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How Managers Use PMS to Induce Behavioural Change in Enhancing Governance

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ABSTRACT

This study uses the psychology theory to explore how managers use the performance measurement system (PMS) to induce behavioural change in employees in enhancing governance. This study utilizes a semi-structured interview of 14 Indonesian senior bankers. Data were analysed using qualitative analysis software, Nvivo. The results suggest that PMS improves employees' task and goal cognition, and intrinsically motivates them by creating habit, promoting a comfortable working environment and healthy competition. Employees are also extrinsically motivated as PMS produces rewards and punishments, making employees ashamed of poor performance, including non-financial behavioral aspects in performance goals. The most significant is how the perceptions of fairness and shame are enacted through multiple PMS uses and processes. This study was conducted in the Indonesian context. Therefore, the findings of the study may not be generalized to the banking industries in other countries, especially the Western ones. These findings will likely have significant implications for managers in designing and implementing the PMS to maximize employees' efforts and performance.

JEL Classification: G02, D21, G18

Keywords: Psychological Theory, Cognitive Mechanism, Motivational Mechanism, Financial Institutions, Firm Performance, Service Sector, Strategic Performance Measurement

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INTRODUCTION

Researchers have directed substantial attention on the relationship between performance measurement system (PMS) and behavior of the organizational members (Lillis, 2002, Malina and Selto, 2004, Van der Stede *et al.*, 2006, Burney *et al.*, 2009, Otley, 1999, Kaplan and Norton, 1992, Burney and Widener, 2007). More specifically, many of them mention that the change is particularly to motivate employees to pursue incentives, bonuses, and rewards. However, certain effects of changes of the organizational behavior of members using PMS are under-explored. Many years ago, scholars such as San Miguel (1977, p. 184) advocated the need to explore behavioral effects 'for transferring behavior science knowledge to the design and implementation of effective management control systems'; recently, this area seems to lack research attention. For example, De Waal (2010, p. 80) highlights that 'unfortunately, there are not many concrete examples in the literature of the influence of behavioral aspects on the use of a performance management systems'. Thus, this study aims to explore the effect of using PMS on the changes of behavior attitudes among employees. In order to achieve this objective, this paper aims to apply the psychology theory to examine the behavioral effect of using PMS.

The primary objective of PMS is to steer employees' behaviour and to encourage them to achieve the organization's objectives (de Waal, 2006, Adler, 2011). Using the psychology theory, we argue that this change in employee behaviour occurs through cognitive and motivational mechanisms (Hall, 2011, see:Bonner and Sprinkle, 2002). In terms of cognitive mechanism, Locke (1968) and Adhikari (2010) contended that individuals produce a higher level of performance if they have clear goals even if the goals are challenging. On the other hand, motivation is distinguished between intrinsic and extrinsic motivation (Deci and Ryan, 2008). Intrinsic motivation means that a person wants to do 'an activity for the inherent satisfaction of the activity itself', e.g. the activity is enjoyable or meaningful (Ryan and Deci, 2000, p. 71). In contrast, extrinsic motivation is the performance of an activity in order to attain some separable outcome (Ryan and Deci, 2000, p. 71). Extrinsic motivation is either an autonomous motivation¬, such as in attaining rewards, or a controlled motivation, i.e. avoiding shame and its associated loss of self-esteem (Ryan and Deci, 2000, Wong-On-Wing *et al.*, 2010, Deci and Ryan, 2008).

Empirically, the management accounting literature has investigated the effect of PMS on goal clarity, job satisfaction, bonuses, and rewards (Hall, 2008, Sholihin *et al.*, 2010, Campbell, 2008). If PMS links the results of individual attainment with bonus and rewards, employees may have a greater motivation to pursue goals (Pearsall *et al.*, 2010, Sholihin *et al.*, 2010). Further, PMS as a control system has an effect on employee behaviour through monitoring, evaluating, and measuring actions and performance (Sprinkle, 2003). Hall (2008) found that a comprehensive PMS can enhance managerial performance by mediating the role of goal clarity (cognitive) and psychological empowerment (motivational). Further, Lau and Sholihin (2005) suggested that it might not be the financial or non-financial aspects of the indicators that matter, but more the way they are implemented and used that motivates behavioural change. Hence, it is important to understand the mechanisms through which PMS affects behavioural change, other than goal clarity and a link to the reward system.

The remainder of this study is organized into five sections. Next section presents the

literature review, followed by the research method. The result and discussion are presented in further sections, and the paper ends with the conclusion section.

LITERATURE REVIEW

In this section, we will review studies based on the psychology theory that examines the improvement in individual performance by using PMS. Furthermore, this study investigates PMS in association with business strategy or strategic PMS. One of the most widely accepted PMS is the balanced scorecard (Kaplan and Norton, 1992).

Cognitive mechanisms

Hall (2011) contended that PMS can enhance employee behaviour through cognitive mechanisms if the PMS assigns clear goals and tasks to all individuals. According to the psychological literature, clear goals can have three effects: motivating people (Latham and Baldes, 1975), improving the superior-subordinate relationship (Carroll and Tosi, 1970), and enhancing productivity and performance even when the goals and targets are quite difficult (Locke, 1968, Latham and Kinne, 1974, Adhikari, 2010, Locke and Latham, 2002, Latham and Baldes, 1975).

