CHAPTER FIVE

RESEARCH FINDINGS

5.1 Introduction

In this chapter, the analysis of respondents is presented followed by the preliminary analysis of data in respect of the demographic profile of the respondents and the firms. Next, descriptive statistics of the data and the results of Pearson correlation are discussed.

Prior to testing the hypotheses, analyses of variances across the various demographic variables are done. Finally, the results of hypotheses are discussed.

5.2 Results of the Questionnaire Survey

5.2.1 Analysis of Respondents

One thousand questionnaires were distributed to managers of companies in Malaysia which are owned by either Malaysian or foreign entities. The targeted respondents are managers with budget responsibilities working in any field. Out of these 1000, 73 questionnaires were returned. To increase the response rate, for each company which did not return the questionnaire (after the fourth week questionnaire were sent), follow-up calls were made to the Human Resource Manager. An additional 36 questionnaires were collected, bringing the total questionnaires received to 109.

Out of the 109 responses, 1 was rejected because the company did not prepare the budget. The balances of 108 questionnaires were completed and can be used for further analysis, which comprise of 75 local companies, 31 Anglo-American companies and 2 Asian companies.

The summary of the analysis of respondents is depicted in Table 5.1.

Table 5.1: Analysis of Respondents

Distributed questionnaires	1000
Returned questionnaires	109
Omitted in the analysis	1
Usable questionnaires	108 (10.8%)

5.2.2 Potential Response Bias

Assessment of potential response bias was conducted to examine the possibility of the existence of non-response bias. It was conducted by examining the differences in the two groups, the early and late responses of the main variables using the independent sample t-tests. Responses received within the due date or 3 weeks after the questionnaires were sent are considered as early responses, while the responses received later than the stipulated period are considered as late responses.

Altogether 67 respondents gave feedback within 3 weeks after the questionnaires were sent. The balance of 41 usable questionnaires was received after the 3 week period. Table 5.2 presents the results of the t-test for the main variables which shows that there are no significant differences ($p>0.1$) found in the two groups. Thus it can be concluded that non-response bias is not a problem in this study, which means that there are no significant differences between early and late responses.

Table 5.2: Analysis of the Early and Late Responses

	Early Responses (n=67)		Late Responses (n=41)			
	Mean	**Std Deviation**	**Mean**	**Std Deviation**	**t**	**p**
BP	3.5025	.80272	3.7276	.84225	-1.372	.174
DF	3.4448	.84410	3.6341	.82329	-1.149	.254
PF	3.4944	.79190	3.6433	.64624	-1.065	.290
MOTIV	4.1741	.96462	4.3333	.76376	-.949	.345
MPERF	3.7220	.57316	3.7317	.58601	-.084	.933

BP – Budget Participation; DF – Distributive Fairness; PF – Procedural Fairness; MOTIV – Motivation; MPERF – Managerial Performance

5.2.3 Preliminary Analysis of Data

Preliminary analysis of data involves a series of data examination processes in order to organise data for further analysis. It is an initial analysis to perform before a more complete and complex techniques and analyses are conducted. The purpose of preliminary analysis of data is to ensure the data are complete and no mistakes in the data entry process.

5.2.3.1 Data Cleaning and Screening

Prior to analysis, the data was cleaned and screened. Data cleaning and screening involves consistency checks of the data to identify any missing data and/or outliers. Missing data is the data that is not available for analysis and outliers are out of range data or extreme values that may influence the results of the analysis (Tabachnick and Fidell, 1983). Any missing responses and outliers should be treated in manageable ways and any remedy applied without affecting the original distribution whenever possible (Hair et al., 2006). Data cleaning and screening were conducted using frequency distribution of Statistical Package for the Social Sciences (SPSS) version 17, to ensure the accuracy and completeness of data used.

In this study, all data related to key variables were available. However, for demographic profile, there were some missing data specifically the information regarding the ethnicity and respondent's position in the organisation. No remedy was undertaken since the missing data did not involve the key variables measured in this study. Similarly, no outliers were identified that may affect the results of the analysis. Thus, the original distribution of data was used for further analysis.

5.2.3.2 Demographic Profile

Two aspects of the demographic profile are discussed: demographic profile of the respondents and demographic profile of the firms.

5.2.3.2.1 Demographic Profile of Respondents

Table 5.3 shows the demographic profile of the respondents. The proportion of male and female respondents is quite relatively equal with 48.1% and 51.9% of respondents being male and female respectively. The highest proportion of respondents is those aged 31 to 40 years old which represents 50% of all the respondents, followed by those from the age of 41 to 50 and below 30 years old with 27.8% and 13% respectively. The lowest proportion of respondents comes from those aged over 60. Regarding the ethnicity of the respondents, Malay are the highest respondents in this study comprising of 59.3%, followed by Chinese (27.8%) and Indian ethnic represented by only 6 respondents (5.6%).

Table 5.3: Demographic Profile of Respondents

Demographic	Category	Frequency	Percentage %
Gender	Male	52	48.1
	Female	56	51.9
Age	Below 30	14	13.0
	31 to 40	54	50.0
	41 to 50	30	27.8
	51 to 60	7	6.5
	Above 60	3	2.8
Ethnicity	Malay	64	59.3
	Chinese	30	27.8
	Indian	6	5.6
	No information provided	8	7.4
Education	SPM/STPM	1	0.9
	Diploma	11	10.2
	Bachelor Degree	62	57.4
	Master or above	18	16.7
	Professional	15	13.9
	No information provided	1	0.9
Position	Top management	27	25.0
	Middle management	61	56.5
	Low management	13	12.0
	Supervisor	2	1.9
	No information provided	5	4.6
Work Experience	Below 5 years	58	53.7
	5 to 10 years	39	36.1
	Above 10 years	11	10.2
Department	Production	10	9.3
	Quality Assurance	3	2.8
	Logistics	2	1.9
	Finance	46	42.6
	Selling/Marketing	9	8.3
	Human Resource / Administration	20	18.5
	Others	18	16.7

Most of the respondents are educated at the tertiary level, with Bachelor Degrees (57.4%) and Masters Degrees or above (16.7%). 13.9% have a professional certificate and 10.2% are Diploma holders. Most of the respondents work in the middle level of management (56.5%) and the second highest proportion of respondents are top management (25%). The rest of the respondents consist of supervisors (1.9%), while 4.6% did not provide any information regarding their position level.

Table 5.3 also shows that almost 50% (46.3%) of the respondents have more than 5 years of working experience, while 58 respondents or 53.7% have working experience of less than 5 years at their current position level. Regarding the department to which the respondents are attached, most of the respondents are working in the Finance department (42.6%), followed by the Human Resource or Administration department (18.5%), the Production department (9.3%) and the Selling or Marketing department (8.3%). The rest of the respondents are attached to Quality Assurance (2.8%), Logistics (1.9%) and other departments (16.7%) such as the Business Development, Technical and Operation departments.

5.2.3.2.2 Demographic Profile of Firms

Table 5.4 shows the demographic profile of the firms. Most of the firms are owned by Malaysian (69.4%) while 28.7% are owned by Anglo-American and 1.9% owned by other Asian nation. There are two types of industries involved in this study: manufacturing and the service industry. Manufacturing firms represent 48.1%, and service firms comprise of 51.9% of the respondents. Most of the firms have more than 500 employees (41.7%), while the firms with between 101 and 250 employees, and between 251 and 500 employees have an equal percentage of 23.1%. Only 12% of the firms have 100 employees or less.

Regarding the total assets of the firms, 55.6% of the firms have more than RM100 million, followed by those with assets of RM25 to RM50 million (23.1%) and assets between RM51 to RM100 million (13%). Only 8.3% of the firms have less than RM25 million of total assets. Similar to the total assets of the firms, the annual sales revenue also shows that 58.3% of firms have more than RM100 million in revenue. Those with sales revenue of RM51 to RM100 million and RM11 to RM25 million per annum are represented by 13.9% and 9.3% of the firms respectively. 3.7% of the firms under study have the lowest annual sales revenue, which is between RM5 to RM10 million. The sample consists of mainly medium and large firms which are more likely to have a formal budgeting process as part of their control system, thus can be assumed to be suitable for this study.

Table 5.4: Demographic Profile of Firms

Demographic	Category	Frequency	Percentage %
Ownership Structure	Malaysian	75	69.4
	Anglo-American	31	28.7
	Asian	2	1.9
Type of Industry	Manufacturing Industry	52	48.1
	Service Industry	56	51.9
Number of Employees	Between 0-100	13	12.0
	Between 101-250	25	23.1
	Between 251-500	25	23.1
	Above 500	45	41.7
Total Assets	Less than RM25 million	9	8.3
	Between RM25 – RM50 million	25	23.1
	Between RM51– RM100 million	14	13.0
	Above RM100 million	60	55.6
Annual Sales Revenue	Less than RM5 million	9	8.3
	Between RM5 – RM10 million	4	3.7
	Between RM11 – RM25 million	10	9.3
	Between RM26 - RM50 million	7	6.5
	Between RM51 – RM100 million	15	13.9
	Above RM100 million	63	58.3

5.2.4 Budget Type

Table 5.5 illustrates the types of budget that the respondents' firms employed. The table shows that more than half of the respondents are applying the line item budgeting technique. Line item budget is a technique where the individual items of financial statement are grouped together. It is a conventional budgeting process where the actual and budgeted amounts of resources are listed line by line and any differences can be identified as clearly as either overspending, underspending or as expected.

Incremental budget also applies the same concept as line item budget. 14.8% of the respondents used this type of budget in their department. As the name implies, incremental budgeting technique is prepared based on the previous year's budget, with the incremental amount added for future allocation (Garrison et al., 2008). Similarly, to allocate resources for future periods, the current or past allocations are compared and any increment and decrement to the base amount can be known accurately. Since it is based on previous budget, it is consistent and fewer changes are required to set up the budget.

Unlike the previous mentioned budgets which are more traditional practices, zero based budgets are prepared from scratch, with the assumption that the base expenditure is zero (Garrison et al., 2008). Only 11.1% of the respondents in this study employed this technique in preparing their budget. This type of budget required all the departments to justify the usefulness of the allocation of resources they need and activities or objectives they want to achieve (Hilton, 2009). Efficient allocation of resources is practised where all the needs have to be approved based on their cost and benefits.

From the table, it also shows that 9 respondents were using other types of budgets (8.3%) comprising of modified budgetary system, sales and cost budgets and compliance budget.

Table 5.5: Budget Type

Category	Frequency	Percentage %
Line item budget	71	65.7
Zero based budget	12	11.1
Incremental budget	16	14.8
Others	9	8.3

5.2.5 Descriptive Statistics

Descriptive statistics summarise data in terms of its mean value, standard deviation and the minimum as well as maximum amount of actual and theoretical range of data. Table 5.6 shows descriptive statistics of the variable used in this study. The table shows that all the variables have the theoretical range of 1 to a maximum of 5. Overall, the mean values are between 3 and 4.5 with the standard deviation between 0.5 and 0.9.

