



# The Time Expectation Gap in Australia

**Lu Huang,**

*Email: lu.huang4@students.mq.edu.au*

**Medhat Endrawes\***

*Email: medhat.endrawes@mq.edu.au*

**Andreas Hellmann**

*Email: andreas.hellmann@mq.edu.au*

*Department of Accounting and Corporate Governance*

*Faculty of Business and Economics*

*Macquarie University*

*Sydney, NSW, Australia*

*Telephone: + (612) 9850 8451*

## **Abstract**

*This paper examines how industry specialisation and the size of the clients affect the time expectation gap, which is defined as the difference between perceptions of audit timeliness by auditors and audit clients. It used a sample size of 70 auditors to examine their perceptions of the time expectation gap in different scenarios. The participants included auditors at different hierarchical levels in audit firms, from junior auditors to audit partners. The results of the survey experiment demonstrate that industry specialisation significantly reduces the level of the time expectation gap, indicating that industry specialist auditors work more efficiently and face less time pressure compared with non-specialist auditors. No significant relationship exists between the size of the client and the time expectation gap, indicating that audit firms are likely to possess stronger bargaining power and resist pressure from clients to reduce audit hours when auditing large companies.*

## **INTRODUCTION**

Since the collapses of large companies (e.g. HIH, One. Tel, Pasminco, Ansett, and Enron) between 2000 and 2002, litigation against auditors has increased along with regulatory review of the auditing profession (Fargher and Jiang, 2008). Auditors are expected to achieve high levels of audit quality and ensure reliable financial reports, which are crucial for improving outsiders' confidence, benefiting clients, and overcoming the information asymmetry between corporate managers and stockholders (Khurana and Raman, 2004). However, audit quality may be affected by time pressure that auditors experience during the audit. This time pressure may be as a result of gap between the auditors and clients with respect to the time of completion of the audit. This time expectation gap may leads to time pressure during fiscal year-end audit engagement, and results in reduced audit quality.

Prior studies examine two types of time pressure, namely, time budget pressure and time deadline pressure, and suggest that both types of time pressure



lead to dysfunctional behaviours, and reduce audit job satisfaction (Pierce and Sweeney, 2004; Margheim et al., 2005). When time budget<sup>1</sup> is less than time actually required to complete audit tasks, time budget pressure exists (Margheim et al., 2005). Time deadline pressure is generated when auditors have to complete the project before a deadline agreed upon by both auditors and clients (Margheim et al., 2005).

Although the negative impact of time pressure on the audit project has been investigated, few studies address the reason for time pressure. Uncertainties between clients' and auditors' perception of audit work, such as the complexity of the clients' business and the industry, make auditors' preparation for meeting time budget and time deadline difficult (Sweeney and Pierce, 2004). The aim of this paper is to understand the time expectation gap, which is defined as the difference between the expectations of audit timeliness by auditors and audit clients. It is essential to understand the time expectation gap in order to overcome time pressure, improve audit performance and audit quality, and reduce litigation against auditors.

Fung et al. (2012) suggest that industry specialisation enables auditors to audit a larger number of clients within an industry and increases audit efficiency, because of the similar client characteristics. The industry specialist auditors are better able to understand clients and to update their knowledge than non-specialists are (Lim and Tan, 2010). Therefore, clients are less likely to impose time pressure on industry specialist auditors, who complete the audit engagement more efficiently.

Audit clients keep imposing pressure on auditors to reduce hours required for the fiscal year-end audit (Behn et al., 2006). When a single client contributes a large portion of the auditor's total fees in an industry, the client is of more importance to the auditor (Casterella et al., 2004). Audit firms prefer to maintain long-standing auditor-client relationships with clients (Nagy, 2005). Casterella et al. (2004) find evidence that audit fee premiums exist only for small companies with little bargaining power. Thus, large clients have strong bargaining power and avoid paying audit fee premiums, resulting in less time available for the audit engagement. Time pressure is expected to increase as the size of the client is larger.

The auditing process is under constraints of labour and costs (Chou et al., 2007). This paper investigates the time expectation gap and factors that affect time pressure in audit work, including auditors' specialisation and the size of the client. If these two factors are the determinants of the time expectation gap, it would be feasible to control the time pressure by auditors, improve auditors' performance, and reduce auditors' litigation risk.

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<sup>1</sup> Time budget refers to the budgetary amount of time allocated to audit work (Margheim et al., 2005).



## LITERATURE REVIEW

### The Audit Expectation Gap

Prior studies indicate that litigation against auditors is due to the audit expectation gap (Liggio, 1974; Porter, 1993). Liggio (1974) first introduced the concept of 'the audit expectation gap', which refers to the difference between the levels of expected performance from both the auditors and users of financial statements. Porter (1993, p.50) defines 'the audit expectation gap' as

- a. Reasonableness gap: a gap between what society expects auditors to achieve and what they can reasonably be expected to accomplish; and
- b. Performance gap: a gap between what society can reasonably expect auditors to accomplish and what they are perceived to achieve.

