## **CHAPTER FOUR**

# RESEARCH FINDING

## 4.1 INTRODUCTION

Chapter three discussed the hypotheses development and methodology used to test the hypothesis. This chapter reports findings of the questionnaire survey carried out in order to test the hypothesis described in Chapter Three.

# 4.2 RESPONDENTS' BACKGROUND

The respondents are consists of Vice Chancellor/President, Financial Controller, Member of Board of Directors, Head of Internal Audit Department and Internal Auditors. Total population consists of 17 public institutions of higher education and 49 private institutions of higher education. Sample selected is shown in Table 4.1.

Table 4.1 Sample Selected In The Study

Institutions	Respondent	Number of	%	Sample size	% Of Response	
		Response			Over Sample	
	Vice Chancellor/President	6	18.18	17	35.29	
	BOD	10	30.30	17	58.82	
Public	Financial Controller	9	27.28	17	52.94	
	Registrar	8	24.24	17	47.06	
Total		33	100	68	48.53	
	Vice Chancellor/President	10	15.15	49	20.41	
	BOD	2	3.03	49	4.08	
Private	Financial Controller	29	43.94	49	59.18	
	Registrar	25	37.88	3 49	51.02	
Total		66	100	196	36.94	
Total Response/total sample		99		268	36.57	

The response rate is fairly acceptable. The responses from different type of respondent show a difference. Board of Directors in public institutions of higher education were more responsive than Board of Directors in private institutions of higher education whereas in private institutions of higher education Financial Controllers were more responsive.

## 4.3 ANALYSIS

The analysis were based on 99 responses from the management of institutions of higher education which consists of Vice Chancellor/President, Financial Controller, Registrar and Member of Board of Director in both public and private institutions of higher education.

Before the survey was sent out to the respondents, the researcher had called the sampled institutions to investigate the existence of internal audit function in their institutions. The telephone survey indicated that 18.37% of private institutions of higher education have internal audit departments and all of them are either incorporated as public listed companies or subsidiary of public listed companies. For the public institutions of higher education, 88.24% of institutions have established internal audit department, the remaining are the newest institutions, which are in operation for a period less than 3 years.

This study also incorporated question on the existence of internal audit department on the questionnaire to Vice Chancellor/President. All respondents from public institutions of higher education stated that their institutions have internal audit department whereas only 40% of respondents from private institutions of higher education stated the same.

33.33% and 46.67% of private and public institutions' Head of Internal Audit Department respectively responded to the questionnaire. All the Head of Internal audit department of public institutions of higher education who responded indicated the budget allocated for the internal audit department are less than

RM100, 000 whereas 33.33% of head of internal audit in private institutions of higher learning stated that their budget are between RM100, 000-150, 000. The limited amount of budget allocated to the internal audit department might restrict the scope of their audit activities.

All the Head of Internal Audit of public and private institutions of higher education who responded indicated that their audit covers the review of the operations to ensure compliance with laws, regulation and contract. Further, all respondents also stated that the internal auditors involve in suggesting improvement to internal control procedures to the institutions. The results suggest that, on the issue of internal control, internal auditors in both institutions comply with the requirement of the IIA Guideline and Treasury Circular.

With regards to the type of audits perform in the institutions of higher education, 80% of the respondent stated that their audit covers both management and financial audit. This suggests that management auditing also important in institutions of higher education. It is evidenced by nearly half of respondents (49.55%) believe that financial audit should not be given priority over operational auditing.

On the question of EDP audit, 43% of respondent in public institutions of higher education covers EDP audit in their organization, while in private institutions of higher education, only 33% of respondent cover the EDP audit. This indicated that less emphasis is given in this area, which in the researcher's opinion is due to the lack of technical resources and skilled personnel or may be the reluctance in the part of internal auditors to venture in the area outside the traditional auditing. However, it might also relate to the less amount of budget allocated to internal audit department. The results are consistent with the finding of survey by MIA in 1989. Findings show that, institutions of higher education still left behind in terms of auditing in technological environment.

Questionnaire to the Head of Internal Auditor is to gain information about the scope of internal auditing in institutions of higher education. The analysis is done

based on the 10 responses received from head of internal auditor. Chi-square statistic (X<sup>2</sup>) was used to determine empirically whether the type of institutions influence the scope of audit in the institutions of higher education. Results of the chi-square are presented in Table 4.2

Table 4.2 presents the value of the chi-square and the significant level of each of the audit areas. Review of the table 4.2 shows that the significant value associated with chi-square for all of the variables examined exceeded the confidence level of 0.05. This implies, the hypothesis that there is significant difference between the scopes of internal auditing in public and private institutions of higher education cannot be accepted at 0.05 confidence levels. This result is consistent with the study by Azad (1994) on the operational auditing in US colleges and universities.