Among the variables, motivation has the highest score of a mean of 4.2. This may indicate that the respondents are highly motivated for personal achievement and self-satisfaction upon fulfilling the intended goals. However, the standard deviation of 0.9 signifies the relative highly variable and widely dispersed data from the mean value among the variables.

Budget participation has a mean of 3.6, which may indicate that respondents have a moderate level of participation in the budget setting process. This finding is not surprising as a previous study by Nik Nazli et al. (2003) confirmed that managerial participation in setting up the budget has been practised in Malaysia. Similarly, distributive fairness and procedural fairness also present a moderate value of mean, slightly above average. Both types of fairness have been regarded as important in the organisation as it recorded the mean value of above 3.5, with the standard deviation of 0.8 and 0.7 for distributive fairness and procedural fairness, respectively. For managerial performance, the mean also indicates that the respondents perceive that they are performing above average in managerial functions. It is further supported by the standard deviation of 0.6, which means low variability and less dispersion of data to the mean.

Table 5.6: Descriptive Statistics for Variables (N=108)

Variable	Mean	Std. Deviation	Actual Range		Theoretical Range	
			Min	Max	Min	Max
BP	3.5880	.82140	1.00	5.00	1	5
OF dimensions:						
DF	3.5167	.83750	1.60	5.00	1	5
PF	3.5509	.74041	1.50	5.00	1	5
Overall OF	3.5377	.72018	1.69	5.00	1	5
MOTIV	4.2346	.89333	1.00	5.00	1	5
MPERF	3.7257	.57536	1.88	5.00	1	5

BP – Budget Participation; DF – Distributive Fairness; PF – Procedural Fairness; OF – Organisational Fairness; MOTIV – Motivation; MPERF – Managerial Performance

5.2.6 Pearson Correlation

Correlation analysis provides the degree of association between the two metric variables. It shows the direction and strength of relationship and may serve as the preliminary support for the hypotheses developed in this study. The correlation coefficient can vary between -1 to +1. +1 indicates a perfectly positive relationship, while -1 indicates a perfectly negative relationship. Correlation coefficient of 0 indicates no relationship between variables (Hair et al., 2006; Gujarati, 2006).

Correlation matrix is presented in Table 5.7 and presents a bivariate relationship between variables. From the table it can be seen that all variables are significantly correlated at 0.01 significance levels. As expected, the results also show positive associations between the variables.

The correlation between the overall organisational fairness dimensions and budget participation is strongest, with the correlation of 0.7. For each type of organisational fairness, a moderate strong association was found with the budget participation, with the coefficient of 0.63 and 0.66 for distributive and procedural fairness, respectively. However, a weak association appears between budget participation and motivation as well as between budget participation and managerial performance. A similar association was also revealed in the relationship between motivation and managerial performance with the Pearson correlation of 0.31. The results of the correlation analysis provide preliminary evidence for the relationship between the main variables in this study.

If the predictor variables are highly correlated, multicollinearity is likely to occur. Hair et al. (2006) suggested that the correlation among variables should not exceed 0.9, otherwise multicollinearity problems may exist. By referring to Table 5.7, none of the correlations showed the possibility of the existence of multicollinearity. Furthermore, the variables have also been tested using tolerance method and variance inflation factor (VIF), the two other techniques to assess whether multicollinearity exists. All the predictor variables have tolerance value over 0.1 and VIF value below 10, a cutoff threshold of tolerance and VIF value (Hair et al., 2006).

Table 5.7: Correlations Matrix of All Variables (N=108)

Variables	BP	DF	PF	OF	MOTIV	MPERF
BP	1					
OF dimensions:						
DF	0.63**	1				
PF	0.66**	0.71**	1			
Overall OF	0.70**	0.89**	0.95**	1		
MOTIV	0.35**	0.42**	0.52**	0.52**	1	
MPERF	0.31**	0.41**	0.38**	0.43**	0.31**	1

**. Correlation is significant at the 0.01 level (2-tailed).
BP – Budget Participation; DF – Distributive Fairness; PF – Procedural Fairness; OF – Organisational Fairness; MOTIV – Motivation; MPERF – Managerial Performance

5.2.7 T-test and ANOVA

T-tests and Analysis of Variance (ANOVA) were conducted to examine any variances in the variables used in this study across the demographic variables. The purpose of these tests was to detect the effects of the demographic variables on the independent and dependent variables. Specifically, the t-test was performed on the gender and industrial sector, while ANOVA was performed across ethnicity, age group, education level, position of the respondents, departments and size of the firms.

5.2.7.1 Gender

T-test was conducted to examine whether male and female respondents differ in their level of participation, fairness perception, motivation and performance. The results are depicted in Table 5.8. Overall, male respondents score more than females in the main variables. However, the results clearly show that regardless of the gender, no difference in the main variables is found at $\alpha = 0.05$. It signifies that between males and females, there is no difference with regards to budget participation, fairness perceptions, motivations and performance. Hence, there is sufficient evidence to conclude that there are no differences in participation, the perceptions of fairness, motivation, or performance among male and female respondents.

Table 5.8: T-test across Gender

Variables	Means		T-test
	Male (N=52)	Female (N=56)	t-value (p)
BP	3.63	3.55	0.489 (ns)
DF	3.58	3.46	0.719 (ns)
PF	3.61	3.50	0.740 (ns)
MOTIV	4.27	4.20	0.387 (ns)
MPERF	3.75	3.70	0.421 (ns)

5.2.7.2 Industrial Sector

There are two groups of the industrial sector examined in this study: the manufacturing and services sectors. Overall, respondents in the manufacturing sector have more participation and perceive more fairness in the budgetary process, while those in the services sector have higher motivation level and perform better. In examining the differences of the variables across the two groups, t-tests were carried out. Similar conclusions can be made for the industrial sector as for gender. Based on the results in Table 5.9, no significance evidence was found at 0.05 to infer that the types of sectors differ in the main variables. Regardless of the types of industry, either manufacturing or service industry, there were no differences found in the variables under study and the responses to the main variables did not differ.

Table 5.9: T-test across Industrial Sector

Variables	**Means by Type of Industry**		**T-test**
	Manufacturing (N=52)	**Service (N=56)**	**t-value (p)**
BP	3.72	3.47	1.596 (ns)
DF	3.53	3.50	0.168 (ns)
PF	3.57	3.54	0.221 (ns)
MOTIV	4.14	4.32	-1.049 (ns)
MPERF	3.66	3.79	-1.126 (ns)

5.2.7.3 Ethnicity

Analysis of variance was carried out to determine whether differences exist in different ethnicity groups. The test was conducted by examining the differences between all the key variables and three ethnic groups: Malay, Chinese and Indian. The results demonstrate that there was no significance difference of the variables based on the ethnicity group, with $p > 0.05$. It indicates that the level of budget participation, fairness perceptions, motivation level and the performance of the respondents were not affected by their ethnicity group. Each group has similar perceptions on the key variables, and if there were any differences, they were not significant. Details of the results are shown in Table 5.10.

Table 5.10: ANOVA across Ethnicity

Variables	Means by Ethnicity			ANOVA F-value (p)
	Malay (N=64)	Chinese (N=30)	Indian (N=6)	
Budget Participation (BP)	3.58	3.58	3.83	0.241 (ns)
Distributive Fairness (DF)	3.50	3.63	3.77	1.194 (ns)
Procedural Fairness (PF)	3.57	3.63	3.69	1.603 (ns)
Motivation (MOTIV)	4.35	4.18	4.17	1.863 (ns)
Managerial Performance (MPERF)	3.72	3.87	3.73	2.530 (ns)

5.2.7.4 Age, Education and Position

According to Hofstede (1980) and O'Connor (1995) in studies examining cultural value in organisations, different group of age, qualification and position of the respondents may influence the results of the findings. Thus, in this study analysis of variance was conducted to examine whether or not the main variables are affected by the different group of age, qualification and position.

As shown by Table 5.11, the respondents are divided into five different age groups, most of the respondents are between 31 and 40 years, while the least respondents fall into the group above 60 years. For each variable tested, the age group of 51 to 60 years has the greatest mean score. The majority of the lowest mean score is from 41 to 50 years. Even though it appears as if there are differences in the mean score, the differences are not significant at 0.05 levels.

Table 5.11: ANOVA across Age

Variables	Means by Age					ANOVA F-value (p)
	Below 30 (N=14)	31-40 (N=54)	41-50 (N=30)	51-60 (N=7)	Above 60 (N=3)	
Budget Participation (BP)	3.71	3.56	3.51	3.90	3.61	0.421 (ns)
Distributive Fairness (DF)	3.67	3.49	3.37	3.97	3.6	0.870 (ns)
Procedural Fairness (PF)	3.85	3.46	3.49	3.88	3.75	1.242 (ns)
Motivation (MOTIV)	4.48	4.19	4.03	4.90	4.44	1.752 (ns)
Managerial Performance (MPERF)	3.64	3.73	3.65	4.21	3.67	1.500 (ns)

In the analysis of the qualification of the respondents on the key variables, Table 5.12 shows the result. Most of the Malaysian managers hold bachelor degrees as their highest qualification. This group participate more in budget creation and perceive more procedural fairness compared to other groups. Only one respondent has the highest qualification of SPM/STPM. His/her mean score is the lowest for all the key variables except managerial performance, where he/she scored the highest.

Table 5.12: ANOVA across Qualification

Variables	Means by Qualification					ANOVA F-value (p)
	SPM/STPM (N=1)	Diploma (N=11)	Bachelor (N=62)	Master & above (N=18)	Professional (N=15)	
Budget Participation (BP)	2.00	3.23	3.73	3.55	3.38	1.935 (ns)
Distributive Fairness (DF)	2.00	3.58	3.53	3.37	3.72	0.965 (ns)
Procedural Fairness (PF)	2.00	3.39	3.59	3.54	3.57	1.160 (ns)
Motivation (MOTIV)	2.00	4.18	4.25	4.07	4.53	1.781 (ns)
Managerial Performance (MPERF)	4.00	3.45	3.75	3.70	3.83	0.684 (ns)

Despite these differences in the Bachelor and SPM/STPM holder, the results are not significant. There is no significant evidence to infer that each qualification groups are differed in terms of their participation, fairness perceptions, motivation and performance.

For the position level of the managers, the mean score is portrayed in Table 5.13. Most of the respondents are at the middle level, followed by the top management and then by the lower management. The analysis of the mean score for each variable revealed that the top management score was the highest. This group has the most participation, perceive the most fairness in distribution and procedures, are most motivated and perform the best compared to other positions.