Management accounting literature suggests that goal clarity can enhance managerial performance (Hall, 2008).The cognitive mechanism of PMS results from the impact of goal setting on individuals' persistence (Locke and Latham, 2002). People are motivated to work, and are persistent at a task when they can clearly see the goal they are expected to attain, and especially if the goal has a frame of deadline achievement (Latham and Locke, 1975). It is this persistence generated through the PMS goal setting that induces people to complete and perform a task well.

Proposition 1: A PMS with goal clarity improves employee's task cognition.

Motivational Mechanisms

The psychological theory notes that individuals are stimulated to work inasmuch as they are influenced by intrinsic and extrinsic motivations.

Intrinsic motivation

Intrinsic motivation refers to 'the enjoyment the individual gets from performing the activity or the subjective interest the individual has in the subject' (Eccles and Wigfield, 2002, p. 120). Intrinsic motivations using PMS include creating habits, making comfortable working environments, and enhancing a healthy competitive atmosphere (Brown *et al.*, 1998, Lau and Sholihin, 2005, van Veen-Dirks, 2010). The following section discusses the elements of intrinsic motivation using PMS.

Creating habit. Habits are repeated activities that are generated from past experiences such as a past location, the preceding flow of actions, and particular people (Wood and Neal,

2007). Moreover, Wood and Neal (2007) convey that habits can be created with regard to individual actions to encode the context of activities in their procedural memory. Aarts and Dijksterhuis (2000) suggest that habits are formed as the representation of goals-action links and implemented to stimulate goals-directed automaticity in routine activities. Similarly, Simons (1995) suggests that automatic and unthinking behaviour in individuals, which he defines as "mindlessness", can be generated through habit, rules, and accepted classification categories.

PMS as a diagnostic and interactive control has a role to provide feedback and feed-forward of employee activities (Grafton *et al.*, 2010). Since this procedure is routinely assessed, employees will automatically respond to feedback from superiors regarding individual tasks. Furthermore, this automaticity enables the employees to achieve their KPI goals effectively, based on the knowledge and experience gained from routine tasks and feedback. Regular feedback also improves motivation by increasing employee's perception of their contribution to the firm's performance (Drake *et al.*, 2007).

Theuvsen (2004) and Verplanken and Aarts (1999) contend that habits are controllable and goal-directed. PMS creates controllable habits through the process of goal setting, i.e. defining the acceptable level of performance expected from a task/activity, and hence affecting the action and efforts taken to achieve such performance. For example, selecting a new KPI to replace an existing KPI is bound to create new procedures and tasks for employees, which over time, become new habits. Indeed, Theuvsen (2004) suggests that habits have an impact on job efficiency because employees can perform a task faster and with less mental effort. Once habits are created, the habitual task will be responded by a trigger and prime perception of cues in an action context (Wood and Neal, 2007). Hence, individuals' activities that are intentionally performed and routinely evaluated under the PMS are likely to create an embedded mindset in employees, which in turn would enhance their goal-directed performance.

Proposition 2: A PMS creates habits through regular feedback and the process of goal setting.

PMS creates a comfortable working environment. It is argued that PMS is an important driver in creating a comfortable working environment. Psychologists such as Podsakoff *et al.* (2006) state that better working conditions are enabled through the linkage between reward and performance. PMS provides a direct channel to improve the working environment as an important role of PMS is to determine the variable rewards through performance evaluation (van Veen-Dirks, 2010).

One factor determining the ability of the PMS to improve a working environment is because PMS is considered to embed fairness (Lau and Sholihin, 2005). To be perceived as fair, performance measures need to be measurable. If KPIs are measurable, employees may determine their position in terms of goals achievement, and compare their own-monitoring results to their superior's evaluation at the end of the period. This makes the process of performance evaluation more objective and transparent, hence the perception of fairness, which enhances job satisfaction.

Empirical studies in management accounting show that fairness of performance measures affects employees' job satisfaction. Lau and Sholihin's (2005) study found a positive association between the use of performance measures and job satisfaction through the perceived fairness

of the measures. Van Veen-Dirks (2010) argued that PMS provides more neutral information in terms of incentive risks when it is used for performance evaluation rather than a reward determination. Thus, if PMS is seen to produce neutral information and procedural fairness, it creates comfortable working environment to employees and enhances their motivation to work.

Proposition 3: A PMS creates a comfortable working environment through a performance-reward link and fairness in measurable indicators and in performance evaluation and reward determination.

Promoting healthy competition. Besides providing a comfortable working environment due to enhanced fairness, PMS produces a healthy competitive atmosphere. Competition is an essential element that motivates employees to attain maximum performance and increases individual effort to focus on goal-related activity (Brown *et al.*, 1998). However, competition among employees can only work effectively if the indicators of employees' performance are fairly measured. Additionally, individuals tend to work hard if they understand that their performance outcomes correspond to rewards received. Thus, if an employee recognizes that PMS provides a fair procedure in terms of determining rewards, he/she will endeavour to generate superior performance to maximize the amount of incentive and bonus (Podsakoff *et al.*, 2006). This optimistic chance of every individual in the organization competing to achieve his/her individual goal creates a healthy competitive atmosphere. Thus, performance evaluation and reward determination in association with PMS will affect competition in the working environment (Campbell and Furrer, 1995). In general, if PMS–based performance is measured and evaluated fairly and rewards are aligned with performance, a healthy competitive atmosphere among employees will be achieved.