The result suggests that type of institutions does not influence the scope of internal auditing. The findings indicate that the scopes of internal auditing are influenced by the existence of mandatory guideline from the regulators. Since both institutions' head of internal audit department who responded in this study are required by their regulators to follow the respective internal audit guideline, the compliance to the requirement of those guideline are expected. Since the Treasury Circular and IIA Guideline mention the same role of internal auditors (except that Treasury Circular does not mention about risk assessment), thus, the result of no significant difference between the scopes of internal audit in both institutions of higher education might be influenced by this factor.

**Table 4.2 Chi- Square Statistics** 

Variables	Chi-Square Statistic (X <sup>2)</sup>	Significant value
Types of Audit	2.857	0.24
EDP Audit	0.079	0.778
Audit Priority based on risk assessment	1.071	0.301
Audit on institutions exposure to risk	0.023	0.880
Audit the operations to ensure goals and values of operations are properly communicated	5.833	0.016
Audit of operations and program to ensure consistency with institutional values	0.476	0.49
Audit on criteria to determine achievement of institutions goals	0.375	0.540
Timely Report to management	1.071	0.301

## 4.4 GENERAL PERCEPTION ON INTERNAL AUDITING

Question 1- 7 of the questionnaire to Financial Controller, Registrar, Board of Directors and part 2 of questionnaire to Vice Chancellor/President requires the respondents to state their general perception on the internal audit. The responses are presented in Table 4.3. All respondents believe that colleges and universities should have internal audit functions. 10.1% of the respondents classify internal audit as detrimental to productivity, 13.1% classify internal audit as a necessary nuisance, 75.8% of the respondents classify internal audit as a valuable service, 45.5% of respondents classify internal audit job as a consultant to organization, 32.3% classify internal audit as operating management and 8.1% classify internal audit as prosecuting attorney.

The study also reveals that 39.4% of respondents believe that internal auditor should be part of management team. On the issue to whom the internal auditors should report, the survey shows that 45.5% of respondents believe that internal auditors should report to audit committee, 31.3% believes that the internal auditor should report to President, 19.2% believe that internal auditors should report to Board of Directors and only 4% believe that internal auditors should report to

Financial Controller. The result suggests that management of institutions of higher education view internal auditing as an independent function in the organization. More information about the background of the respondents is presented in Appendix 1.

# 4.5 IMPORTANT AUDIT AREAS IN INSTITUTIONS OF HIGHER EDUCATION

Question 8 of the questionnaire requires the respondents to give their opinion on important audit areas in institutions of higher education. There are five audit areas listed in the questionnaire, which are compliance audit, financial fraud audit, financial reporting audit, efficiency, economy and effectiveness audit, and system development and technology audit. Table 4.3 (a), 4.3 (b) and 4.3 (c) show the result of the statistical testing.

Table 4.3(a) Mean Rank of Important Audit Areas In Institutions of Higher Education

#### Ranks

	type of institutions	N	Mean Rank	Sum of Ranks
Compliance audit	public	33	50.56	1668.50
	private	66	49.72	3281.50
	Total	99		
financial fraud audit	public	33	53.11	1752.50
	private	66	48.45	3197.50
	Total	99		
financial reporting audit	public	33	60.05	1981.50
	private	66	44.98	2968.50
	Total	99		
Efficiency, economy and	public	33	56.05	1849.50
effectiveness audit	private	66	46.98	3100.50
	Total	99		
system development	public	33	53.35	1760.50
and technology audit	private	66	48.33	3189.50
	Total	99		

Table 4.3 (b) Mean of Important Audit Areas In Institutions of Higher Education

# Report

type of institutions		Compliance audit	financial fraud audit	financial reporting audit	Efficiency, economy and effectiveness audit	system development and technology audit
public	Mean	4.48	4.33	4.45	4.58	4.30
	N	33	33	33	33	33
	Std. Deviation	.870	.777	.666	.614	.810
private	Mean	4.52	4.06	3.92	4.27	4.02
	N	66	66	66	66	66
1	Std. Deviation	.728	1.094	.966	.869	1.170
Total	Mean	4.51	4.15	4.10	4.37	4.11
l .	N	99	99	99	99	99
	Std. Deviation	.774	1.004	.909	.803	1.068

Table 4.3 (c) Test Statistic of Important Audit Areas In Institutions of Higher Education