As evidenced in Table 5.13, while no significant evidence is presented for most of the variables, significant evidence is found for the differences in managerial performance. The performance levels among the four groups differ in at least two groups. Further investigation revealed that only the performance of the top management and lower

management group were differed significantly with p=0.03. The performance of the top management was higher than the lower management.

Table 5.13: ANOVA across Position

Variables	Means by Position Level				ANOVA F-value (p)
	Top management (N=27)	Middle management (N=61)	Low management (N=13)	Supervisor (N=2)	
Budget Participation (BP)	3.90	3.56	3.19	3.33	1.870 (ns)
Distributive Fairness (DF)	3.71	3.51	3.11	3.5	1.149 (ns)
Procedural Fairness (PF)	3.85	3.51	3.23	3.44	1.949 (ns)
Motivation (MOTIV)	4.41	4.21	3.97	4.33	0.541 (ns)
Managerial Performance (MPERF)	3.94	3.74	3.31	3.50	2.975*

*significant at 0.05; ns: not significant

5.2.7.5 Department

ANOVA was also performed to examine the existence of variances among the main variables based on different departments. As in Table 5.14, except for motivation, the results demonstrated that there was insignificant evidence to conclude that the differences exist in different functional or departmental areas. Most of the main variables are not affected by the departments in which the managers work. Only the motivation of employees is affected by the different departments the managers are attached to.

Table 5.14: ANOVA across Department

Variables	Means by Department						ANOVA F-value (p)
	Production (N=10)	Quality Assurance (N=3)	Logistics (N=2)	Finance (N=46)	Selling / Marketing (N=9)	Human Resource / Administration (N=20)	
Budget Participation (BP)	3.73	3.17	3.42	3.71	3.83	3.28	1.014 (ns)
Distributive Fairness (DF)	3.60	3.33	2.70	3.69	3.20	3.42	0.970 (ns)
Procedural Fairness (PF)	3.55	3.08	2.88	3.64	3.54	3.47	0.612 (ns)
Motivation (MOTIV)	4.37	2.89	3.50	4.22	4.70	4.05	2.307*
Managerial Performance (MPERF)	3.59	3.54	3.75	3.78	3.81	3.80	0.481 (ns)

*significant at 0.05; ns: not significant

5.2.7.6 Size of Firms

In this study, company's total numbers of employees are used to determine the size of the companies. To examine whether different size of firm has any effect on the key variables used, ANOVA is carried out. Table 5.15 shows that only budget participation presents significant difference across the various sizes of the firms. In contrast, organisation size does not have any influence on the perception of fairness, motivation and managerial performance.

Table 5.15: ANOVA across Size of Firms (Number of Employees)

Variables	Means by Number of Employees				ANOVA F-value (p)
	0-100 (N=13)	101-250 (N=25)	251-500 (N=25)	Above 500 (N=45)	
Budget Participation (BP)	3.18	3.28	3.98	3.66	4.695*
Distributive Fairness (DF)	3.29	3.55	3.63	3.50	0.484 (ns)
Procedural Fairness (PF)	3.42	3.32	3.84	3.56	2.244 (ns)
Motivation (MOTIV)	4.36	3.91	4.35	4.32	1.491 (ns)
Managerial Performance (MPERF)	3.65	3.60	3.92	3.71	1.477 (ns)

*significant at 0.05; ns: not significant

5.2.8 Hypotheses Testing and Findings

Altogether, there are 13 hypotheses developed in this study which are related to the research objectives of the study. 6 of the hypotheses are related to the direct relationship between variables, 4 involve mediating variables and 3 hypothesise the moderating relationship. To test the hypotheses that examine the direct relationship between variables, following Lau and Tan (2006), Lau et al. (2008) and Wentzel (2002), the results which are based on correlation coefficient are used. For the hypotheses that examine the mediating effect, this study employed Partial Least Squares (PLS) data analysis technique. Finally, to examine the moderating relationship, hierarchical regression analysis is used.

5.2.8.1 Partial Least Squares (PLS) Model

This study applies Smartpls Version 2 that conveniently enables the estimation of parameters for both measurement and structural model simultaneously. As Henseler et al. (2009) argued, since PLS does not have any goodness-of-fit criterion, there is a systematic approach to evaluate PLS model (Chin, 1998). The systematic approach is based on the

evaluation of two sequential stages: (1) evaluation of the measurement model, and (2) evaluation of the structural model. The measurement model needs to be evaluated first to ensure the latent variables have fulfilled sufficient reliability and validity, before evaluating the structural model (Henseler et al., 2009).

5.2.8.1.1 Evaluation of Measurement Model

The measurement model of the data is assessed by examining its internal consistency reliability, convergent validity and discriminant validity. Individual item reliability is assessed by examining the loadings of each item on its corresponding construct. While the loadings must exceed 0.7 threshold (Hulland, 1999), loadings of 0.5 and 0.6 can also be accepted but must be interpreted with caution. Table 5.16a shows the loadings of individual items of the respective construct. It can clearly be seen that almost all items have loading more than 0.7, with only 3 items loaded at least 0.6. Moreover, the value of Cronbach's α (Table 5.16b) also shows that all constructs are reliable with Cronbach's α more than 0.8 (Fornell and Larcker, 1981; Nunnally, 1978). Similarly, the composite reliability values for all constructs are more than 0.8 which signifies that all the constructs have internal consistency reliability (Fornell and Larcker, 1981; Nunnally, 1978).

An examination of average variance extracted (AVE) in Table 5.16b further reveals that all constructs satisfy convergent validity requirement with values above 0.5 (Fornell and Larcker, 1981). To assess the discriminant validity, Chin (1998) suggested to examine the loadings of each indicator to its latent variable and the cross-loadings to the other variables. The loadings of each indicator to their latent variable should be higher than all of its cross-loadings (Chin, 1998). In this study, the loadings of each indicator to their corresponding construct are higher than the cross-loading to other constructs as portrayed in Table 5.16a.

Table 5.16a: Outer and Cross Loadings

	BP	MOTIV	MPERF	OF
BP1	0.770467	0.134117	0.242476	0.448607
BP2	0.819075	0.349340	0.271246	0.662508
BP3	0.786148	0.253821	0.237496	0.534762
BP4	0.780165	0.225133	0.313737	0.513442
BP5	0.819580	0.329024	0.282307	0.608925
BP6	0.637888	0.328804	0.140172	0.468106
MOTIV1	0.293730	0.870542	0.251470	0.445717
MOTIV2	0.346707	0.961273	0.321741	0.491133
MOTIV3	0.352030	0.936524	0.310300	0.476932
MP1	0.172275	0.241277	0.685621	0.274291
MP2	0.158282	0.157758	0.618839	0.169022
MP3	0.246810	0.276120	0.806744	0.331568
MP4	0.267809	0.256985	0.778896	0.467668
MP5	0.274488	0.210374	0.743682	0.306297
MP6	0.144532	0.157338	0.747851	0.279771
MP7	0.289375	0.254503	0.761946	0.354038
MP8	0.313884	0.300461	0.793589	0.394326
DF	0.639893	0.421541	0.435553	0.919606
PF	0.673541	0.519898	0.404926	0.930088

5.16b: Summary of the Result of Measurement Model

	AVE	Composite Reliability	R Square	Cronbachs Alpha
BP	0.594967	0.897516		0.862296
MOTIV	0.852989	0.945583	0.260798	0.913051
MPERF	0.554155	0.908113	0.216522	0.884724
OF	0.855369	0.922045	0.504892	0.831099

5.16c: Latent Variables Correlations

	BP	MOTIV	MPERF	OF
BP	**0.771341**			
MOTIV	0.359213	**0.923574**		
MPERF	0.324975	0.320304	**0.744416**	
OF	0.710557	0.510657	0.453747	**0.924862**

Note: Diagonal elements are the square roots of average variance extracted (AVE)
BP – Budget Participation; DF – Distributive Fairness; PF – Procedural Fairness; OF – Organisational Fairness; MOTIV – Motivation; MPERF – Managerial Performance

Additionally, Table 5.16c also demonstrates that the square root of AVE is more than the respective correlations among different constructs which indicates that more variance is shared between each latent variable and its manifest variables than it shares with other latent variables in the same model (Fornell and Larcker, 1981, Chin, 1998). Tables 5.16a, 5.16b and 5.16c also indicate that all the constructs have met the requirement of internal reliability and validity.

5.2.8.1.2 Evaluation of Structural Model

The structural model is evaluated by examining the R^2 of the dependent variables, the path coefficients (β estimates) and its significance value (p-values). Coefficient of determination (R^2) measures the variation of the dependent variable that is explained by the predictor variables. R^2 can range from 0 to 1 (Hair et al., 2006). The larger the R^2, the greater the explanatory power of independent variables in predicting dependent variables. According to Chin (1998), R^2 value provides the explanatory power of a structural model, which can be described as substantial, moderate and weak if the values show 0.67, 0.33 and 0.19 respectively. The evaluation of R^2, the path coefficients and its significance value are provided in the next section.

5.2.8.2 Hypotheses Testing Examining Direct Effect

Six hypotheses, H1 to H6, have been formulated in order to examine whether positive direct relationships exist between variables. The hypotheses are presented in Table 5.17.

Table 5.17: Hypotheses Testing for Direct Effect

H1: There is a positive relationship between budget participation and managerial performance
H2: There is a positive relationship between budget participation and organisational fairness
H3: There is a positive relationship between budget participation and motivation
H4: There is a positive relationship between organisational fairness and motivation
H5: There is a positive relationship between organisational fairness and managerial performance
H6: There is a positive relationship between motivation and managerial performance

Following Lau and Tan (2006), Lau et al. (2008) and Wentzel (2002), the direct relationship of the variables is assessed on the basis of correlation analysis. Table 5.18 shows the result of the direct effect.

Table 5.18: Results of the Direct Effect

Variables	BP	DF	PF	OF	MOTIV
DF	0.63**				
PF	0.66**	0.71**			
Overall OF	0.70**	0.89**	0.95**		
MOTIV	0.35**	0.42**	0.52**	0.52**	
MPERF	0.31**	0.41**	0.38**	0.43**	0.31**

**.Significant at 0.01 level (2-tailed).
BP – Budget Participation; DF – Distributive Fairness; PF – Procedural Fairness; OF – Organisational Fairness; MOTIV – Motivation; MPERF – Managerial Performance

- **H1: There is a positive relationship between budget participation and managerial performance**

H1 states that budget participation is positively related to managerial performance. As depicted in Table 5.18, it can be seen that budget participation is positively related to managerial performance ($r=0.31$, $p<0.01$). It can be inferred that the involvement of managers in budget preparation may enhance their performance.

