Development of Organizational Justice in Incentive Allocation of the Thai Public Sector

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Abstract—An incentive for performance, as one subsystem of a new performance management system, has been implemented in the Thai public sector since 2004. This research investigates the development of organizational justice in the incentive allocation by comparing the roles of distributive and procedural justice on national personnel’s attitudinal outcomes (incentive satisfaction and job performance) between 2 periods, i.e. 2006 and 2008. The data were collected via self-administered questionnaires completed by national government officers and employees. They were stratified using multi-stage sampling with 2,600 usable samples or 72.0% response rate in 2006, and 1,969 usable samples or 59.3% in 2008. The findings are: (1) There is no difference in means between the two periods relating to distributive justice, procedural justice, incentive satisfaction and job performance. (2) Distributive justice and procedural justice played more important roles in predicting incentive satisfaction and job performance in 2008 than in 2006.

Keywords—Distributive justice, incentive allocation, procedural justice, Thai public sector.

I. INTRODUCTION

The performance management system for the Thai public sector had its origins in a growing concern of government leaders that something needed to be done to improve the ability and standards of Thai public services and to continually improve the efficiency of public officers. This concern eventually crystallized in the form of a performance management system for the public sector in 2004. Long established in the private sector, the concept of performance-related pay had not heretofore been applied to the public services sector.

There were three components of the new performance management system, i.e. performance agreement, performance appraisal, and performance-related pay. The final component of the new performance management system came into being on the 30th September 2003, when the Council of Ministers gave their approval for the establishment of incentive motivation to support good governance practice. The Council further decreed that all governmental agencies and the administrative provinces were to implement the new performance management system and that performance incentives – whether monetary or non-monetary -- were to be granted in accordance with guidelines established by the Office of Public Sector Development Commission (OPDC).

In endorsing the new system, the Council stipulated that the allocation criteria and procedures for performance incentives were to promote government system development, support compliance with the economic and social strategies of the country, meet the needs of the organizations and individuals in the public sector, contribute to the unity of government officials, and advance the efficiency and effectiveness of the public sector.

II. THE FRAMEWORK FOR PERFORMANCE INCENTIVES IN THE THAI PUBLIC SECTOR

The payment of incentives for units and personnel in the Thai public sector was a crucial and final step in the process of the performance management system. Aimed at motivating personnel to support improvement of the public sector, the incentive scheme was a tripartite one with allocations set aside to reward performance at three levels – the departmental or provincial level, the divisional level, and the individual level. From 2004 through 2008, the lump sum budget for staff incentives was set at 5,550 million baht per year for government agencies comprising eligible institutions – i.e., 142 departments, 73 higher education institutes, and 75 provinces – with a total personnel of about 1.5 million.

The 5,550 million baht incentive scheme, designed by the OPDC, was a 3-level plan – i.e., agency level, divisional level, and individual level. Incentive pay at the agency (department, higher education institute, and province) level was based solely on the results of the annual performance appraisal of each agency. The rationale was that each unit should devote its effort to achieving goals independent of other government agencies.

Incentive pay at the divisional and individual levels was based on both team and individual performance. The rationale was that, in addition to exerting individual effort to achieve goals, cooperation was required among units and with key persons in order to maximize goal attainment. Therefore, incentive payments were divided into two categories, one to reward team work among divisions and people, and the other to reward outstanding unit or individual performance.

Further, in order to accommodate the diversity and culture of official units while maintaining the basic objective, incentive plans were decentralized, with some decisions delegated to incentive committees of the units involved. The incentive committees of each agency made decisions concerning the apportionment of divisional incentives as between teamwork and individual performance, and also, in conformance to the OPDC guidelines, set the rules and methods of incentive allocation for their agency. Two recent studies [1], [2] of the Thai public-sector performance management system yielded some thought-provoking insights into how the system was faring as it approached its fifth birthday in 2008. Using a combination of primary and secondary data from various sources, Koonmee [1], [2] focused on the areas of goal setting, performance appraisal,
and financial rewards. The core results indicate that all three components of the performance management system, i.e., goal setting, performance appraisal, and incentive allocation had a significant effect on the efficiency and effectiveness of both agencies and individuals.