Proposition 4: A PMS promotes healthy competition through fairly measured performance and fairly determined rewards.

Extrinsic motivation

Extrinsic motivations of PMS can be divided into autonomous and controlled elements including links to rewards systems, making employees feel ashamed for poor performance, and behaviour aspects of non-financial indicators.

Link to reward systems. The psychology theory has extensively discussed the linkage between employee's task and reward system, where the main purpose of linking to a reward system is to stimulate employees to perform the planned tasks (van Veen-Dirks, 2010). The basic motivation for individuals to work is based on their self-interest to gain wealth and leisure (Bonner and Sprinkle, 2002).

Management accounting literature also investigates the effect on employee performance when PMS is linked to a reward system (Sholihin *et al.*, 2010, Campbell, 2008, Guo *et al.*, 2012). Supporting the expectancy theory, most studies find that individuals are heavily influenced by financial incentives to pursue goals. For example, Sholihin *et al.* (2010) found that employee performance and morale seem low because rewards, promotion, pay rise, or other rewards are not appropriately linked to the appraisal systems. Similarly, Guo *et al.*'s (2012) study found that individuals have a higher motivation to achieve goals if PMS is linked to autonomous

extrinsic motivation such as incentives and bonuses. Overall, if rewards systems are properly tied to the individual results, employees have a greater motivation to increase their performance (Pearsall *et al.*, 2010, Stone *et al.*, 2010, Guo *et al.*, 2012).

Proposition 5: PMS improves employee morale through its link to a reward system.

Making employees ashamed for poor performance. Rewards system is not only a way to motivate employees to work better, it also provides negative sanctions that act as visible and effective ways to accelerate productivity and satisfaction (O'Reilly and Puffer, 1989). One reason punishment is an effective way to enhance employees' motivation is because workers pay attention to individuals who get punishment for poor results (Podsakoff *et al.*, 2006). If workers see themselves as a 'worker model' to be punished, they may feel ashamed. Thus, a punishment system linked to PMS results will lead to the feeling of shame in employees. Various management accounting scholars have emphasized the asymmetrical effect of sanctions versus rewards on efficiency and motivation (Baumeister *et al.*, 2001, Taylor, 1991). Specifically, people tend to pay more attention to avoiding bad news than to maximizing good feedback as bad news "weighs" more in performance evaluation (Ito *et al.*, 1998). For example, Dugar (2010) found that non-financial sanctions, such as expression of disapproval, leads to efficiency outcomes while a statement of approval results in inefficiency.

Furthermore, PMS can create shyness in employees through the way the PMS results are communicated. Psychology researchers suggest that individuals may feel shy about their performance if their results are displayed or announced to other individuals and colleagues (Jones & Briggs, 1984; Schroeder, 1995). This explicit way of communicating the PMS results makes poor performance more vulnerable to social scrutiny and sanctions, and increases the level of perceived shame. Further, individuals receiving unsatisfactory performance will be under pressure because they perceive, or are perceived by others, to be lacking in skill, practices, or cognitive interference (Schroeder, 1995). This in turn influences self-esteem as individuals tend to rely on a positive feedback rather than a negative performance in maintaining or enhancing their self-esteem (see: Sanbonmatsu *et al.*, 1994).

Proposition 6: A PMS creates shyness through its link to a reward system and the display of performance results.

Behaviour aspects of non-financial measures. Previous studies argue that reliance on financial accounting data in performance evaluation will result in a dysfunctional behaviour (Hopwood, 1972, Argyris, 1952, Vagneur and Peiperl, 2000). In response, many studies have examined the behavioural impacts of non-financial aspects in performance evaluation. Hopwood (1972) and Otley (1978) found empirical evidence that performance evaluation based on non-financial measures leads to a higher level of trust in supervisors. However, Lau and Sholihin (2010) argue that the increase in perception of fairness and trust in superiors is driven by the existence and clarity of the measures, rather than the financial versus non-financial nature. Supporting this, in psychology literature, Carroll and Tosi (1970) suggest that clear and measurable goals improve the superior-subordinate relationship and incentivize subordinates to work seriously, hence reducing laziness and absenteeism and improving discipline.

Job attendance is widely used as an indicator of job performance, and hence encouraging

employees to 'visit' their office (Abdel-Maksoud *et al.*, 2010). A survey of managers from the Italian manufacturing industries found that absenteeism is a popular and important performance measure, and that including morale-based indicators such as absenteeism or lateness improve the involvement of employees in providing feedback, suggestion, and training activities (Abdel-Maksoud *et al.*, 2010). Thus, we believe that including non-financial performance measures is one of the indicators that encourage employees to work better.

Proposition 7: PMS reduces absenteeism and improves involvement by including non-financial behavioral indicators in its design.