- **H2: There is a positive relationship between budget participation and organisational fairness**

Similar findings are also found for H2 and its sub-hypotheses of H2a and H2b. H2 proposes a direct relationship between budget participation and organisational fairness, while H2a and H2b propose a direct relationship between budget participation and the dimensions of organisational fairness, particularly distributive and procedural fairness, respectively. The results provide support for the direct positive relationship of these hypotheses, with $r=0.7$ ($p<0.01$) for H2, $r=0.63$ ($p<0.01$) for H2a and $r=0.66$ ($p<0.01$) for H2b. In other words, the overall perceptions of fairness, including distributive and procedural fairness, are enhanced by allowing managers to participate in the budget.

- **H3: There is a positive relationship between budget participation and motivation**

H3 predicts the relationship between budget participation and motivation. Table 5.18 shows that the variables are correlated with $r=0.35$, $p<0.01$. As expected, the evidence also supports the earlier expectation of the positive relationship between budget participation and motivation. It can be concluded that budget participation not only can increase the

performance of managers and the managers' perceptions of fairness, but it can also improve the motivation level of the managers in carrying out their duty.

- **H4: There is a positive relationship between organisational fairness and motivation**

H4, which hypothesises the relationship between organisational fairness and motivation also provided significant support. The coefficient shows a value of 0.52 with $p<0.01$. A similar result is also demonstrated for its sub-hypotheses of H4a ($r=0.42$, $p<0.01$) and H4b ($r=0.52$, $p<0.01$). H4a predicts a direct relationship between distributive fairness and motivation, while H4b predicts a direct relationship between procedural fairness and motivation.

H5: There is a positive relationship between organisational fairness and managerial performance

H5 hypothesises a positive relationship between organisational fairness and managerial performance. Table 5.18 provided significant evidence of highly correlated coefficient of the hypotheses with $r=0.43$ ($p<0.01$). Likewise, the relationships of each dimension of organisational fairness also are examined. Results show that the relationship between distributive fairness and performance (H5a) is significant ($r=0.41$, $p<0.01$) as is that between procedural fairness with managerial performance (H5b) which is also significantly correlated ($r=0.38$, $p<0.01$). These findings indicate that favourable perceptions of fairness may increase managers' performance in the managerial functions.

- **H6: There is a positive relationship between motivation and managerial performance**

H6 predicts the relationship between motivation and managerial performance. As shown in Table 5.18, the results provide support for the direct positive relationship of the variables with r=0.31 ($p<0.01$). It suggests that when the employees are motivated, their performance may be improved.

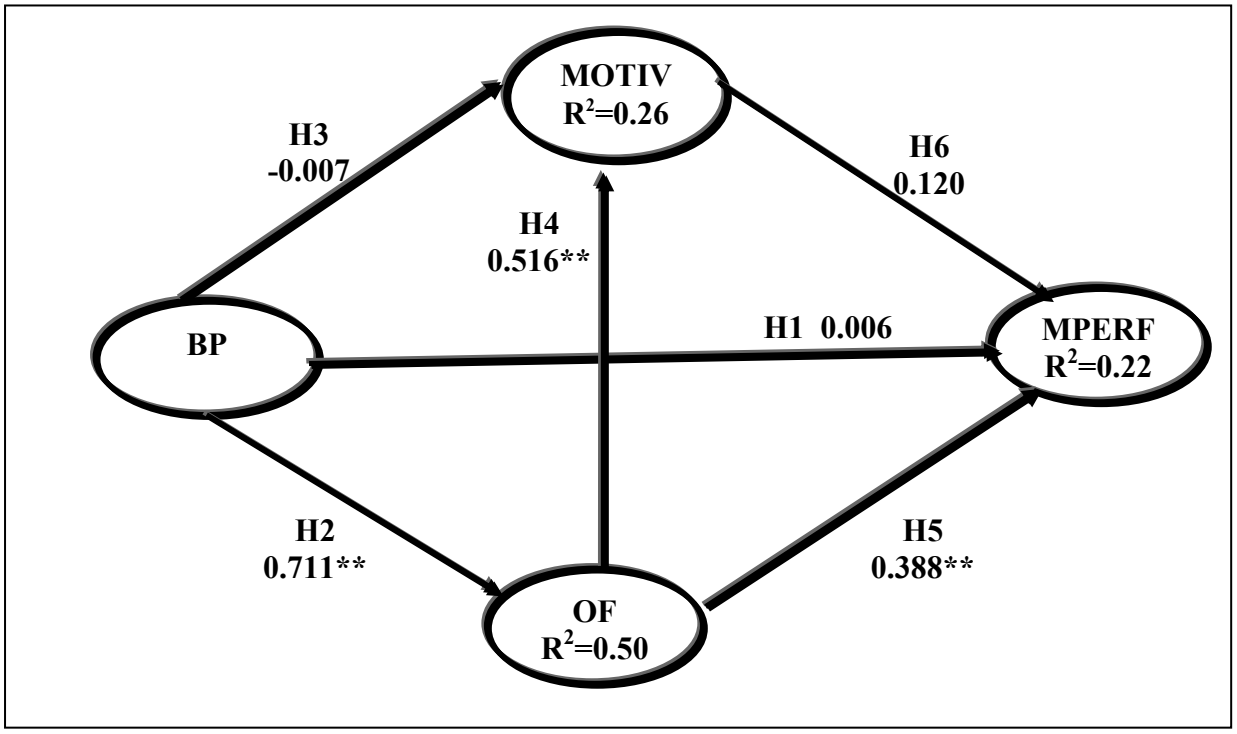
5.2.8.3 Hypotheses Testing Examining Mediating Effect

In examining the mediating role of the variables, Partial Least Squares (PLS) data analysis technique is used. Since this study examines not only organisational fairness, but also its two dimensions, the investigation of the mediating effects involves two models: the overall model and the separate model. The overall model shows the path coefficients of the main latent variables, while the separate model shows the path coefficients of all variables including the dimensions of organisational fairness.

5.2.8.3.1 Overall Model

Figure 5.1 shows the overall model of the research. It shows the path coefficients, its significance value (p-values) and the R^2 of the dependent variables. The coefficient of determination, R^2 of managerial performance shows the value of 22%. It means that only 22% of the variances in managerial performance are explained by the independent variables, in particular, budget participation, fairness perception and motivation. The remaining 78% was explained by other variables which are not tested in this study.

The table also demonstrates that organisational fairness has the R^2 of 50%, which indicates that budget participation explains 50% of the variances in organisational fairness. For motivation, only 26% of the variation can be explained by budget participation and fairness perceptions. The balance of 74% was explained by other variables which are not examined in this study.



**significant at 0.01
BP – Budget Participation; OF – Organisational Fairness; MOTIV – Motivation; MPERF – Managerial Performance

Figure 5.1: Partial Least Squares for Overall Model

There are four hypotheses that examine the mediating role of organisational fairness and motivation. Table 5.19 shows the hypotheses.

Table 5.19: Hypotheses Testing for Mediating Effect

H7: Organisational fairness mediates the relationship between budget participation and managerial performance
H8: Organisational fairness mediates the relationship between budget participation and motivation
H9: Motivation mediates the relationship between budget participation and managerial performance
H10: Motivation mediates the relationship between organisational fairness and managerial performance

Figure 5.1 shows that the direct relationship between budget participation and managerial performance is not significant. Even though the previous finding for H1 shows a significant result, the overall model of PLS shows that the relationship between these variables is not direct but through another variable, a mediating variable.

PLS output provides the results of the direct and total effect of the path coefficients. The decomposition of the direct and indirect effect from the total effect can be further analysed as appears in Table 5.20.

Table 5.20: Analysis of Direct, Indirect and Total Effect

Independent Variable	Dependent Variable	Direct Effects	Indirect Effects	Total Effects
BP	MOTIV	-0.007	0.367	0.359
BP	MPERF	0.006	0.319	0.325
BP	OF	0.711		0.711
MOTIV	MPERF	0.120		0.120
OF	MOTIV	0.516		0.516
OF	MPERF	0.388	0.062	0.450

BP – Budget Participation; OF – Organisational Fairness; MOTIV – Motivation; MPERF – Managerial Performance

It can be seen from Table 5.20 that the total indirect effect in budget participation-managerial performance relationship is 0.319 out of the total effect of 0.325. The direct effect is only 0.006. Thus, it is highly likely that there are indirect relationships between participation and performance. To determine whether organisational fairness or motivation, or both variables play a role as mediating variable, following Lau et al. (2008) and Lau and Tan (2006), the analysis of path coefficient was conducted as depicted in Table 5.21. Table 5.21 provides the analysis of the indirect effect between budget participation and managerial performance via organisational fairness and motivation.

Table 5.21: Analysis of Indirect Effect between Budget Participation and Managerial Performance

Hypothesis	Variable Path	Path Coefficient	Indirect Effects
H7	BP-OF-MPERF	0.711 x 0.388	0.276 (sig)
H9	BP-MOTIV-MPERF	-0.007 x 0.120	-0.001 (ns)
	BP-OF-MOTIV-MPERF	0.711 x 0.516 x 0.120	0.044 (ns)
	Total indirect effect		0.319

From the table, the relationship between budget participation and managerial performance is mediated by organisational fairness and not by motivation. The effect of organisational fairness is 0.276 and the effect of motivation in the relationship is 0.043 (-0.001+0.044). According to Barthol (1983) and Pedhazur (1982), if the absolute amount of the indirect effect is more than 0.05, the effect is significant. Since organisational fairness has an indirect effect of more than 0.05, it can be concluded that the perception of fairness mediates the relationship between budget participation and managerial performance, hence H7 can be supported. In contrast, motivation does not mediate the relationship, as the effect is less than 0.05, thus support for H9 cannot be granted.

H8 tests whether organisational fairness mediates the relationship between budget participation and motivation. The overall result of PLS in Figure 5.1 shows the relationship between budget participation and motivation is insignificant. This suggests that the perceptions of fairness may act as a mediating variable in the relationship. To further confirm the result, Table 5.20 and 5.22 need to be referred. Table 5.20 shows that there is a strong indirect effect in the path between participation and motivation. Further analysis of the indirect effect is conducted as in Table 5.22. The total indirect effect is 0.367, which is more than the threshold amount of 0.05, which may be considered meaningful (Pedhazur, 1982; Bartol, 1983). Thus there is enough statistical evidence to support H8.

H10 hypothesises whether motivation mediates the relationship between organisational fairness and performance. Table 5.22 shows the analysis of the effect and found that it is meaningful, since it is more than 0.05, thus it provides support for H10. As displayed in Table 5.20, the indirect effect between organisational fairness and managerial performance is 0.062 out of the total of 0.450. While motivation may mediate the relationship between fairness perceptions and managerial performance, the fairness perceptions themselves retain a substantial amount of its direct relationship with managerial performance.

