measures and procedural justice. Perception of the fairness the performance evaluation process is the perceived fairness of all aspects of the organization’s processes and procedures used by superiors to assess their subordinates performance, communicate performance feedback and determine their awards such as promotions and pay increases [28]; [35]. Thus, the hypothesis propose in the following:

H2: There is a positive relationship between comprehensive performance measurement systems and clarity of role.

C. Role clarity and managerial performance

Individuals need sufficient information to carry out effective tasks. Lack of information about work goals and the most effective work behavior can impact inefficient, misdirected or inadequate efforts for these tasks, and thus reduce the performance of the job [19]; [45]. Managers are likely to be more effective when they understand what needs to be done and how managerial functions are to be performed. Empirical results reveal that the ambiguity of the role decreases performance [19]; [45], [24] reveals the clarification of employee roles within the organization through the use of performance measures may lead to improve managerial performance. The role theory literature suggests that role clarity is valued for its effects in enhancing harmony and reducing conflict, anxiety, and stress in the workplace (e.g [19]. The greater role clarity will improve in performance [12]; [12]; [49]; [24]. These argument and evidence lead to H3:

H3: There is a positive relationship between clarity of role and managerial performance.

D. Procedural fairness and managerial performance

Procedural justice in performance evaluation, the notion of procedural justice was described by [44]. They examined courtroom settings and distinguished between the fairness of
the verdict and the fairness of the process leading to the verdict. Procedural justice was transferred to business organizations by [26], who introduced six criteria of perceived procedural justice. According to these criteria, subsequent research has shown that performance evaluation is most likely to be perceived as fair when they have access to detailed information about the performance measures used and perceive them as highly relevant, and when the performance evaluation is conducted uniformly and without bias among subordinates [13]; [35]; [39]. Based on goal setting theory there is procedural fairness influences managerial performance.

Despite the influence of procedural justice on the effectiveness of control mechanisms, the management accounting research, with a few exceptions [25]; [16]; [34], has largely ignored the conditions that bring performance evaluation procedures more or less in line with the principles of procedural justice. [43] argued that “if managers can apply rules fairly and consistently to all employees and reward them based on performance and achievement without personal bias, then employees will have a positive perception of procedural fairness, which can lead to higher satisfaction, commitment and involvement”. In the context of management accounting, [27] found high procedural fairness to interact positively with performance improvements. [48] similarly found fairness perception to be positively associated with performance. The hypothesis is based on the explanation above is in the following:

H₄: There is a positive relationship between procedural and managerial performance.

![Diagram](image)

Note: PMSC = Comprehensive performance measurement systems, RCLA = Role Clarity, PFAI = Procedural Fairness, PERF = Managerial Performance.

E. Previous Research

Previous research showed the result research there was indirectly associated between comprehensive performance measurement systems and managerial performance through role clarity and psychological empowerment [14] through mental model building and mental model confirmation [15]. Procedural justice is conceptualized as the judgments of the fairness of procedures used to assess employee performance and to communicate performance feedback. Procedural justice is important because of its likely effect on organizational members ‘attitudes’ [17]; and [28]. Drawing on previous studies which found that the use of performance measures is associated with procedural justice e.g., [17]; and [22]. Employee perceptions of the fairness of the procedures used by others to evaluate their performance are critical to their judgments of how fairly they are being treated. What makes procedures fair? The literature suggests several fairness criteria including (1) completeness and accuracy of information, (2) adoption of a long-term perspective, (3) correctability of incorrect decisions, (4) retention of control over decisions, (5) consideration of the interests of all parties, and (6) the manner in which people are treated [26]; [28]. In the context of performance evaluation, employees will assess the procedure of performance evaluation as fair if the procedure (1) focuses on performance appraisal based on complete and accurate information, (2) describes their long-term interests, (3) contains some rules for submitting appeal and correct unfair judgments, (4) describe performance in their control, (5) protect their interests, and (6) show respectful and respectful treatment of individuals.

III. RESEARCH METHOD

This study uses a survey to obtain data. This study investigates in the banking sector. The respondents are managers such as financial managers, human resources managers, operational managers, institutional managers, distribution managers, and treasury managers. This research sends hardcopy questionnaires to obtain data from a survey conducted. The questionnaires were sent and distributed about 135 questionnaires, the questionnaires returned were 98. However, 3 is incomplete so that 95 were used for statistical analysis.

Variable Measurement

A. Role Clarity

Role clarity is measured using six items on a seven-point scale from Rizzo et al. (1970). This instrument has been used in organizational literature [19]; [47] as well as in management accounting research [5], [24]. Respondents were asked to rate whether they had clear goals, do they know they have allocated time correctly, do they know their responsibilities, what expected and how much authority they have.

B. Procedural Fairness

This variable use [35] developed a four - item instruments. In management accounting research’s it has been used by [22]; [24]; [41]. Respondents were asked to evaluate the fairness of the procedures used to assess their performance, to link performance feedback, and to decide on salary increases and their promotions, ranging from 1 (very unfair) to 7 (very fair).