### III. ROLE OF ORGANIZATIONAL JUSTICE

Organizational justice has long been recognized as one of the important factors for organization effectiveness [3]. Organizational justice relates to the perception of individuals or groups towards fairness treatment from the organization and their responses to such perception [4]. Employees’ perceptions about the outcomes of decisions taken in an organization and their responses to these form the basis of distributive justice [5]. Perceptions about the fairness of the processes used to arrive at, and to implement, organizational decisions form the basis of procedural justice [6].

Greenberg [7] has made an important distinction between distributive and procedural justice that is relevant for the administration of incentive pay. Distributive justice, as it relates to incentives, refers to the perceived fairness of the incentives allocated; that is, distributive justice focuses on the perceived fairness of incentive pay outcomes (the amount allocated for various performance inputs). Procedural justice refers to the perceived fairness of the procedure or process used to determine incentive allocation. That is, procedural justice looks at the procedures organizations undertake to ensure a link between pay and performance.

Many studies give further insight into the importance of distributive justice and procedural justice [8]-[13]. These studies have shown that distributive justice is more important in predicting individually derived outcomes, such as pay satisfaction, turnover intention, and job satisfaction. Procedural justice, on the other hand, seems to be more critical for understanding reactions to organizational or group-based systems (such as organizational commitment, and conflict-harmony within work groups). These results led researchers to conclude that the nature of the outcome, whether an outcome is individually or group derived, determines which type of justice is dominant in understanding employee attitudes. In addition, Greenberg reported that medium and high outcomes were fair regardless of the procedure used, but that low outcomes were only fair when they were based on a fair procedure [7], [14]-[15].

### IV. THE RESEARCH FRAMEWORK

This study is designed to investigate decisions and management by the OPDC and government agencies of incentive allocation across all Thai public services. Given that incentive plans involve allocation decisions and pay, justice theory suggests that both distributive and procedural justice should be important for predicting incentive plan outcomes. There are a variety of direct outcomes from incentive schemes; this research is interested in two measures, i.e., incentive satisfaction and job performance. Incentive satisfaction is one affective reaction to work. This reaction comes from the employees’ work assessment, and one of the conditions of work assessment is pay. This study focuses only on incentives which is part of total pay. Job performance can be viewed as a behavioral reaction to performance – related pay. An increase in performance is a major goal of incentive pay plans. Along with an increase in the level of performance, another desirable incentive pay outcome is an increase in the consistency of performance over time [16]. This study compares job performance during 2 periods, 2006 and 2008.

Specifically, the following hypotheses were formulated:

- **Hypothesis 1a:** There is no significant difference between 2006 and 2008 in terms of mean scores for distributive justice.
- **Hypothesis 1b:** There is no significant difference between 2006 and 2008 in terms of mean scores for procedural justice.
- **Hypothesis 1c:** There is no significant difference between 2006 and 2008 in terms of mean scores for incentive satisfaction.
- **Hypothesis 1d:** There is no significant difference between 2006 and 2008 in terms of mean scores for job performance.

- **Hypothesis 2a:** There are positive relationships between distributive justice and incentive satisfaction.
- **Hypothesis 2b:** There are positive relationships between distributive justice and job performance.
- **Hypothesis 2c:** There are positive relationships between procedural justice and incentive satisfaction.
- **Hypothesis 2d:** There are positive relationships between procedural justice and job performance.

- **Hypothesis 3a:** Distributive justice and procedural justice play important roles in predicting incentive satisfaction.
- **Hypothesis 3b:** Distributive justice and procedural justice play important roles in predicting job performance.

- **Hypothesis 4a:** Distributive justice and procedural justice had more effect on incentive satisfaction in 2008 than they did in 2006.
- **Hypothesis 4b:** Distributive justice and procedural justice had more effect on job performance in 2008 than they did in 2006.

Hence, all four hypotheses suggest that although there are no significant differences in justice and work-related outcomes resulting from incentive allocation between 2006 and 2008, there are some clues to the development of incentive allocation decisions and management. Distributive justice and procedural justice played more important roles in predicting incentive satisfaction and job performance in 2008 than they did in 2006.