Figure 1 summarizes the theoretical arguments made in this section and the seven propositions.

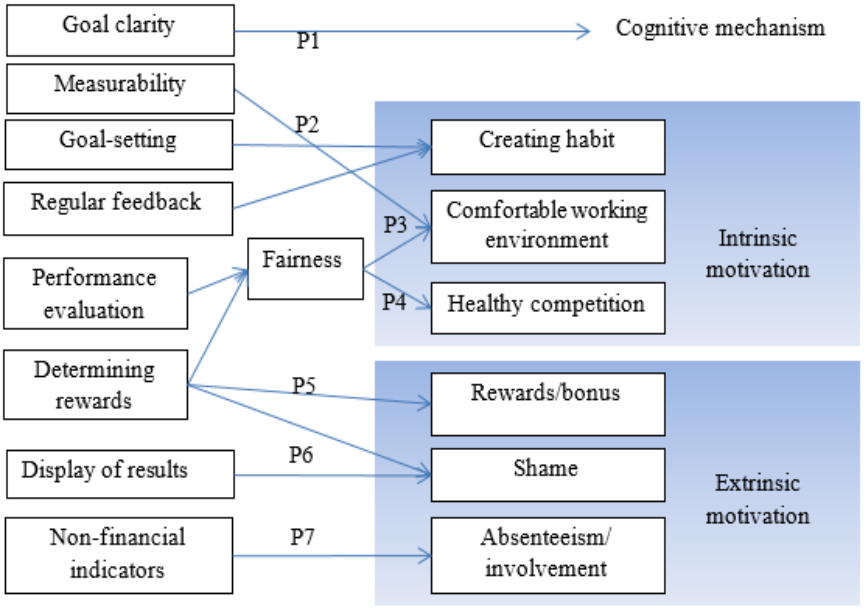

Figure 1 Behavioural impacts of PMS design and use

RESEARCH METHODS

This study is an exploratory study investigating the benefits of using PMS for employees in the Indonesian banking industry. Further, data collection was derived through face-to-face interviews with managers from Indonesian banks. The banking industry was selected in this study because it has experience using PMS. An informal communication with a senior manager at the Bank of Indonesia revealed that most banks especially medium and large banks apply a strategic PMS such as the balanced scorecards. Another reason is that banks are among the organizations reported as 'successful' in their change programs that involve the PMS transformation (Johnston *et al.*, 2002). Thus, it provides a great opportunity to explore the aspects of PMS that can stimulate employees' behavior and performance within these organizations.

Indonesia was selected as the country site of this study for three reasons. Firstly, most studies in the banking sector have been conducted in North America and other Western countries (Hussain and Hoque, 2002), and the banking sector in developing countries such as Indonesia has been largely unexplored. Similarly, Scapens and Bromwich (2010) pointed out that very few studies have been conducted in Asian counties, particularly management accounting studies– only 4% of 205 published papers. Secondly, there are cultural reasons why the effect of PMS in Asian countries may be different from Western countries in this context (see: Lok *et al.*, 2005, Rhodes *et al.*, 2008). For example, Hofstede (2007) and Hofstede (1993) asserted that the nature of cultures in Indonesia is high power distance, collectivist, feminine, strong uncertainty avoidance, and a short-term orientation to working.

The research data were collected through face-to-face interviews with Indonesian senior bankers. These senior bankers were selected because they have high levels of knowledge and understanding about their company's strategy (Perera *et al.*, 1997, Chenhall, 2005). Further, designing and formulating an organization's performance measurement are executed by senior managers (Kaplan and Norton, 2006).

We targeted medium and large banks in Indonesia in terms of assets because they have more complex structures and have experience in aligning strategy to the lowest level. Further, most of these banks are nation-wide and stock exchange-listed, hence they are more likely to implement more strategic-linked performance measurement systems rather than small, region-based banks (see: Lau and Sholihin, 2005). Based on personal connections, one manager in each of the targeted banks was sent an email, or called by phone and asked if they would like to be involved in this research. The managers were also told the importance of this research and ensured that their participation would be anonymous.

Based on this notification, 14 senior bankers agreed to be involved in this research. Next, the interview schedule was negotiated and arranged. All interviews were audio-recorded, with the permission of the respondent. Each interview took around 15-25 minutes. Before the actual data collection, the interview questions were pilot tested with four PhD students and one person experienced with qualitative research. Based on the feedback received, the questions were modified to enhance clarity.

In order to analyse the data, the NVivo 9 program was used to facilitate and assist in the handling of the data. NVivo 9 as a computer analysis of qualitative data 'permits more efficient data management and, importantly, keeps records and dates of various file transactions' (Maclaran and Catterall, 2002, p. 31). Additionally, using computer-assisted qualitative data can enhance speed and make it easier to work in terms of handling, managing, browsing, coding, and creating links to data, which lead to an increase of quality in qualitative research (Johnston, 2006, Flick, 2002). Following Kyriakidou and Gore (2005, p. 197), the interview data analysis consisted of a four phase approach: developing a coding schedule for the thematic interviews; organizing the coded text as themes; establishing common themes; and analysing the themes provided by the coded material.