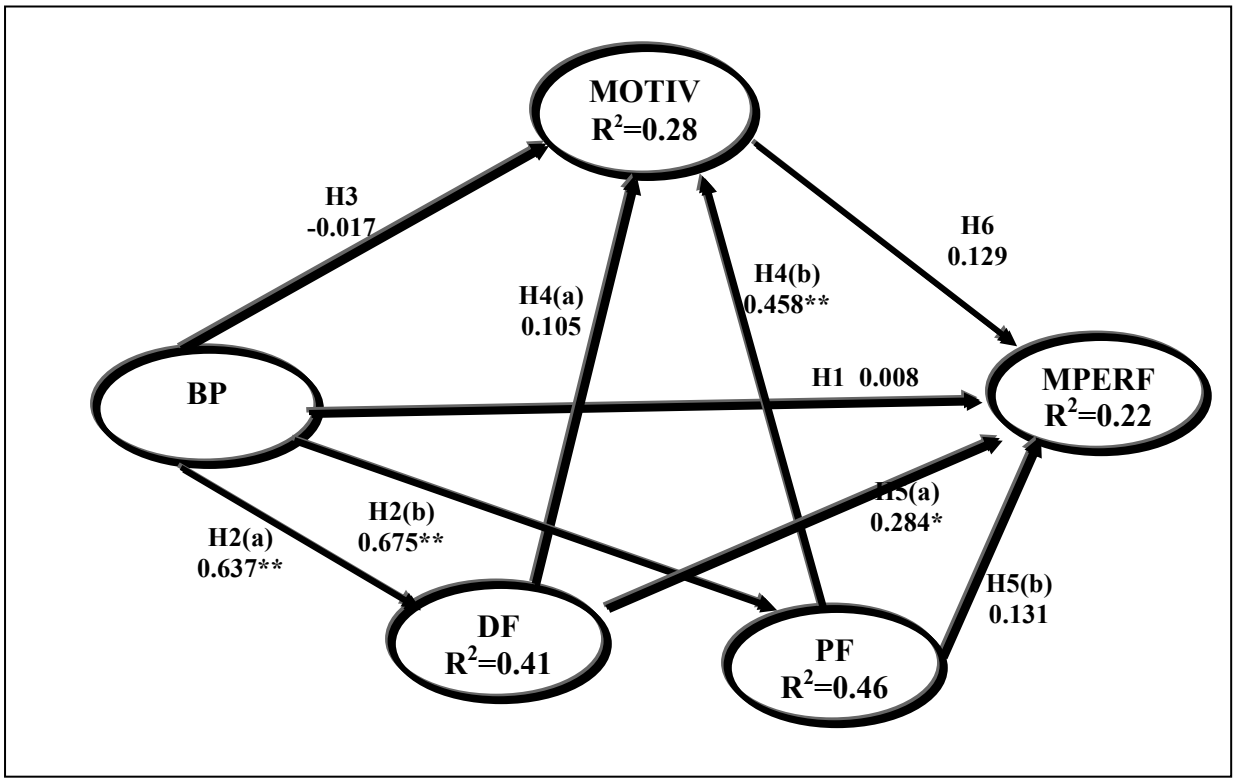
Table 5.22: Analysis of Indirect Effect between Budget Participation and Motivation, and between Organisational Fairness and Performance

Hypothesis	Variable Paths	Paths Coefficients	Total Indirect Effects
H8	BP-OF-MOTIV	0.711 x 0.516	0.367 (sig)
H10	OF-MOTIV-MPERF	0.516 x 0.120	0.062 (sig)

5.2.8.3.2 Separate Model Analysis

Separate model analysis is conducted to further examine the effect of each dimension of the organisational fairness variable, which consists of distributive and procedural fairness. Prior to the analysis, the evaluation of the measurement model and the structural model is conducted. The measurement model of the data is assessed by examining its internal consistency reliability, convergent validity and discriminant validity. Appendix C exhibits the outer and cross-loadings, the summary of the result of the measurement model and latent variables correlations. The results signify that all constructs have met the requirement of internal reliability and validity.

To evaluate the structural model, R^2 of the dependent variables, the path coefficients (β estimates) and its significance value (p-values) are evaluated. The results are shown in Figure 5.2.



**significant at 0.01
*significant at 0.05
BP – Budget Participation; DF – Distributive Fairness; PF – Procedural Fairness; MOTIV – Motivation; MPERF – Managerial Performance

Figure 5.2: Partial Least Squares for Separate Model

Figure 5.2 demonstrates the R^2 value of managerial performance of 22%. It signifies that 22% of the variation of performance can be explained by the independent variables of budget participation, both dimensions of organisational fairness and motivation. The other 78% is explained by other variables which are not examined in this study.

Further, higher coefficient of determination is shown by distributive fairness (41%) and procedural fairness (46%). The variation for both distributive and procedural fairness is explained by the variation in budget participation, while the rest is due to other factors. Finally, budget participation, distributive fairness and procedural fairness explain 28% of

the variances in motivation, while the remaining 72% is explained by other variables which are not tested in this study.

There are two dimensions of organisational fairness analysed in this study: distributive fairness and procedural fairness. In each main hypothesis that involves the organisational fairness variable, the sub-hypothesis examining the effect of its dimensions was tested to investigate whether distributive or procedural fairness plays a greater role in mediating the relationships. In particular, the hypotheses of H7a and H7b, H8a and H8b, and H10a and H10b are tested.

In examining the mediating role of distributive and procedural fairness, H7a and H7b are tested to examine the role of (a) distributive fairness and (b) procedural fairness in the relationship between budget participation and managerial performance. Figure 5.2 demonstrates that budget participation is not directly related to managerial performance (β=0.008, $p>0.05$). Thus, it is highly likely that the relationship may be mediated by both distributive and procedural fairness. To confirm the results presented in Figure 5.2, an additional analysis using the approach suggested by Barthol (1983) and Pedhazur (1982) is used. The analysis is shown in Table 5.23.

Table 5.23: Additional Analysis of Indirect Effect

Hypothesis	Variable Paths	Paths Coefficients	Total Indirect Effects
H7a	BP-DF-MPERF	0.637 x 0.284	0.181 (sig)
H7b	BP-PF-MPERF	0.675 x 0.131	0.088 (sig)
H8a	BP-DF-MOTIV	0.637 x 0.105	0.067 (sig)
H8b	BP-PF-MOTIV	0.675 x 0.458	0.309 (sig)
H10a	DF-MOTIV-MPERF	0.105 x 0.129	0.014 (ns)
H10b	PF-MOTIV-MPERF	0.458 x 0.129	0.059 (sig)

Based on the condition suggested by Pendhazur (1982) and Bartol (1983), the indirect effect in excess of 0.05 is considered meaningful. Since both distributive and procedural fairness have indirect effects of more than 0.05, which suggest they mediate the relationship between budget participation and performance. Hence there is enough evidence to support H7a and H7b.

As shown in Table 5.24, when the total effect is broken down into direct and indirect effect, the results indicate that there is an indirect effect in the budget participation-performance relationship. The value shows the indirect effect of 0.317 out of the total effect of 0.325. The combination of indirect effect of H7a and H7b provided the substantial total indirect effect of 0.269 (0.181+0.088), thus it can be concluded that the relationship between budget participation and performance is indirect through each distributive and procedural fairness[1].

H8a and H8b propose that distributive and procedural fairness mediates the relationship between budget participation and motivation. As shown in Figure 5.2, no evidence of a

[1] The balance of 0.048 of the indirect effect comes from the mediating role of motivation. This effect is not shown because it is not related to the discussion of H7a and H7b.

significant relationship between budget participation and motivation is found, which indicates the possibility of an indirect relationship through both perceptions of fairness. Similarly, the indirect analysis is done as appears in Table 5.23. It can be concluded that both fairness dimensions mediate the relationship between budget participation and motivation since their indirect effects are in excess of 0.05. Table 5.24 shows that the indirect effect was 0.376 out of the total effect of 0.359. It is clearly evident that the effects of budget participation on motivation are entirely indirect rather than direct, thus providing strong evidence to support both H8a and H8b.

H10 hypothesises the role of motivation as a mediating variable in the organisational fairness-managerial performance relationship. The previous result of H10 provides support for this relationship. Based on Figure 5.2, while distributive fairness is significantly related to managerial performance ($\beta=0.284$, $p<0.05$), procedural fairness demonstrates an opposite finding ($\beta=0.131$, $p>0.1$). This observation provides preliminary evidence of the results for the likelihood of the mediating role played by motivation in the relationship between procedural fairness and performance, and not in the distributive fairness-performance relationship. Further investigations need to be done to validate these hypotheses. As shown in Table 5.23, as expected, the indirect effect analysis shows that motivation only acts as a mediator in the relationship between procedural fairness and performance and not in the distributive fairness-performance relationship. The indirect effect is 0.014 for the relationship between distributive fairness and performance, and 0.059 for the relationship between procedural fairness and managerial performance. As a result, it provides insignificant evidence to support H10a while providing support for H10b. The analysis of direct, indirect and total effects as depicted in Table 5.24 also demonstrates that the effects of distributive fairness on managerial performance are mostly direct, rather than indirect,

thus further confirming the insignificant role of motivation as a mediating variable in the relationship between distributive fairness and managerial performance. While the relationship between procedural fairness and managerial performance is mediated by motivation (H10b), procedural fairness has a substantial direct effect on performance as the direct effect is considerably larger than the indirect effect.

Table 5.24: Additional Analysis of Direct, Indirect and Total Effect

Independent Variable	Dependent Variable	Direct Effects	Indirect Effects	Total Effects
BP	DF	0.637		0.637
BP	MOTIV	-0.017	0.376	0.359
BP	MPERF	0.008	0.317	0.325
BP	PF	0.675		0.675
DF	MOTIV	0.105		0.105
DF	MPERF	0.284	0.014	0.298
MOTIV	MPERF	0.129		0.129
PF	MOTIV	0.458		0.458
PF	MPERF	0.131	0.059	0.190

5.2.8.4 Hypotheses Testing Examining Moderating Effect

There are three hypotheses developed to test the moderating role of organisational culture in this study. Table 5.25 shows the hypotheses.

Table 5.25: Hypotheses Testing for Moderating Effect

H11: Organisational culture moderates the relationship between budget participation and organisational fairness.
H12: Organisational culture moderates the relationship between budget participation and motivation.
H13: Organisational culture moderates the relationship between budget participation and managerial performance.

In this study, consistent with O'Connor (1995) who examined the effect of organisational culture on role ambiguity and the superior-subordinate relationship in the participatory environment, organisational culture was operationalised based on the level of power distance, either high or low power distance level. In other words, the relationships between budget participation and performance, fairness perceptions and motivation are expected to differ in low and high power distance companies, by referring to the ownership structure of the companies. Local (Malaysian) companies have high power distance culture and foreign (Anglo-American subsidiaries) companies have low power distance culture (Hofstede, 1983; 2001). Specifically, the effectiveness of budget participation in increasing managerial performance, organisational fairness and motivation is expected to be higher in Anglo-American companies compared to Malaysian local companies (Hofstede, 2001).