Test Statistics

	Compliance audit	financial fraud audit	financial reporting audit	Efficiency, economy and effectiveness audit	system development and technology audit
Mann-Whitney U	1070.500	986.500	757.500	889.500	978.500
Wilcoxon W	3281.500	3197.500	2968.500	3100.500	3189.500
z	162	820	-2.618	-1.653	880
Asymp. Sig. (2-tailed)	.871	.412	.009	.098	.379

a. Grouping Variable: type of institutions

Table 4.3(a) presents the mean of important audit areas in institutions of higher education. This question used five Likert scale, ranging from 1 = not important to 5= very important. Considered most important audit areas in institutions of higher education in Malaysia is compliance audit (4.51). This shows that the priority of internal auditing in institutions of higher education environment still centres on traditional role of compliance auditing. This is consistent with the finding from the previous study by Rezaee et. al. (1999) and Gordon and Fischer (1996).

However, there is a move to the more expanding role of internal auditing i.e. efficiency, economy and effectiveness audit (4.37). The next important audit areas are financial fraud audit (4.15) follow by system development and technology audit (4.11) and financial reporting audit (4.1). Therefore, there is some evidence that the priority of internal audit has moved from financial reporting to other areas of importance in organization.

One significant difference was found between the public and private institution of higher education in the area of financial reporting audit (prob. = 0.05). Finding shows, that management of public institutions of higher education regards financial reporting audit as fairly important (mean = 4.45) whereas management of private institutions of higher education only considered financial reporting audit as moderately important (mean = 3.92). This might result from the Treasury Circular Guideline, which mentions the financial audit as the main function of internal audit department. Therefore, the management's view is in line with the requirement stated in Treasury Circular.

On the other items, no significant differences were found between both institutions. Therefore, the second hypothesis i.e. the hypothesis that there is significant difference between the perceived important audit areas between the management in public and private institutions of higher education cannot be accepted at 0.05 confidence level.

# 4.6 IMPORTANT ROLE OF INTERNAL AUDITORS IN INSTITUTIONS OF HIGHER EDUCATION

Question 9 list down the important roles of internal auditors, which are to assess the university's financial reporting, to assess the efficiency and effectiveness of university's programs and make recommendations, ensure achievement of institutional goals and objectives, monitor adequacy and effectiveness of institution's internal control systems, assist all members of management and other administrators on financial matters, assist all members of management in the effective discharge of their responsibilities, monitor compliance with both internal and external rules and regulations and evaluate and monitor the effectiveness of institution's risk management systems. Results of the survey are tabulated according to types of institutions.

Table 4.4 shows the result of perceived important internal auditor roles in institutions of higher education. Considered most important internal auditor roles in institutions of higher education is monitor compliance with internal and external rules and regulations (4.54) and monitor adequacy and effectiveness of institutions internal control systems (4.51) and evaluate institution's control systems (4.41). This finding is consistent with the finding of Rezaee et. al. (1999). Gordon and Fischer (1996) also found that internal auditors in education institutions are more likely to put more efforts in compliance and financial audits. Next most importance is to assess the efficiency and effectiveness of university's programs and make recommendations (4.24). However, this variable was rank last in the Rezaee et. al. (1999). Next most important function is to ensure achievement of institutional goals and objectives (4.16), evaluate and monitor the institution risk management systems (4.11). According to IIA guideline, monitoring the institution's risk management and control system and contributing to the institution's governance process are part of the internal auditor's function. This finding shows that the management aware of the function of internal auditors in this changing environment.

Considered moderate important is the role of internal auditors in assisting members of management in effective discharge of their responsibilities (3.95), assessing the university's financial reporting (3.92) and assist all members of management and other administrators on financial matters (3.79).

There are few statistically significant differences found between the means of perception between public and private institutions of higher education on the assessment of financial reporting, monitoring effectiveness of institutions internal control systems and monitoring compliance with internal and external rules and regulations (statistically significant at 0.05 level of confidence). The finding shows that significant difference in perception is found on the traditional role of internal auditing. Review of Table 4.4 reveals that public institutions of higher education considered assessment of financial statement (mean=4.24), monitoring the adequacy of organization internal control (mean = 4.7) and monitoring compliance with rules and regulation (mean=4.73) as fairly important role of internal auditor in institutions of higher education. This also might be influenced by the requirement of the Treasury Circular, which considered the above roles as important functions of internal audit department.

There are no significant differences found in other internal auditor's role in institutions of higher education, therefore the third hypothesis i.e. the hypothesis that the perceived important internal auditor roles is different between the management of public and private institutions of higher education cannot be accepted at 0.05 confidence level.