RESULTS AND DISCUSSIONS

Bank structure and the PMS design

All the banks are divided into two types of divisions: business and supporting divisions. The business division focuses on accomplishing the company's goals to reach financial outcomes and other quantitative indicators while the supporting division supports the business division in achieving these goals. This is achieved by the design of the organizational PMS where the supporting unit is judged on how it serves the business units. In turn, success in the business division in achieving financial goals is partly determined by the contribution from the supporting division.

Most interviewed banks apply a modern PMS such as the balanced scorecard and six sigma. Integration across boundaries of the implementation of BSC in the context of western countries was also seen in the Indonesian banking industry. For example, a manager from Bank D, which used BSC, pointed out that his company defined his company's vision into a strategy map involving four perspectives that comprise of both financial and non-financial indicators.

Interview data confirm the existence of both cognitive and motivational mechanisms. Cognitive mechanism was generated from a mindset of clear targets, while intrinsic motivations come from habit creation, a comfortable healthy competitive atmosphere and a healthy competition. Additionally, extrinsic motivation mechanisms include rewards and incentives, avoidance of shame, and behavioral impacts of non-financial indicators. We will discuss these one at a time.

Cognitive mechanism

Clear measures and targets

Individuals will perform better if they know about what they have to do. PMS changes individual mindsets because employees have a clear idea about the required tasks and actions based on the list of KPIs. Most respondents acknowledged that the employees are set clear targets regarding their responsibilities and activities in a period. This clarity of targets strongly affects employee motivation, as claimed by a senior manager:

> *PMS can motivate employees because it has a clear target* [Head of the legal division of Bank G].

Additionally, all employees clearly understand how their performance is measured. They also understand the rewards and promotions that they will receive if they achieve high scores – and the consequences if they fail to achieve the target. With this clear system, managers hope that employees will perceive rewards and promotion as proportionate to merit.

> *All [performance] measurements are very clear and all employees know this measurements and the results of the measurements are fully documented'* [Vice-President Director of Bank A].

Hence, a clear system highlights to employees what they are required to do to maximize their performance and achievement. In turn, improved cognition regarding tasks and goals enables employees to perform well. Thus, this finding is in line with the existing theory and supports P1.

Motivational mechanisms

Intrinsic motivations

Individuals are motivated to work due to an intrinsic motivation. Interview data suggest this motivation arises when the PMS becomes habitual and creates comfortable working conditions. Additionally, a good PMS enhances a healthy competitive atmosphere.

Become habit. Interviewees suggest that employees behave positively when they perceive an intrinsic value in the work they perform. Additionally, a change in employee behaviour may stem from the habits associated with the PMS processes. Since the performance evaluation of individuals is inherently linked to their own KPIs, employees have the incentive to align their action with the KPIs. Once the KPIs are defined and selected, employees identify their tasks and goals regularly and act accordingly. As a result, this creates a culture of success for the individual. Achievement becomes the norm and creates habits. As the PMS is fully documented, two-way communication is significantly improved. Management tells employees about their evaluation. If they disagree, employees can approach the management. A senior manager of Bank E's Finance Division suggested that, *"If we do not agree with our supervisor's rating, we can complain to him or her. In this case, we can ask about the details of the assessment done by the supervisor"*. Communication is also better about the progress of goals achievement concerning detecting and monitoring actions and tasks. Problems arising from the implementation can be easily detected and discussed to find a solution.

> *With good documentation, we can easily detect and discuss individual KPI from headquarter office [corporate level] to the lowest level within our organization, each month* [Senior manager of performance measurement division of Bank L].

Other than facilitating decision-making, this regular feedback and communication over time becomes routine activities and part of the employees' "mindset". As one respondent acknowledged, *"employees become familiar with this culture, this behavior becomes habitual"*[1]. Overall, the process of goal-setting and feedback on performance creates habit, thus supporting P2.

PMS creates comfortable working environments. Managers believe that another aspect of the changes in employee behavior is a comfortable atmosphere in the workplace. They argue that if a PMS does not have a clear system, employees do not have clear ideas of what their contribution to the organization is and what reward or promotion such contribution results in.

> *The system creates peace of mind for employees because all employees know that they are evaluated with transparency […]. If a PMS is not clear, employees will make only a token effort with their work '* [Head of Risk Management of Bank L].

[1] A Vice-president Corporate Planning of Bank D

A comfortable working condition is also influenced by the fairness that PMS provides among individuals. Accordingly, rewards that one employee receives are not necessarily the same as the rewards for another. This continuously reinforces the employee to work hard to receive higher bonuses, while an employee who works less receives less.

Fairness exists because the PMS has a clear system. Thus, if these aspects are found in the organization, it will create a comfortable working atmosphere. In other words, employees focus on their work and strive to achieve the highest rating because family and close friend factors are not relevant to employee rewards and promotion. Under these circumstances, the employee is not distracted from work in the company. In other words, if they endeavor to meet their KPI, they will get better rewards and more promotion. From the point of view of senior managers, one respondent said that she feels comfortable working in the bank because the bank has a fair system to evaluate employees.

> *Then, […] employees will not ingratiate themselves with the boss to get higher ratings. Hence, with this system, employees feel comfortable to work because the most prominent aspect in working is peace of mind* [Head of Risk Management of Bank L].