### V. METHODOLOGY

**A. Sample & Data Collection**

A self-administered questionnaire was used as the data-collection technique for this study. Questionnaires were completed by government officers and employees in 2006 and 2008. The research data are from simple random sampling and stratified multi-stage sampling from government officers and employees of departments, provinces, and higher education.
institutes. This research covers 290 organizational units. The researcher expected sampling data with an expected error of 5%; therefore, the researcher randomized 168 (rounded up to 170) organization units. In order to meet the standard sample size for the population of more than 1,000,000 government officers and employees, the researcher has randomized 1,600 staff - officers and employees receiving incentives (using the sampling error at 5%). However, because there are a lot of sampling units as well as a number of populations of officers and employees in each organization, the researcher has increased the sample size to 3,600 cases in 2006 and and 3,320 cases in 2008. The sample figures for each unit category (departments, provinces, and higher education institutes) are determined proportional to the population of the unit categories to be sampled.

The pretest data was collected using the field data survey method with 30 study cases of the National Institute of Development Administration personnel. The survey data were aggregated for the reliability test. The coefficient of Cronbach Alpha is 0.93 which is satisfactory. The questionnaires have been amended by abridging or simplifying some questions making them easier to understand. The questions mostly invited responses on a four point ‘Likert scale’ ranging from ‘strongly disagree’ to ‘strongly agree’. The questionnaires also included a section for staff to give written answers to certain questions. Although not extensively analyzed in this report, they have provided valuable insight into some other responses.

When the actual data survey was conducted, there were 2,600 responses to the 3,600 questionnaires distributed giving a response rate of 72.2% in 2006. The majority of the respondents were female (59.0%), between 40-49 years of age (41.4%), and rank in level 6 (24.2%). To the 3,320 samples in 2008 there were 1,969 responses or a 59.3 % response rate. The majority of the staff respondents were female (56.5%), between 40-49 years of age (40.7%), and rank in level 7 (29.3%). Details of frequency and valid percent of control variables is shown in table 1.

### Table 1

<table>
<thead>
<tr>
<th>Variable</th>
<th>Gender</th>
<th>Government officers and employees 2006 samples (N=2,600)</th>
<th>Government officers and employees 2008 samples (N=1,969)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Frequency 1,055 41.0% Valid % 847 43.5%</td>
<td>Frequency 1,055 41.0% Valid % 847 43.5%</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>Frequency 1,517 59.0% Valid % 1,101 56.5%</td>
<td>Frequency 1,517 59.0% Valid % 1,101 56.5%</td>
</tr>
<tr>
<td></td>
<td>Age</td>
<td>&lt; 30 Frequency 230 8.9% Valid % 95 4.9%</td>
<td>&lt; 30 Frequency 230 8.9% Valid % 95 4.9%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>30-39 Frequency 772 30.0% Valid % 476 24.3%</td>
<td>30-39 Frequency 772 30.0% Valid % 476 24.3%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>40-49 Frequency 1,065 41.4% Valid % 797 40.7%</td>
<td>40-49 Frequency 1,065 41.4% Valid % 797 40.7%</td>
</tr>
<tr>
<td></td>
<td>50 and up</td>
<td>507 19.7% Valid % 590 30.1%</td>
<td>507 19.7% Valid % 590 30.1%</td>
</tr>
</tbody>
</table>

B. Measurement

The questionnaire used in this study contains three key measures: distributive justice, procedural justice, and incentive plan outcomes (incentive satisfaction, and job performance).

1) Distributive justice: An item scale was developed to assess perceptions of the distributive justice of the incentives for government officers and employees. A four-point Likert-type scale ranging from “strongly disagree” (value of 1) to “strongly agree” (value of 4) was used.

2) Procedural justice: A two-item scale was developed to assess perceptions of the procedural justice of the incentives for government officers and employees. A four-point Likert-type scale ranging from “strongly disagree” (value of 1) to “strongly agree” (value of 4) was used.

3) Performance–related-pay outcomes: The two employee incentive plan outcomes measured in this study are: incentive satisfaction, and job performance. Both outcome variables were also measured with a 4-point Likert-type scale. For incentive satisfaction, the scale was designed to measure an employee’s general satisfaction with his or her allocated incentive. For job performance, a two-item scale was used. The scale was designed to measure an employee’s attitude toward his or her devotion, and efficiency and quality improvement.

(See details of each key measure in appendix).

4) Control variables: Three control variables, after running stepwise regression on several demographic variables, were included that may influence performance-related-pay outcomes. They were gender (male = 1, female = 2), age (less than 30 years = 1, 30-39 years = 2, 40-49 years = 3, from 50 years and up = 4), and rank (level 1,2,3, ...9 = 1,2,3,...9).