Table 4.4

Internal Auditor's Roles		Public	Private	Total	Significant
		958 515850	Mean	Mean	Value
		N=33	N=66	N=99	
:	To assess the university's financial reporting To assess the efficiency and effectiveness of university's programs and make recommendations	4.24 4.36			d.
•	To ensure achievement of institutional goals and objectives	4.36	4.06	4.16	0.197
•	Monitor adequacy and effectiveness of institution's internal control systems	4.7	4.41	4.51	0.007#
•	Assist all members of management and other administrators on financial matters	4.09	3.64	3.79	0.054
•	Assist all members of management in the effective discharge of their responsibilities	4.15	3.85	3.95	0.235
•	Monitor compliance with both internal and external rules and regulations	4.73	4.44	4.54	0.048
•	Evaluate and monitor the effectiveness of institution's risk management systems	4.3	4.02	4.11	0.10
•	Assessing Institution's exposure to risks	4.15	3.95	4.02	0.21
•	Evaluate the institution's control systems	4.61	4.32	4.4	0.13
•	Review the operation to determine the accomplishment of institution's goals and objectives	3.65	3.4	3.49	0.22
•	Audit of the criteria set by management to measure goal accomplishment	3.6	3.2	3.3	0.09

To determine empirically whether there is significant difference between the perceptions of internal auditors in public and private institutions of higher

<sup>&</sup>quot; Significant at 0.05 confidence level

education, this study surveyed the internal auditors from both institution on their perception on certain statement as adopted from study done by Gordon and Fischer in United States. Results of the study are shown in Table 4.5 below.

Table 4.5 Internal Auditors' Perceptions

Internal Auditors Perception				
	Public	Private	Mean	Significant
1 Access to board of director	4.0	3.2	3.83	0.2
2 Access to president	4.28	4.2	4.26	0.682
3 Access to all records	4.5	4.2	4.43	0.707
4 Contacted for specific information	3.39	2.8	3.26	0.382
5 Encouraged to clarify findings with auditees	4.33	4.0	4.26	0.684
6 Management often decides not to accept recommendation	2.11	2.2	2.13	0.813
7 Sensitive areas not audited	3.0	3.0	3.0	0.69
8 Part of management team	3.0	3.0	3.0	0.03
9 Solicited for management decision	3.61	3.4	3.57	0.588
10 Employment jeopardized by negative finding	2.44	2.4	2.43	0.938
11 Working relationship encouraged with external auditors	3.6	3.0	3.48	0.31
12 Effectiveness related to professional standing	4.0	3.2	3.83	0.159
13 Recommendation given careful consideration	4.44	3.4	4.22	#0.004
14 Generally recommendations well received	4.5	3.6	6 4.3	<b>*</b> 0.009
15 Encouraged to have a working relationship with auditees	4.3			
16 Well respected by management	4.3	3.8	8 4.2	2 0.149

Table 4.5 reveals that in public institutions of higher education, the higher mean are found on the question of whether audit recommendations are well received by the management (mean = 4.5). Meanwhile, in private institutions of higher education, the higher mean is found on the good access to the board of directors and record of the auditee (mean 4.2).

<sup>&</sup>quot;Significant at 0.05 confidence level

Two significant differences (prob=0.05) were found when the internal auditors were asked whether their recommendations were given considerations and well received. Overall the results show that auditor in public institutions of higher education have higher mean of perception on every variable tested as compare to the private institutions of higher education. Interestingly, both auditors in public and private institutions of higher education have similar means on the question whether the internal auditors are part of management team (mean=3). Both institutions also have their lowest mean on the perception whether the management often reject their recommendation.

Overall, the findings show that public institutions of higher education comply with the guideline issued by Treasury Circular. The internal auditors in public institutions of higher education reported that they provide the service as mentioned by Treasury Circular. However, The Treasury Circular 2/79 was issued in the year 1979 need to be revised to be in line with the current situation. For instance, it does not mention about the internal auditor's job to assess the risk exposure of the institutions.

Even though the IIA Guideline seems to cover wider aspect of internal audit function, unlike the Treasury Circular Guideline, it is not mandatory to the € institutions. It is only can be enforced to the members of The Institute of Internal Auditors. Given the positive views from the management of institutions of higher z education on internal audit function, it is suggested that the government take necessary action to make it mandatory to every type of institutions.

## 4.7 CONCLUSION

This chapter reports on the scope of internal audit, perception of management and internal auditors in institutions of higher education. The next chapter provides the conclusion and recommendation for future research.