C. Managerial Performance

This variable was measured using a nine-item self-value scale introduced by [31]. This scale assesses managerial performance, which is eight dimensions related to planning, inquiry, coordination, evaluation, supervision, staff placement, negotiation and representation, and also includes an overall performance appraisal. Respondents were asked to determine on a 7-point Likert scale (1 = well below average to 7 = well above average) to what extent their performance was below average or above average for each item. This scale is used to measure managerial performance in accounting studies [6]; [7]; [33]; [36]; [38]; [48]), with researchers arguing that self-report performance measures are valid and tend to show less bias than supervisor ratings [10]; [33]; [38]

D. Comprehensive performance measurement systems

This variable uses a measurement developed by [14] which is measured on a 9 item scale. This scale measures the extent to which PMS illustrates important parts of
Strategic Business Units operations and integrates steps with strategy across the entire value chain. Respondents chose to show a 7-point Likert scale (1 = not all to 7 = most) to what extent each of the nine characteristics is provided by their business unit's PMS.

IV. EMPIRICAL RESULTS

**TABLE I: THE QUESTIONNAIRES RETURN**

<table>
<thead>
<tr>
<th>Explanation</th>
<th>Total</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distributed Questionnaires</td>
<td>135</td>
<td>100</td>
</tr>
<tr>
<td>Questionnaires return</td>
<td>98</td>
<td>73</td>
</tr>
<tr>
<td>Incomplete Questionnaires</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Process of Questionnaires</td>
<td>95</td>
<td>71</td>
</tr>
</tbody>
</table>

**TABLE II. DESCRIPTIVE STATISTICS OF RESEARCH VARIABLES**

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Min.</th>
<th>Max.</th>
<th>Mean</th>
<th>stdev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comprehensive performance measurement systems</td>
<td>95</td>
<td>1</td>
<td>7</td>
<td>4.912</td>
<td>0.732</td>
</tr>
<tr>
<td>Role Clarity</td>
<td>95</td>
<td>1</td>
<td>7</td>
<td>4.956</td>
<td>0.722</td>
</tr>
</tbody>
</table>

**TABLE III. THE RESULT RESEARCH**

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>β</th>
<th>P</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPMS → RCLA</td>
<td>0.59</td>
<td>0.01</td>
<td>Supported</td>
</tr>
<tr>
<td>CPMS → PFAI</td>
<td>0.45</td>
<td>0.01</td>
<td>Supported</td>
</tr>
<tr>
<td>RCLA → PERF</td>
<td>0.28</td>
<td>0.01</td>
<td>Supported</td>
</tr>
<tr>
<td>PFAI → PERF</td>
<td>0.55</td>
<td>0.01</td>
<td>Supported</td>
</tr>
</tbody>
</table>

Hypothesis 1, which stated that Comprehensive performance measurement systems (CPMS) had a positive effect on Role Clarity, was proven acceptable. This is consistent with the structural equation model, in which the estimated value of the resulting CPMS coefficient is 0.59 with a significance level of P <0.001, which means below the level of significance acceptance of 0.01. Thus, hypothesis 1 is supported. This study is supported in previous research from [4]; [14]; [24]. They found that performance measurement system has a relationship with role clarity.

Hypothesis 2 which states that CPMS has a positive effect on procedural fairness, is proven to be accepted. This is in accordance with the structural equation model, in which the estimated value of the resulting CPMS coefficient is 0.45 with a significance level of P <0.001, which means below the acceptance level of significance of 0.01. Thus, hypothesis 2 is supported. This hypothesis supported the previous research from [17]; [37]; [22]; [23].

Hypothesis 3 which states that role clarity has a positive influence on managerial performance, is proven to be accepted. This is under the structural equation model, where the estimated value of the resulting Role Clarity coefficient is 0.28 with a significance level of P = 0.009, which means below the acceptance level of significance of 0.01. Thus, hypothesis 3 is supported. Previous research from [12]; [49]; [24]; [25] showed that the greater role clarity, the increase on performance.

Hypothesis 4 which states that procedural fairness has a positive influence on managerial performance, is proven to be accepted. This is following the structural equation model, where the estimated value of the resulting procedural fairness coefficient is 0.55 with a significance level of P = 0.001, which means below the acceptance level of significance of 0.01. These results provide support for H4. This study supported the previous research from [27] and [48]. [27] found high procedural fairness to be interact positively with performance improvements. [48] similarly found fairness perception to be positively associated with performance. Research implications of the results of this study indicate that Comprehensive performance measurement systems (CPMS) affect the role of clarity and procedural fairness on performance.

V. CONCLUSION

Applying Partial Least Squares in analyzing the causal model techniques of 95 respondents from the banking sector. The results of the study provide support for all hypotheses proposed in this study. Comprehensive performance measurement systems have a positive and significant influence on role clarity and procedural fairness. Role clarity and procedural fairness also have a positive and significant effect on managerial performance. If the comprehensive performance measurement system is high, then role clarity increases. If the comprehensive performance measurement system is high, then procedural fairness will also increase. Role clarity also increases, so manager performance increases. Procedural fairness increases, so the manager's performance also increases.

There are several limitations in this study. First, this finding can only be generalized based on a sample that is a banking company. For future research, it can research in other sectors. Second, the study only uses four variables in the study, namely CPMS, role clarity, procedural fairness and manager's performance. Future studies can further examine other variables related to organizational commitment, job satisfaction, justice, and others. This study uses a CPMS that includes performance measurement systems both financially and non-financially.
REFERENCES