C. Analysis

All research hypotheses were tested by means of independent samples t-test, Pearson correlation coefficients and hierarchical regression analysis. Hypotheses 3s and 4s were tested using hierarchical multiple regression with
performance-related-pay outcomes, i.e. incentive satisfaction and job performance as dependent variables. The control variables were entered in model 1. This allowed an analysis of the amount of unique variance associated with distributive and procedural justice after partiauling out the effects of other factors.

VI. RESULTS

Table 2 summarizes the results of independent samples t-test of 2006 and 2008 means. Table 3 shows the Pearson correlation matrix for both 2006 and 2008 government officer and employee samples. Table 4 summarizes the results of the hierarchical regression analysis for the government officers and employees 2006 samples, while Table 5 summarizes those results for the 2008 samples.

Hypotheses 1a-1d posit that there are no significant differences between the 2006 and 2008 mean scores for justice (distributive and procedural) and work-related outcomes (incentive satisfaction and job performance). The results of independent samples t-test of 2006 and 2008 means in table 2 indicate that those 2-year- means of distributive justice, procedural justice, incentive satisfaction, and job performance are not significantly different (p > 0.05). Therefore, the results provide support for all hypotheses 1a-1d.

<table>
<thead>
<tr>
<th>Variables</th>
<th>2006</th>
<th>2008</th>
<th>t</th>
<th>p (0.05)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distributive justice</td>
<td>2.31</td>
<td>0.740</td>
<td>2.35</td>
<td>0.817</td>
</tr>
<tr>
<td>Procedural justice</td>
<td>2.45</td>
<td>0.658</td>
<td>2.45</td>
<td>0.737</td>
</tr>
<tr>
<td>Incentive satisfaction</td>
<td>2.34</td>
<td>0.772</td>
<td>2.39</td>
<td>0.814</td>
</tr>
<tr>
<td>Job performance</td>
<td>2.53</td>
<td>0.765</td>
<td>2.50</td>
<td>0.777</td>
</tr>
</tbody>
</table>

Table 3 presents the results of correlation analysis between all variables. For the government officers and employees 2006 samples (above the diagonal), the results indicate significantly positive relationships at moderate levels between distributive justice and procedural justice with incentive satisfaction (Pearson correlation coefficients, r, equal 0.77 and 0.56), while those relationship with job performance are at low levels (Pearson correlation coefficients, r, equal 0.45 and 0.39). In addition, the relationship between both work-related outcomes (incentive satisfaction and job performance) and control variables are very low, though some are significant, and some are negative relationships. For the government officers and employees 2008 samples (below the diagonal), the results indicate a higher positive relationship than those of the government officers and employees 2006 samples for the model variables. That is significantly positive relationships between procedural justice and distributive justice with incentive satisfaction and job performance at moderate and high levels (r ranging from 0.60-0.84). The relationship between both work-related outcomes (incentive satisfaction and job performance) and control variables indicate a similar picture to those of the 2006 samples, i.e. very low, though some are significant, and some are negative relationships. We can conclude that the results from table 3 support hypotheses 2a-2d (significant positive relationship between distributive and procedural justice with incentive satisfaction and job performance for both years).

Table 4 summarizes the regression results of both dependent variables: incentive satisfaction and job performance, for government officers and employee 2006 samples. Table 5 summarizes the regression results of both dependent variables: incentive satisfaction and job performance, for government officers and employee 2006 samples.

The research hypotheses 3-4 were tested by means of hierarchical regression analysis, with 3 control variables (gender, age, and rank) as independent variables for model 1, and two more model variables (distributive justice and procedural justice) as independent variables for model 2. Table 4 summarizes the regression results of both dependent variables: incentive satisfaction and job performance, for government officer and employee 2006 samples. The results indicate the following important findings: (1) Control variables play unimportant roles in explaining variance of incentive satisfaction and job performance (adjusted R² = 0.01-0.02). (2) Those officers and employees in lower ranks indicate higher incentive satisfaction and job performance (significantly negative relationship for model 1 of incentive satisfaction (β = - 0.09, p < 0.01), and both models for job performance (β = - 0.17, -0.11 p < 0.01)). (3) Both distributive justice and procedural justice play important roles in predicting incentive satisfaction and job performance. Although distributive justice plays a more important role in predicting incentive satisfaction and job performance (β = 0.67, and 0.34
p < 0.01) than does procedural justice, the effects of procedural justice remained stable on incentive satisfaction and on job performance ($\beta = 0.20, p < 0.01$ for both models).