To test these hypotheses, the method used by Harrison (1992; 1993), Lau and Tan (1998) and O'Connor (1995) is used. First, separate power distance index for each local and foreign firm group is calculated. This is done not only to know the present power distance index for both local and foreign firms located in Malaysia, but also to see whether cultural value between the firms have any significant differences. If there are any significant differences, the moderating role of organisational culture in the relationship between budget participation and organisational fairness (H11), budget participation and motivation (H12), and budget participation and managerial performance (H13) is examined.

Based on the study carried out by Hofstede from 1967 to 1978, Malaysia was ranked first in terms of the highest of power distance index, with a score of 104. However, in the current globalisation era, this index may no longer be accurate and there may be some changes in the current power distance index in Malaysia. Previous studies also have shown the changes of power distance index between Hofstede's and their studies (Harrison, 1992; 1993; Harrison et al., 1994; O'Connor, 1995). For instance, the score obtained by Singapore based on Hofstede's (1980) was 74, but studies revealed there are changes in the scores. Table 5.26 shows the changes of scores obtained by several nations presented in Lau and Buckland (2000), Lau and Tan (1998) and O'Connor (1995).

Table 5.26: Changes of Power Distance Index

	Power Distance Index from Previous Studies	Power Distance Index from Hofstede (1980)
Singapore		
Hwang (1989)	67	74
Harrison (1992; 1993)	92	
Harrison et al. (1994)	73	
O'Connor (1995)	61	
Lau et al (1997)	60	
Lau and Tan (1998)	63	
Australia		
Hwang (1989)	2	36
Harrison (1992; 1993)	58	
Harrison et al. (1994)	32	
Lau et al (1997)	26	
Lau and Tan (1998)	41	
Norway		
Lau and Buckland (2000)	-10	31

Sources: Harrison (1992; 1993), Harrison et al. (1994); Lau and Buckland (2000), Lau and Tan (1998) and O'Connor (1995).

Table 5.27 shows the overall power distance index in Malaysia, the index for local companies and the index for Anglo-American subsidiaries companies operating in Malaysia.

In Table 5.27(a), a total of 106 respondents that worked in 75 local firms and 31 foreign firms is analysed to see whether there exist any difference in the power distance index in both types of firms. Earlier, this study received 108 useful responses, but 2 responses were excluded because they worked in the firm that are owned by Singaporean. Singapore's power distance index is 74 (Hofstede, 1980; 1984a; 2001). Thus including Singapore in this analysis may distort the result and may not provide actual differences between local and foreign (Anglo-American) firms.

By employing the same measurement as in Hofstede (2001), overall the power distance index in Malaysia is 46 (Table 5.27(a)). This is quite surprising as the score obtained in this study is much lower than previously reported in Hofstede's, which scored 104.

Table 5.27: Power Distance Index

(a) Power distance index		**(b) Power distance index after matching for age, education and position**	
Overall (N=106)	46	Overall (N=25)	65
Local (N=75)	46	Local (N=15)	73
Foreign (N=31)	40	Foreign (N=10)	52

For each of the local and foreign firm group which was determined based on the ownership of the firm, local firms showed a score of 46 compared to the score of 40 calculated for foreign subsidiaries firms situated in Malaysia. As expected, local firms have a higher power distance index than foreign firms. To determine whether the differences in power distance score for local firms is significantly higher than foreign firms, the calculation is done following the procedures used by Harrison (1992), Lau and Tan (1998) and O'Connor (1995) studies, by using Hofstede's (2001) score as a base.

The difference in the score between local and foreign firms is 6 (46-40) and it represents 0.27 standard deviation, based on a standard deviation of 22 in Hofstede distribution, The result demonstrates that the difference in the power distance index was not significant ($p=0.39$, $\alpha > 0.1$).

To confirm this result, a further investigation was done using the method suggested by Hofstede (1980) that examines the score or power distance index after matching the respondents according to age group, education level and position level. In other words, all respondents that have similar group of age, education and position are analysed. This method of index computation was also applied in O'Connor (1995). In this study, based on the age group of 30 to 40 years old, holding bachelor degree and working in middle level positions, the total number of respondents is 25 which comprise of 15 local and 10 foreign firms. The results are shown in Table 5.27(b).

The power distance index in Malaysia is 65 overall. This is higher than previously calculated in Table 5.27(a). The index for local firms is 73 and for foreign firms the score is 52. Again, as expected, local firms have higher power distance index than in foreign firms. However, this result is much more meaningful as it shows higher difference between the firms owned by local and foreign firms.

To examine whether any significant difference exists in the two scores, similar calculation was performed. The difference in the score between local and foreign firms is 21 (73-52) and represents 0.95 standard deviation (based on standard deviation of 22 in Hofstede distribution). Likewise, no significant results were recorded for the difference in power distance index for both firms ($p=0.17$, $\alpha > 0.1$).

The insignificant differences revealed in the power distance index are likely to be due to the internalisation and globalisation effect (Lau and Tan, 1998) among employees either in local or foreign companies. In addition, in this globalisation era, more employees have an external education background which may bring down the power distance effect in these local companies. Further, the globalisation era promotes openness in communication between employees and employers hence employees are more proactive in the firms' decision making compared to the traditional working environment.

The examination of the possible differences in local and foreign firms was further extended to cover each individual item of power distance, following the study by O'Connor (1995) and Soeters and Schreuder (1988). Table 5.28 shows that each item seems to have differences between local and foreign companies. Table 5.28(a) presents the results of the original 106 firms, while Table 5.28(b) presents the results of the items after the matching process according to the similar age group, education level and position of the managers.

From the results shown in Table 5.28(b), it can be inferred that managers in local companies prefer to work under a more persuasive or less consultative style of superior than managers in foreign firms, who prefer a more consultative and participative style of superior. The managers in local firms also perceive that their own superior practises a more persuasive style of decision making than their peers in foreign firms which perceived a more consultative style of leadership. Finally, managers working in local firms are more afraid to express disagreement with their superiors than managers in Anglo-American firms. However, based on the results of the t-test, no significant evidence was found at 0.05 significance levels for all the power distance items analysed. Even though the results present otherwise, they are in the expected direction.

Table 5.28: Mean Score for Each Power Distance Items

(a) Score for each item				(b) Score for each item after matching for age, education and position			
	PD1	**PD2**	**PD3**		**PD1**	**PD2**	**PD3**
Overall (N=106)	3.12	2.56	3.69	Overall (N=25)	3.08	2.92	3.92
Local (N=75)	3.08	2.55	3.67	Local (N=15)	2.80	2.90	3.80
Foreign (N=31)	3.26	2.68	3.81	Foreign (N=10)	3.50	2.93	4.10
p-value	0.342 (ns)	0.536 (ns)	0.5 (ns)	p-value	0.071 (ns)	0.941 (ns)	0.491 (ns)

PD1: managers' preference of superior either autocratic (1), persuasive (2), consultative (3), or democratic (4)
PD2: managers' perception of superior either autocratic (1), persuasive (2), consultative (3), or democratic (4)
PD3: managers afraid to express disagreement to the superior, ranging from (1) very frequent to (5) very seldom

To further confirm the effect of organisational culture in the budget participation practices, the hypotheses examining the moderating role of organisational culture (H11, H12 and H13) were tested. H11 hypothesises the role of organisational culture as a moderating variable in the relationship between budget participation and organisational fairness. H12 and H13 hypothesise the moderating role of organisational culture in the budget participation-motivation relationship and in budget participation-managerial performance relationship, respectively.

In order to test the moderating effect of organisational culture, hierarchical regression[2] was used. Following O'Connor (1995), the local and foreign firms sample were combined and a dummy variable of 0 and 1 was used to represent the local (high power distance) and foreign firms (low power distance) respectively.

[2] Before conducting the analysis, normality and multicollinearity test were conducted. For normality test, the results are shown in Appendix D, which suggest that no serious violation of the normality assumption. For multicollinearity test, based on the results of Pearson correlation (as shown in para 5.2.6), it is suggested that multicollinearity was not considered a problem.

Hierarchical regression involves the 3-steps. First, the independent variable (budget participation) was included in the regression model. Second, the moderator variable (organisational culture - power distance) was entered. In the final step, Step 3, the cross-products or the interaction between budget participation and organisational culture, were entered as a set. The interaction exists if the inclusion of the interaction variables improves the subsequent betas, F values and change in R^2, with the significance results of the F change (Dean and Snell, 1991).

Table 5.29 shows the results of the hierarchical regression for the effects of the interactions between budget participation and cultural value on organisational fairness, motivation and managerial performance.

Table 5.29: Results of Interaction between Budget Participation and Organisational Culture on Organisational Fairness, Motivation and Managerial Performance

Steps and Variables	Standardised Beta	R^2	R^2 Change	F	Sig. F Change
Hypothesis 11					
DV = Organisational Fairness					
1. Participation (P)	0.727	0.468	0.468	91.362	0.000
2. Organisational Culture (C)	0.147	0.474	0.006	46.377	0.274
3. P x C	-0.236	0.477	0.003	30.958	0.465 (ns)
Hypothesis 12					
DV = Motivation					
1. Participation (P)	0.301	0.110	0.110	12.912	0.001
2. Organisational Culture (C)	-0.194	0.111	0.000	6.400	0.914
3. P x C	0.193	0.112	0.002	4.305	0.646 (ns)
Hypothesis 13					
DV = Managerial Performance					
1. Participation (P)	0.326	0.077	0.077	8.705	0.004
2. Organisational Culture (C)	0.211	0.080	0.003	4.466	0.594
3. P x C	-0.275	0.084	0.004	3.099	0.521 (ns)

It can be seen that the inclusion of the interaction term between budget participation and organisational culture (P x C) for all the hypothesis have not significantly improved the model. The F change shows insignificant values ($p>0.1$), which suggest that there were no moderating role played by organisational culture in affecting the relationship between independent variable (budget participation) and dependent variable (organisational fairness, motivation or managerial performance). It can be concluded that organisational culture does not moderate the relationship between budget participation and organisational fairness, motivation and managerial performance, thus H11, H12 and H13 cannot be supported. The results suggest the nature of relationship between the independent variable (budget

participation) and the dependent variable (organisational fairness, motivation or managerial performance) in local and foreign firms is somewhat similar.

These results further confirmed the insignificant differences of cultural value among Malaysian managers in both local and foreign firms. One of the possible reasons for the insignificant findings may be due to the respondents' background. While local and foreign firms participated in the questionnaire survey, all the respondents are Malaysian managers. This is due to difficulty in getting adequate number of foreign middle-level managers working in Malaysia. Furthermore, most foreign managers usually serve in the top management positions and the number of these top managers is very small.