People will work when a PMS creates comfortable working conditions. Comfortable working conditions are created by a PMS that provides fairness among employees and has clear KPIs.

Overall, the results suggest that clear indicators lead to a comfortable working environment. Further, the link to a reward system itself does not provide this comfort. It is the perceived fairness arising from the objective and measurable performance evaluation, and the differential reward determination that matter. Hence, P3 is partially supported.

Promoting a healthy competitive atmosphere. Besides the employees feeling comfortable with a transparent system, managers believe that the PMS promotes a healthy competition among the employees. In the interviews, all bankers mentioned that because their performance measurement is linked to rewards and bonus systems, there is a strong competition among employees to perform better and to give their best. Employees can exceed their targets and achieve high ratings without hurting other people. This work-focused performance evaluation creates the perception of fairness, making the competition among employees healthy and without malice.

Furthermore, the healthy competition comes from the way measures are used to generate internal discussions and to find solutions, rather than attributing blame.

> *If a manager has a bad result in one month, they will encourage subordinates to do better in the next month. Because the manager will not surrender top placing to another division, but will open discussions between their employees and themselves to find the reason that has caused the poor performance, the competition between divisions becomes healthy* [Vice-president of Corporate Planning of Bank D].

Hence, when a division has a poor result, the manager will not blame another division for the unsatisfactory performance, but he/she will directly ask their subordinates what the problem is, and proceed to finding a solution and encourage them to perform better. This means that the division focuses on the attainment and exceeding of its goals and not on blaming other divisions.

Overall, results support P4 that a healthy competitive environment is generated through the link to a reward system, fair performance evaluation, and reward determination. Additionally, a healthy competition also comes from the divisional inter-dependence on the PMS design, and the way the PMS is used to generate internal discussion for problem-solving.

In addition to supporting the intrinsic motivation, the use of PMS also increases the extrinsic motivation for employees, as reported in the next section.

Extrinsic motivation

The literature suggests that extrinsic motivation is made up of external autonomous motivation and external controlled motivation. The results show that extrinsic autonomous motivation results in changed employee behavior because PMS is linked to rewards systems.

However, the employees perform even better because of extrinsic controlled motivation; the employee feels ashamed of poor performance and the inclusion of non-financial indicators in PMS to control employees.

Extrinsic autonomous motivation

PMS links to rewards systems. The majority of respondents agree that PMS can influence employee's behavior by linking PMS with incentives. Clear financial incentives motivate employees to perform better. This link increases the alignment of individual behavior with organizational goals and performance, and hence, results in benefits for both the organization and the individual. Bonuses and rewards become both the cause and the effect of individual success. Employees work harder in anticipation of bonuses and rewards. High performance rating based on PMS in turn results in financial compensation, which incentivizes even more effort in the next period.

> *We strongly encourage our employees to achieve their targets. [….]. If they accomplish their goal, we reward them with high bonuses.* [Vice-president Director of Bank A].

Based on a systematic and clear PMS, the resulting rewards can be financial or non-financial. All interviewed banks have graded levels for calculating bonuses, rewards, and promotion. For example, Bank L has a policy that if an employee achieves three times consecutively the highest score, then the employee will automatically get a promotion to the next grade.

> *The increase of regular salary is also based on the grade of performance measurements* [Head of corporate secretary and corporate legal of Bank I].

However, an individual will have no bonuses if their performance in a certain period is at the lowest level. Hence, this "straight-forward" system will motivate each employee to achieve the highest level because he/she has a clear picture of the evaluation system in his/her bank.

> *It should be clear that, for example, if I get rated PA 5 in several consecutive assessments, I will get a promotion. If I am rated PA 5, I know the bonuses that I will receive and how much my salary will increase. Thus, employees are motivated.* [Head of Risk Management of Bank L].

As much as providing a "carrot", a fair PMS also penalises poor performance through a "stick" approach. In a reward-linked PMS, if an employee has poor performance under the expected threshold, he/she will get nothing, and even receive a warning of dismissal. This sanction further reinforces the importance of achieving KPI/PMS goals as a way to achieve job security. Rewards and sanctions work together in a PMS to motivate and control employees to strive for high performance. Hence, results support P5 on the importance of linking PMS to reward systems and sanctions.

Extrinsic controlled motivations

PMS causes shame for poor performance. As for the controlled type, it was found that the change of employee behaviour is also influenced by controlled extrinsic motivation. Although Wong-On-Wing, Lan, and Lui (2010) found that extrinsic controlled motivation has a negative effect on performance, in the Indonesian context, this element has a positive effect. This study's data suggest that individuals feel embarrassed if they have poor performance, and hence, people try to avoid poor performance by working hard.

The significance of "shame" in the context of Indonesia, is consistent with Hofstede's (2007) suggestion that the national culture of Indonesia is better described as collectivism rather than individualism. In an individualistic culture, everybody takes care of himself or herself. When bad or good things happen to an individual, few people would care. However, in Indonesia, if somebody gives a poor performance, everybody will see and discuss it. Although this will reduce individual self-esteem, this situation does increase the individual's motivation to perform better (Deci & Ryan, (2008) (2000); Jones & Briggs, (1984, p. 94) Schroeder, (1995)).