Table 5 summarizes the regression results of both dependent variables: incentive satisfaction and job performance, for the government officer and employee 2008 samples. The results indicate the following important findings:- (1) Control variables are more important in explaining variance of job performance (adjusted $R^2 = 0.06$) than incentive satisfaction (adjusted $R^2 = 0.01$). (2) Officers and employees in lower ranks indicate higher incentive satisfaction and job performance (significantly negative relationship for model 1 of incentive satisfaction ($\beta = -0.13, p < 0.01$), and both models for job performance ($\beta = -0.25, -0.11 p < 0.01$)); those in the higher age group and male respondents indicate higher job performance in both models. (3) Both distributive justice and procedural justice play important roles in predicting incentive satisfaction and job performance. Although distributive justice plays a more important role in predicting incentive satisfaction and job performance ($\beta = 0.74, p < 0.01$), procedural justice shows a stronger effect on job performance than on incentive justice performance ($\beta = 0.27, p < 0.01$).

The results in this study (that the means of some attitudinal measures. Therefore, future research should include other types of outcomes such as job satisfaction, and organization commitment. In addition, future research should include other job-related outcomes including an organization’s objective performance criteria such as growth (asset growth, sales growth), profitability (return on asset, return on equity), quality awards, and turnover rate.

Third, data collection in this study was carried out over only 2 years. To gain more confidence in the development issues, future research should employ more longitudinal data, which I think may be more suitable for this research topic.

APPENDIX

Measure of distributive justice
- The incentive you received is appropriate to your knowledge and ability to work.

Measures of procedural justice
- The OPDC establishes appropriate rules and methods in the incentive allocation.
- Your unit establishes appropriate rules and methods in the incentive allocation.

Measures of incentive satisfaction
- You are satisfied with the incentive payments received.

Measures of job performance
- You are more dedicated to your work after receiving the incentive.
- You have improved your work efficiency and work quality after receiving the incentive.

ACKNOWLEDGMENT
I would like to thank the School of Human Resource Development, NIDA, for funding this research, and the Office of Public Sector Development Commission for allowing the use of survey data.
### TABLE IV
PREDICTING INCENTIVE SATISFACTION AND JOB PERFORMANCE BY DISTRIBUTIVE AND PROCEDURAL JUSTICE (GOVERNMENT OFFICERS AND EMPLOYEES 2006 SAMPLES)

| Variables    | Incentive satisfaction |   | Job Performance |   |
|--------------|------------------------|--|--|------------------|--|
|              | Std Beta    | Std Beta | Std Beta    | Std Beta |
| Control variables |           |     |           |     |
| Gender       | -0.02  | 0.00  | -0.04  | -0.01 |
| Age          | -0.03  | 0.01  | 0.07*  | 0.06* |
| Rank         | -0.09** | -0.02 | -0.17** | -0.11** |
| Model variables |           |     |           |     |
| Distributive justice | 0.67** |     | 0.34**   |     |
| Procedural justice | 0.20** |     | 0.20**   |     |

Adjusted $R^2$ 0.01 0.63 0.02 0.24

$F$ 7.48** 550.02** 14.61** 100.54**

**. Significant at the 0.01 level.
*. Significant at the 0.05 level.

### TABLE V
PREDICTING INCENTIVE SATISFACTION AND JOB PERFORMANCE BY DISTRIBUTIVE AND PROCEDURAL JUSTICE (GOVERNMENT OFFICERS AND EMPLOYEES 2008 SAMPLES)

| Variables    | Incentive satisfaction |   | Job Performance |   |
|--------------|------------------------|--|--|------------------|--|
|              | Std Beta    | Std Beta | Std Beta    | Std Beta |
| Control variables |           |     |           |     |
| Gender       | -0.02  | -0.01 | -0.08** | -0.08** |
| Age          | 0.02   | -0.03 | 0.10**  | 0.07** |
| Rank         | -0.13** | 0.03  | -0.25** | -0.11** |
| Model variables |           |     |           |     |
| Distributive justice | 0.74** |     | 0.47**   |     |
| Procedural justice | 0.16** |     | 0.27**   |     |

Adjusted $R^2$ 0.01 0.63 0.02 0.24

$F$ 7.29** 647.88** 27.40** 246.60**

**. Significant at the 0.01 level.
*. Significant at the 0.05 level.
REFERENCES