The performance gap is further divided into (Porter, 1993 p. 50):

- b-1. Deficient standards: a gap between the duties which can reasonably be expected of auditors and auditors' existing duties as defined by the law and professional promulgations; and
- b-2. Deficient performance: a gap between the expected standard of performance of auditors' existing duties and auditors' perceived performance, as expected and perceived by society.

While the audit expectation gap represents the difference of expected auditors' performance between the society and auditors, the time expectation gap is more focused on the gap of perceived audit time by the clients and auditors during the audit engagement. This paper measures the time expectation gap in two ways: (1) time budget pressure, (2) time deadline pressure. It also investigates whether industry specialisation and the size of the client affect the time expectation gap.

### Time pressure

Both time deadline pressure and time budget pressure lead to dysfunctional behaviours, increasing the risk to reduced audit quality and the possibility of audit failure (Coram et al., 2004; Bowrin and King, 2009; Pierce and Sweeney, 2004).

Time budget pressure occurs when the time allocated to the audit project is less than available time and auditors have to complete their work during leisure hours and charge less working hours to their clients (Margheim et al., 2005). Auditors are reluctant to attain additional work hours and perceive achieving time budgets as career advancement, because audit managers use time budgets as performance standards and the inability to meet time budgets is viewed as poor performance (Ettredge et al., 2008).



Time deadline pressure occurs when there is a need to complete the audit project at a specified point in time and it is difficult to complete the required work by the deadline (Margheim et al., 2005). Auditors may experience pressure to balance quality of work and meeting deadlines because they are responsible for completing the project in a cost-effective manner (Robertson, 2007).

This paper examines whether the time expectation gap is related to industry specialisation and the size of the client.

## **HYPOTHESES DEVELOPMENT**

Audit is not only affected by the experience of auditors and time spent by audit managers to review audit work, but also the complexity of the client business, the industry (including specialisation), and the size of the audit (Sweeney and Pierce, 2004).

### **Auditors' Specialisation**

The industry specialist auditor is the audit firm that has the largest industry market share (Lim and Tan, 2008). Auditors who are specialists are exclusively assigned to the industry in which they work and become very adept at addressing industry-specific audit issues (Mayhew and Wilkins, 2003). Furthermore, the knowledge of the client's industry helps auditors to plan audit procedures and set time budgets more effectively (Low, 2004). Because industry specialisation improves auditors' work efficiency by reducing auditors' time used to understand clients and the industry-specific knowledge, it helps reduce auditors' work time and thus helps to decrease the time expectation gap.

**H1a: When auditors are specialists in their clients' industries, the time expectation gap is reduced.**

**H1b: When auditors are not industry specialists in their clients' industry, the time expectation gap increases.**

### **The Size of the Client**

The audit fees are lower as the client size increases relative to the auditor's industry clientele, and clients that generate higher revenue are more economically important to auditors and have more bargaining power, resulting in lower audit fees as well (Casterella et al., 2004; Huang et al., 2007). As the audit fee is often based on reported audit hours, attaining more audit hours is considerably difficult (Gist and Davidson, 1999). Therefore, the time expectation gap (time budget pressure) is expected to increase when the client is a large company.

Large clients face more public scrutiny and investment analysts who rely on the financial reports for investment decision making, so they are able to impose more pressure on auditors for timely reporting compared to small clients (Owusu-Ansah,



2000). Therefore, large clients are expected to increase time expectation gap (time deadline pressure).

**H2a: When the audit client is a small client, the time expectation gap between auditors and client decreases.**

**H2b: When the audit client is a large client, the time expectation gap between auditors and client increases.**

## **RESEARCH METHOD**

### **Research Design**

The paper used a survey experiment as a research instrument. The respondents were randomly assigned to various scenarios, leading to a high degree of validity, and the use of a representative sample allows generalisation of the larger population (Barabas and Jerit, 2010).

A 2x2 between-participants design was used to test the research hypotheses. There are four different scenarios of the fiscal year-end audit in the survey experiment, including a large client with auditors specialised/not specialised in the industry and a small client with auditors specialised/not specialised in the industry. The participants were randomly sent one of the four scenarios in the survey experiment and asked to evaluate their perceptions of time budget pressure and time deadline pressure.

Before commencement of the research, a pilot study was conducted among professors and auditors. Some minor changes were made based on the feedback from the professors and auditors.