The sampling design of this study is consistent with Douglas et al. (2007), O'Connor (1995) and Soeters and Schreuder (1988) who collected data from local and foreign firms operating in the same nation. The respondents of these studies were also locals. On the other hand, there are studies which were able to obtain adequate sample of local and foreign respondents. For example, Tsui (2001) examined the cultural effect on budget participation and found significant difference in Chinese and Western managers. Tsui (2001) collected data from Chinese managers working in China and Caucasian expatriate managers working in Hong Kong. Similar results were also found in Harrison (1993; 1994) who collected data from Australian managers and Singaporean managers working in Australia and Singapore, respectively.

The summary of the results concerning all the hypotheses are presented in Table 5.30.

Table 5.30: Summary of Hypotheses Testing and Findings

Main Hypothesis	Findings
H1: There is a positive relationship between BP and MPERF	Supported
H2: There is a positive relationship between BP and OF	Supported
H2a: There is a positive relationship between BP and DF	Supported
H2b: There is a positive relationship between BP and PF	Supported
H3: There is a positive relationship between BP and motivation	Supported
H4: There is a positive relationship between OF and motivation	Supported
H4a: There is a positive relationship between DF and motivation	Supported
H4b: There is a positive relationship between PF and motivation	Supported
H5: There is a positive relationship between OF and MPERF	Supported
H5a: There is a positive relationship between DF and MPERF	Supported
H5b: There is a positive relationship between PF and MPERF	Supported
H6: There is a positive relationship between motivation and MPERF	Supported
H7: OF mediates the relationship between BP and MPERF	Supported
H7a: DF mediates the relationship between BP and MPERF	Supported
H7b: PF mediates the relationship between BP and MPERF	Supported

H8: OF mediates the relationship between BP and motivation	Supported
H8a: DF mediates the relationship between BP and motivation	Supported
H8b: PF mediates the relationship between BP and motivation	Supported
H9: Motivation mediates the relationship between BP and MPERF	Not supported
H10: Motivation mediates the relationship between OF and MPERF	Supported
H10a: Motivation mediates the relationship between DF and MPERF	Not supported
H10b: Motivation mediates the relationship between PF and MPERF	Supported
H11: OC moderates the relationship between BP and OF	Not supported
H12: OC moderates the relationship between BP and motivation	Not supported
H13: OC moderates the relationship between BP and MPERF	Not supported

BP: Budget participation; DF: Distributive fairness; PF: Procedural fairness; OF: Organisational fairness; MPERF: Managerial performance; OC: Organisational culture

5.3 Results of the Semi-Structured Interview

5.3.1 Background Information

In general, the results of the questionnaire survey show that budget participation is positively related to managerial performance, fairness perceptions and managers' motivation. Moreover, organisational fairness is also found to be an essential predictor of managerial performance. Finally, the differences in organisational culture do not play any role in affecting the effectiveness of budget participation.

The interviews attempt to provide further information on the extent of budget participation practices in a firm, the reasons for budget participation, the persons involved and the barriers to implement budget participation. Moreover, the interviews also aim to ascertain the influence of organisational culture on budget participation together with the impact of budget participation on managerial performance, satisfaction and motivation. In the final part of the interviews, the opinions from the practitioners or managers on the results from the survey questionnaire were obtained, whether or not it reflects practices at firm level.

5.3.2 Profile of the Respondents

A total of 10 interviews were carried out with managers who have budget responsibility. These managers were randomly selected from the respondents of the mail returned questionnaire survey. Due to time and cost constraints, only managers from Klang Valley were selected for face-to-face interview. Each interview session took between 45 minutes to one hour, and was conducted in the respondent's office. The questions asked during the interview were based on the interview guide, in order to ensure the coverage of all important issues. This also ensured the consistency of the questions asked to all respondents. Appendix B provides a copy of the interview guide. Out of 10 interviewees,

only 7 respondents agreed to the tape-recording of the session. Besides voice-recording, notes were also taken to prevent any loss of data.

Table 5.31 provides the profile of the respondents who participated in the interview. The table shows that the number of male and female respondents was quite equal with 6 males and 4 females. Out of 10 respondents, 7 were in the middle position of the organisation, while the rest held top management positions. The majority of the respondents in the interview were in the finance department (6), followed by the operations department (2) and only one in each of the engineering and manufacturing departments. All the respondents had been in their current position for at least two years, while there were two respondents with service of 10 years.

Table 5.31: Profile of the Respondents Who Participated in the Interview

Respondent	Gender	Position	Department	Length of Service in Current Position (years)
A	Female	Senior Executive	Operations	3
B	Male	Manager	Finance	2
C	Male	Operation Manager	Operations	6
D	Male	Senior Manager	Finance	3
E	Female	Senior Manager	Engineering	4
F	Male	Senior Manager	Finance	10
G	Female	Senior Executive	Finance	6
H	Male	Senior Executive	Finance	7
I	Male	Department Manager	Manufacturing	3
J	Female	Assistant Manager	Finance	10

5.3.3 Profile of the Respondents' Firms

Table 5.32 provides the profile of the respondents' firms who participated in the interview. It shows that both types of industries, the manufacturing and services industries, were involved in the interview session with equal responses received from each industry. The number of employees in respondents' firms ranges from 120 to a maximum of 1200. Within the industry, there are several types of firms involved including palm oil, sugar, automotive and ship building firms in the manufacturing industry, while firms in the services industry are multimedia, security, water treatment and communication firms.

Table 5.32: Profile of the Firms Participating in Interviews

Respondent	Type of Industry	Type of Company	Number of Employees
A	Services	Multimedia	800
B	Manufacturing	Palm Oil	1000
C	Services	Security	320
D	Services	Multimedia	120
E	Services	Water Treatment	280
F	Services	Communication	150
G	Manufacturing	Sugar	360
H	Manufacturing	Palm Oil	400
I	Manufacturing	Automotive	1200
J	Manufacturing	Ship Building	900

5.3.4 Opinions on Budget Participation

5.3.4.1 The Necessity of Budget Participation

All the respondents interviewed were involved in the process of setting up budgets. They agreed on the beneficial outcome that can be obtained from budget participation process. Almost all managers acknowledged the importance of information gathering as one of the reasons for budget participation. As mentioned by one interviewee in a senior executive position in a multimedia company, "by participation, we can give more accurate

information and amount as only the right people knows the exact amount and quantity needed" (Respondent A). Another interviewee, a Senior Manager in a service industry, said that "we need information from the lower level of managers, they are directly involved in their work, thus they are the one who knows exactly what they want" (Respondent E).

This reason for budget participation is consistent with the study conducted by Parker and Kyj (2006) and Nouri and Parker (1998). Parker and Kyj (2006) found that through participation, information can be shared among employees, while Nouri and Parker (1998) found the need to have adequate budgetary support to fulfill job requirements. They concluded that with the information given by those employees directly involved in the work, enough budgetary support ensures the better performance of not only the individual, but also the organisation performance.

Apart from sharing of information, budget participation is also practised to ensure that budget can be implemented without much disagreement. Every manager that has budget responsibility must be aware of the direction of the firm or the department. One of the interviewees, the Finance Senior Executive in a manufacturing firm, said "budget participation is good for the future company direction (Respondent G), while another interviewee, the Senior Manager of a service firm said that "everybody needs to know the information to make sure they are aware of where the company is headed" (Respondent F).

By involving managers in preparing budget, it provides a basis for performance evaluation, or as a control over performance. As stated by the interviewee, who is in a Department Manager position in an automotive company, "budget is part of our KPI" (Respondents I) and another Senior Manager from a multimedia company said, "it can improve company performance, can control the cost" (Respondents D).

In conclusion, based on the responses from the interviewees, budget participation is an important practice in the organisation. Not only does it promote the sharing of information, it also provides the direction of the company and acts to control employees' performance.

5.3.4.2 Staff Involved in Budget Preparation

The respondents were asked who they think should be involved in preparing budgets and who are currently involved. Almost all the respondents agreed that at present the persons who should be involved in the budget preparation process are currently involved in the process. All the respondents affirm that the Finance Department should be involved directly in the budget preparation process. As stated by the Finance Assistant Manager of a ship building company, the "Finance Department coordinate, and all production divisions will prepare the budget" (Respondent J). Another respondent, the Senior Manager in the Finance Department of a communication firm also said that "the finance manager leads, with participation of other managers" (Respondent F).

However, the budgeting practice in a multimedia firm involves only the finance department. As stated by the Senior Manager of the firm, "all heads should be involved in preparing budget, but currently only finance and accounting people are involved" (Respondent D).

This implies that at a practical level, the budget participation practices differ from one organisation to another. The staff involved in preparing the budget could be from various departments, or only the finance department.

5.3.4.3 Barriers in Implementing Budget Participation

Most of the managers cited the time factor as one of the main reasons that discourages the involvement of managers in preparing budget. They argued that even though there are many advantages in allowing managers to participate in budget preparation, the process is very time consuming. Normally, the budgeting process could take up to 6 months. One of the interviewees, a manager in a palm oil company, when asked about the barriers in implementing budget participation, said "it is the time factor as budgeting process would take away the employee time from their regular work" (Respondent B), while another interviewee, a Senior Manager from a communication company, also said "it is the time factor, too many inputs from different people" (Respondent F). The Senior Executive from the palm oil firm said "we only have 3 months to gather all the information needed before presenting it to the Board. The market is volatile; we need expertise to estimate, so need extra time" (Respondent H).

Apart from the time constraint that hinders the implementation of budget participation, the attitude and mind-set of those managers involved in budget preparation is also a contributing factor. As mentioned by the Senior Manager of a water treatment firm, "the lethargic attitude of those staff who do not check the current prices with the suppliers, they just budget using previous estimation, will lead to participation becoming ineffective as the information provided is inaccurate" (Respondent E).

Based on the responses given by the interviewee, it can be generalised that the time factor is the main obstacle in implementing budget participation, apart from the negative attitudes of the employees. This finding is consistent with Hilton (2009) and Libby and Lindsay (2007).

5.3.4.4 The Influence of Organisational Culture in the Implementation of Budget Participation

In obtaining insight into the influence of organisational culture in the implementation of budget participation, the meaning of organisational culture in the context of this study was explained to all the respondents. The explanation of organisational culture, in particular the extent of power distance or the leadership style of their superior, is based on the literature. In general, organisational culture in this study refers to the level of power distance. Large power distance societies are normally related to an autocratic style of leadership, more concerned with the enforcement of decisions by the superior. On the other hand, in low power distance societies, a more lenient and democratic style of leadership is practised where the views and opinions of the managers will be considered by the superior before making any decision.

All the respondents agreed that in the work culture that practises high power distance, if there is an autocratic leader, any decision made through participation would not be effective as the final decision will be determined by the leader. As such, budget preparation will be ineffective and a waste of time and resources as the final decision still lies with the top management. A Finance Manager in the oil palm industry said, “normally in high power distance culture, the budget prepared is just to play safe, just refer to the last year’s budget, with a few amendments” (Respondent B). Another respondent from the services industry

said that “if high power distance is being practised, it is easier to implement budget, top management will be more focus. But low power distance is better. When all are involved, this can cater for the needs for each member of staff” (Respondent D).