In the literature, it has been explained that an individual will perform better if he/she is motivated to avoid the negative effects of poor performance. The finding shows that PMS makes an employee feel ashamed of poor performance. There are several reasons for this shame. First, with the PMS of the company online, all managers can easily track the achievements of all branches and become aware of unsatisfactory performance. This can be seen by all managers both at the headquarters and at the branches. Any manager will feel upset if their poor achievement is known by all managers because it indicates that the manager is not able to manage their subordinates to work better. In response to this situation, the manager will find the people responsible for their unit or branches' poor performance and push them to work harder in the next accounting period. This situation is explained by a senior manager of Bank D.

> *If a director's performance is flagged red*[2]*, they take steps to help the subordinate that caused the alarm. This is a kind of punishment because the subordinate makes the director lose face. It is an art, how directors train their staff to achieve their targets* [Vice-president corporate planning of bank D].

The second factor that causes managers or employees embarrassment is that their performance, in any period, is announced and displayed to everyone. For example, Bank F, one of the biggest Sharia banks in Indonesia has a weekly routine activity on Monday, namely, the praying forum. This forum was created to tighten relationships between upper and lower

[2] A company uses some colours to identify performance achievement. For example, Blue is above good, Green is good, yellow is warning and red is poor performance.

levels of management, especially in the headquarters office, to direct the short-term business strategies, and to give a weekly report of employee performance, among other things. When the president of the bank announces that an employee or division has a poor performance, everyone present focuses on the person or manager who has failed to perform, and the results will be sent to all branches in Indonesia. The culprit is embarrassed because they are recognized as a person responsible for poor performance. In future, they will work harder to avoid their performance from being listed again as a poor performance.

> *The praying forum is held every morning for all employees in headquarters. […] we also release our weekly report. All employees know that if we have a bad report on them, then the news will be sent to all branches. So, we have a serious incentive to work* [Manager of performance measurement of Bank K].

Another respondent revealed that sometimes the company hires a mystery shopper to evaluate how front line staff provides services to customers. Using hidden video recording, the results will show how employees behave when serving customers face-to-face. The results go to the higher manager.

> *We do a mystery shopper using a hidden camera to evaluate how a front line employee provides a service to customers. Then, we display the results, [Employees show courtesy when they know that their behavior when serving customers may be recorded.* [Head of legal division of bank G].

Overall, the results suggest that PMS explicate shame in several ways: i) the legitimate necessity of having one's KPI defined in the PMS; ii) the way performance is monitored and measured; and iii) the way performance results are made available, and communicated. These different implications only partially supports P6, regarding the display of performance results, while offering additional insights regarding the significance of the shame factor throughout different PMS processes.

PMS includes behavior indicators of non-financial performance. Besides the improvement in employee behavior, PMS has a non-financial aspect that measures how employees behave while interacting with colleagues. This covers teamwork spirit, discipline, and other behavior aspects. For example, one aspect of qualitative measures explains how employees should behave to attain their desired score on measures such as keenness, teamwork, and so on. A Head of Human Resources Management Group of Bank I said that its company's PMS is divided into quantitative and qualitative measurement. Behavior is included in qualitative measurement and he noted that:

> *Our [performance] measurements are 60 percent quantitative elements and 40 percent qualitative elements. We call the qualitative approach a soft skill approach because these negative elements include indiscipline such as absenteeism and laziness, as well as positive elements of employee behavior, like teamwork.*

Likewise, a Manager of a Finance Division said that their organization also applied the qualitative elements and quantitative finance elements included in the KPI.

Our individual performance evaluation is not only measured from the [financial] performance side but also from the behavior aspect. For example, we evaluate how employees communicate, interact with other employees, co-operate in teamwork, and so on.

Soft skills of behavior aspect evaluation are not only targeted on lower level employees, but also on heads of units and divisions. A head of operations at the accounting division of Bank C remarked that not only is evaluation of performance achievement based on the accomplishment of individual goals, but also that the company checks soft skills including the employee's discipline, leadership, and managerial skill.

Besides evaluation of individual goals, the company also measures behavior aspects such as the employee's discipline, leadership, managerial skill, and so on.

Based on this finding, it appears that PMS can enhance employee's behavior because with the clear links to the rewards system and with clear targets, employees are motivated to work better. Further, since the score is obtained because of their performance rather than close relationships with managers or with the boss' family, the employee feels comfortable working in the company and competition becomes healthy. Lastly, PMS can also enhance employee behavior because PMS consists of quantitative and quantitative indicators. Qualitative aspects include indicators for, for example, attention to duty, discipline, and teamwork spirit, interactions with colleagues and customers, and so on. Hence, in consistency with P7, the results suggest that the inclusion of behavioral indicators in PMS reduces absenteeism and improves employee involvement.