However, coincidentally, all the respondents interviewed said that generally in their department, the power distance is low. Everybody is involved in setting-up budget and the head or the top management makes a decision based on the budget that has been prepared. If the management is not satisfied or not clear with the budget, they will seek justification before any amendment is made. One of the respondents, the Finance Senior Executive of a sugar company asserted that “this company is not owned by one person or owned by family business, so every decision must be made collectively” (Respondent G) and another respondent, from a water treatment company claimed that “everybody needs to participate. No one knows everything, even the leader. The decision made must be based on the views provided by the staff, because they are directly affected” (Respondent E).

Thus, it can be concluded that there is some influence of organisational culture in the implementation or the success of budget participation. However, based on the comments made by the interviewees, in their companies, a more positive impact of culture is evidence that the companies are generally practising a more democratic style of leadership.

5.3.4.5 The Impact of Budget Participation on Managers' Performance and Satisfaction

All respondents agree that budget participation has some impact on managers' performance and satisfaction. For the firms which use budget as a sole determinant for performance evaluation, the impact of budget participation on performance is more visible. This is illustrated by the statement by the Finance Manager from a palm oil firm, "it should have an impact as they have a say on the way the budget was developed. If there are variances, the KPI (key performance indicators) will be affected" (Respondent B). Another interviewee, the Finance Senior Manager of a multimedia firm also said that "yes, there is an effect. If the target is achieved, the performance of the individual and company can be improved, employees feel satisfied" (Respondent D). While the Senior Manager of a water treatment firm expressed, "When we participate, we know that our project and needs will be fulfilled and make us do our job more effectively and efficiently, thus our performance will be increased too" (Respondent E). For firms which evaluate performance based on several factors other than budget, the effect of budget participation on performance is indirect. "The effect is very minimal, other factors count", said the Senior Executive of a multimedia firm (Respondent A).

For satisfaction, the same Senior Executive stated that, "when we participate, we feel more appreciated as chances are given to be involved in budget matters. No matter whether the opinion is being considered or not" (Respondent A). Another respondent, the Senior Executive of a palm oil firm also mentioned that "when we participate, then the company is suffering loss, staff performance will be affected and so will satisfaction. When we are able to achieve target, we will feel self-satisfaction because there is a reward in terms of dinner and additional cost of living allowance, which is based on performance" (Respondent H).

Thus, it can be concluded that there is some impact of budget participation on managers' performance and satisfaction. The findings are consistent with the literature that found beneficial influence of budget participation on budgetary performance and employees' satisfaction (Chalos and Haka, 1989; Kenis, 1979; Merchant, 1981).

5.3.5 Opinions on the Results of the Survey

In this part, the respondents were informed about the main results of the survey questionnaire. Their perceptions on the results were sought to gain further insights on the findings, and whether they reflected actual practices at firm level.

In general, three main findings are found from the survey questionnaire.

- Budget participation enhances managerial performance, organisational fairness and motivation
- Organisational fairness is an essential factor that may increase the performance of the managers
- No impact of organisational culture is found that may affect the effectiveness of budget participation

5.3.5.1 Budget Participation Enhances Managerial Performance, Organisational Fairness and Motivation

The first main finding of the survey is that budget participation leads to higher managerial performance, organisational fairness and motivation. When asked about the findings, all respondents agreed that the results reflect the real situation in the firm. They agreed that when budget is prepared through the participation of managers, it can enhance the performance, fairness and motivation of those managers. When they participate, at least some, if not all, of their needs will be fulfilled. It is illustrated by one of the interviewees, the Senior Manager of a water treatment firm, "when we participate, we know what we have targeted, we know what we can do and there are allocations to do what have been planned. It definitely increases our performance, our motivation and we feel that there is fairness in the organisation" (Respondent E). The Finance Senior Manager of a communication firm also said, "participation creates ownership of the budget. Thus we are motivated to achieve what we planned and we feel fair enough" (Respondent F).

5.3.5.2 Organisational Fairness is an Essential Factor That Increase Performance of Managers

The survey shows that the perceptions of fairness are an essential factor that may increase the performance of managers. Most of the managers interviewed believe that the fairness perceptions are a necessary factor to increase the performance of employees. Consistent with the survey results, a Senior Executive of a multimedia firm said, "fairness is very important determinant to increase the performance of managers" (Respondent A) and another Senior Manager of the other multimedia firm also said "fairness really reflects practices at this firm" (Respondent D) and "organisational fairness is important in the organisation", said the Senior Manager of a water treatment firm (Respondent E).

Based on these comments, it can be concluded that fairness perception is an essential factor that increases the performance of employees. However, three out of ten respondents expressed doubt on the role played by organisational fairness. One of the interviewees, the Department Manager of an automotive industry said "Good managers must efficiently manage the tasks based on the budget provided. Even though it is not fair, work is work, the responsibility is there" (Respondent I). Another respondent, the Manager from the oil palm industry says "all variables have been set by the holding company. The subsidiary has to follow without any objection. The element of fairness is affected as the company has to follow the variables. This could affect their budget figure beyond their control" (Respondent B). The above comments suggest the existence of high power distance in these companies as these managers felt that they need to follow the decisions or the budget made by top management.

It can be seen that even though overall survey results show the essential role played by the fairness perceptions, some of the managers perceived otherwise. From their opinions, it can be a sign of the existence of a cultural effect in certain companies. However, these opinions may reflect their own firm and cannot be generalised to the whole findings.

5.3.5.3 The Effect of Organisational Culture on the Effectiveness of Budget Participation

The third main finding is related to the impact of organisational culture on the effectiveness of budget participation. The results from the survey show that the cultural value does not affect the effectiveness of budget participation. This is inconsistent with the literature which suggests that the effectiveness of budget participation is influenced by the

organisational culture that exists within an organisation (Frucot and Shearon, 1991; Hofstede, 1984a; O'Connor, 1995).

When asked for their opinion with regards to this finding, all the interviewees perceive that in general, the cultural value should have some influence on the effectiveness of budget participation. If there is an autocratic style of leadership by the superior, then the effectiveness of participation can be adversely affected. In fact, the employee will not be allowed to contribute ideas and provide adequate information even regarding the work in which they are directly involved. But if the superior is practising a more democratic style of leadership, budget participation is more effective and useful.

Asked whether this cultural difference reflects the practices at their firm, the Finance Manager of the oil palm company said, "...it depends on the CEO. Definitely budget will be prepared based on the amount that will be approved by the CEO. In my company, my boss will discuss first with staff for justification if he does not agree with the budget prepared" (Respondent B). The Operation Manager of a security firm said "I think discussion should be practised, like what has been done here" (Respondent C). Another respondent, from a sugar processing firm, who is the Finance Senior Executive expressed that "this is not a family business. Participation is practices and no impact of culture" (Respondent G). Another Manager from an automotive firm says "in general, organisational culture should have impact. Sometimes we need participation, sometimes not. Normally for HOD and the bottom level, we really need participation. But for HOD and the above level, there would be less participation. It's a challenging factor, readiness to accept and accommodate whatever decision is made by the top management" (Respondent I).

Based on the views provided by the respondent, it can be concluded that generally organisational culture is perceived to affect the effectiveness of budget participation. If the firm is practising low power distance culture, or is practising a democratic style of leadership, the participation is definitely more effective. Even though all the respondents of the interview come from local firms, their firms are practising a more participatory style of leadership, thus there is a higher level of budget participation in their firms. However, they also stated that the level of budget participation in family-owned local firms might be lower. In family-owned businesses, usually the management positions are controlled by family members and the top person in the organisation is usually the oldest family member, which will increase the power distance in the company.

The result of the interview is consistent with the result of the survey. It is found that regardless of the ownership of the firm, the managers' participation in preparing budget makes no difference. All the managers participate equally or are involved in the budget setting process in both local and foreign firms. In the literature, however, the effectiveness of budget participation in high power distance countries is arguable (Hofstede, 1980) as societies in high power distance countries are more likely to be a follower and inequality of power occurs (Hofstede, 1983). Previous studies that have demonstrated the effect of cultural value in the management control system of the organisation include Douglas et al. (2007), Frucot and Shearon (1991), Harrison et al. (1994) and O'Connor (1995).

The possible explanation for this deviation may be the moderate level of power distance index obtained in this study. In the literature, a question arises about the usefulness of participation because the studies refer to Hofstede's (1983) study. Hofstede has classified Malaysia as having high power distance index, based on his research conducted from 1967

to 1978. This index, however, may become obsolete and may not be applicable in the 21st century. As such, this may suggest that since Malaysia has a moderate level of power distance, participation is being practised in firms and the effectiveness of the involvement of managers in budget decisions cannot be questioned. Moreover, even though there exist differences in power distance level in local and foreign-owned companies, the differences are not strong enough to influence budget participation.

While no effect of organisational culture was found in this study, this result is consistent with Lau and Tan (1998). Lau and Tan examined the cultural influence between Australia and Singapore in the effect of evaluative style on managerial performance. They argued that the surprising result could be due to the "internationalisation and globalisation of financial market" (p. 174) and the higher qualifications and international exposure that Singapore managers have.

5.4 Summary

This chapter provides the research findings of the study for both the questionnaire survey and semi-structured interviews. The results of the questionnaire survey cover the analysis of the respondents and the data, which comprise the presentation on the demographic profile of the respondents as well as of the firms. The descriptive statistics for all the variables used in this study and the bivariate correlation on the basis of Pearson correlation are also presented. Moreover, various t-tests and analyses of variance were conducted to examine the existence of significance differences of the key variables across demographic variables. The tests show the insignificant differences among almost all of the variables.

Correlation matrix, Partial Least Square (PLS) technique and hierarchical regression analysis were used to test the hypotheses developed in the previous chapter. Overall, the results indicate the significant direct effect of budget participation on managerial performance, organisational fairness and motivation of managers. The results also show the significance of organisational fairness, particularly the distributive and procedural fairness in the relationship between budget participation and managerial performance and between budget participation and motivation. The effectiveness of budget participation is not influenced by the ownership of the firms as the findings show no significant differences were found in respect of the power distance index and each item of power distance measurement in the local and foreign companies.

For the semi-structured interview, the results are consistent with the survey. Overall, all the interviewees were involved in the preparation of budget in their companies. While the time factor becomes the main barrier in implementing budget participation, the managers agreed for the positive role played by the budget participation practices. From the opinion expressed by the interviewees, budget participation is significantly related to increase managerial performance, fairness perceptions and motivation. Moreover, the results also show that organisational fairness is an essential factor in increasing the performance of employees. For the effect of organisational culture in their companies, all the respondents affirm that their firms are practising a higher level of budget participation. As such, no effect of high power distance occurs in their companies that could affect the effectiveness of budget participation practices.