CONCLUSION

The aim of this study is to explore the extent to which PMS enables a change in employee's behaviour. Previous management accounting research suggesting that PMS can improve employee's behaviour motivated this study. However, the behavioural aspect mostly discussed is the incentive of employees to pursue bonuses and rewards as PMS links to these factors. Recent researchers have suggested that PMS could improve behaviour through cognitive and motivational mechanisms. Based on the qualitative data using Nvivo9, it was found that significant enhancement of individual behaviour was associated with PMS design and use. The first factor is measure and goal clarity. Supporting Hall (2011), this study found that PMS enables individuals to perform better if they have a goal and a clear path to achieving it.

PMS can also enhance employee behaviour through either intrinsic or extrinsic motivational mechanisms. Intrinsically, PMS creates routines and habits for individuals because they articulate their job, actions, and activities based on their KPIs. Furthermore, regular feedback on performance becomes part of the employee's mindset, enabling a "culture of success". Another intrinsic motivation gathered from the interviews was PMS gives employees peace of mind and hence a comfortable working environment. Such comfort is generated when performance is measurable and evaluated objectively and rewards are determined fairly, rather than directly from the PMS' link to the reward system. The third intrinsic motivation comes from a healthy competition created by PMS processes. Supporting prior literature, competition

is generated through the PMS' link to the reward system, and fair performance evaluation and reward determination. Additional to the literature, a healthy competition is also promoted through divisional inter-dependence on the PMS design, and the use of PMS results to generate meaningful internal discussion.

Extrinsic motivation was divided into two types: autonomous extrinsic motivation and controlled extrinsic motivation. Consistent with the literature, autonomous motivation arises when employees are strongly motivated due to rewards and bonuses being determined fairly based on their performance and efforts (Kominis and Emmanuel, 2007, Stone *et al.*, 2010, Deci and Ryan, 2008). On the other hand, controlled motivation comes from avoiding shame associated with PMS use and the inclusion of behavioural indicators in ones' KPIs.

The above findings result in three main contributions by this study. Firstly, the use of the psychology theory provides a more comprehensive understanding of the different ways and channels through which PMS affects behaviour. It extends our knowledge of the effects of PMS beyond goal clarity and the link to a reward system. The other mechanisms in which PMS motivates employees include creating habit, enhancing a comfortable working environment and a healthy competition, instigating a feeling of shame, and enforcing positive behavioral traits through non-financial indicators.

Secondly, this study identified the characteristics of the PMS information, as well as the different ways it is used with the most impact on employee behavior. Chenhall (2005) suggested that, 'while there are some support for growing BSC implementation …, the characteristic of information dimensions of the systems are not examined in these studies' (Chenhall, 2005, p. 396). This study argues that PMS characteristics such as goal clarity, indicator measurability and objectivity, and non-financial indicators, affect employees' behavior through enhancing their task cognition and motivation. Moreover, Meekings (2005, p. 213) suggested that, 'the greatest benefits from the application of performance measurement lie … in how they are actually implemented and used in practice'. Prior literature emphasized the importance of procedural fairness in performance evaluation and reward determination in order to motivate employees. This study adds that to achieve this fairness, the processes need to be objective and measurable. Furthermore, as opposed to previous studies that focused on the two types of PMS use (performance evaluation and reward determination), this study proved that significant motivation also arises from three other uses: feedback on performance, display of performance results, and generating discussion for problem-solving.

Thirdly, as many studies have pointed out, Asian countries such as Indonesia possess different cultural traits from Western countries (Sudarwan and Fogarty, 1996, Heuer *et al.*, 1999). This study evidences how these cultural differences affect the mechanisms through which PMS leads to behavioral change. One of the most significant impacts is that PMS instigates a feeling of "shame" for poor performance, which in turn motivates employees to work hard and perform well. Shame is widely utilized by managers throughout the PMS design and processes, from making one's KPI defined in PMS as the legitimate necessity, to monitoring and measuring performance in both explicitly and secretly, making performance results available and communicating them publicly, and taking various corrective actions that have the potential to embarrass employees. This is probably the most distinctive feature of the PMS impact that differentiates this study from other studies based on a Western context.

This study was subjected to a number of limitations. The first limitation is the small sample size. As noted earlier, the sample size of this study was 14 senior bankers. Hence, the results may be limited in their generalization to the whole Indonesian banking industry. Additionally, respondents were senior bankers working in the banks' headquarters. They reflect the perceived behavioral aspects of the PMS from the viewpoint of managers, i.e. how managers design and use PMS to induce behavioral change in employees. It should be cautioned that the perceived impacts by managers might reflect more on the "intended" impacts, rather than the actual impacts by lower-level employees or all employees within a bank. Lastly, the results of the study were conducted in the Indonesian context. As a result, the findings of the study may not be generalized to banking industries in other countries, especially the Western ones.

Overall, this study may provide opportunities for future study. As the data were derived from the views of the managers, further research can interview lower level managers or front-line service staff to ascertain the extent that PMS enhances their behavior. Additionally, it will be interesting to analyze and compare the perceptions between senior managers and employees regarding PMS' behavioral impacts. A survey-based instrument can also be used to garner a wider response across the banking industry, to test the association between PMS characteristics such as clarity, fairness, feedback, and link to rewards and behavioral aspects such as cognitive and motivational mechanisms. Finally, the behavioral impacts of PMS in other industries and sectors should be examined.

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