### **Cases**

The current study uses two industries, mining and financial services. The mining and financial services industries were adopted in the survey experiment. The sustainability information from management, such as carbon accounting has become more important, and the proposed carbon pricing mechanisms are likely to impose pressure on the mining industry (Pellegrino and Lodhia, 2012). Because mining companies have to match their disclosure with societal expectation (Pellegrino and Lodhia, 2012), financial reports in mining companies tend to be more complicated, and audit procedures are expected to be more complex and time-consuming.

Furthermore, financial firms have relatively low levels of fixed assets and inventory, and their accounting systems involve daily financial statements, regular reports and strong internal control (Henderson and Kaplan, 2000). As financial firms tend to have more audit work completed during interim engagement, it is important to examine whether auditors experience the time expectation gap during the fiscal



year-end engagement (Henderson and Kaplan, 2000). Prior research shows that industry specialisation has occurred in the mining and financial services industries since 1990s (Ferguson and Stokes, 2002). In order to study the time expectation gap between auditors and clients in general, this paper adopts the mining and financial services industries to examine the time expectation gap.

### **Measurement of Independent Variables**

Industry specialisation is determined based on the market share of an auditing firm in an industry, and the threshold of market share for an industry specialist audit firm is 20% or more (Jaggi et al., 2012).

The size of the client was measured based on the Corporations Act (2001), shown in the questionnaire in the appendix. According to Section 45A (2) Corporations Act (2001), a proprietary company is a small proprietary company for a financial year if it satisfies at least 2 of the following conditions:

- a. the total revenue for the financial year of the company and the entities it controls (if any) is less than \$25 million;
- b. the value of total gross assets at the end of financial year of the company and the entities it controls (if any) is less than \$12.5 million;
- c. the company and the entities it controls (if any) have fewer than 50 employees at the end of the financial year.

### **Measurement of Dependent Variables**

The time expectation gap is measured by estimating auditors' perceptions of time budget pressure and time deadline pressure, given budgetary audit hours and the due date of audit report agreed by clients prior to the audit engagement. The time expectation gap (time budget pressure) is measured by estimated values of the budget attainability, ability to meet time budget without underreporting of audit hours and competence to deal with time budget related pressure.

The perception of time budget achievement without underreporting of time is adapted to measure time budget pressure in different scenarios, on a scale from 1 (impossible to achieve) to 5 (very easy to attain) (Otley and Pierce, 1996; Pierce and Sweeney, 2004).

Another method to measure time budget pressure is to let auditors estimate their self-perception of competence to deal with time budget related pressure, on a seven point Likert scale, ranging from 1 (not competent) to 7 (highly competent) (Kelley et al., 1999).

The time expectation gap (time deadline pressure) is determined by estimated adequacy of time to finish audit assignment, and competency to deal with time



deadline related pressure. The values are responses to questions 3 and 5 in the scenarios, and a higher score indicates lower time expectation gap (time deadline pressure).

### **Data Collection**

The survey experiment was started by contacting external auditors randomly from the membership list of Institute of Chartered Accountants in Australia and the website of audit firms located in Sydney. Before commencement of the study, the participants were sent an email that stated the research topic, objectives of the study, and its requirement, as well as an online link that enabled participants to get access to the survey experiment. All participation was anonymous, voluntary and confidential.

### **RESULTS OF THE STUDY**

This part: (1) reports the descriptive information about the demographic data and provides descriptive information about the time expectation gap; (2) reports the results of the hypotheses testing; and conclusions about the overall results.

#### **Demographic Information**

Table 1 summarises the demographic information for the participants. The table includes information about positions, experience, age and gender of participating auditors.

Among the valid responses, 38 (54.3%) of the participants are male and 32 (45.7%) are female. 23 (32.9%) of the participants are junior auditors. 23 (32.9%) of the participants are senior auditors. Only 6 (8.6%) of the participants are audit managers, and 18 (25.7%) of the participants are audit partners. There are 14 (20%) participants with less than one year of experience, and 26 (37.1%) participants have between 1-3 years of experience. A total of 16 (22.9%) of participants have between 4-6 years of experience, and 14 (20.0%) of participants have over 6 years of experience.

Overall, 40 (57.1%) of the participants are under 30 years old. 17 (24.3%) of participants are between the age of 30-40 years. Only 4 (5.7%) of participants are between the age of 41-50 years, and 9 (12.9%) participants are more than 50 years old.



**Table 1 Demographic Information**

	Frequency	Precent
<b>Position</b>		
Junior auditor	23	32.9
Senior auditor	23	32.9
Audit manager	6	8.6
Audit partner	18	25.7
Total	70	100.0
<b>Experience</b>		
Less than 1 year	14	20.0
1- 3 years	26	37.1
4 -6 years	16	22.9
More than 6 years	14	20.0
Total	70	100.0
<b>Age</b>		
Under 30 years of age	40	57.1
31- 40	17	24.3
41 – 50	4	5.7
More than 50	9	12.9
Total	70	100.0
<b>Gender</b>		
Male	38	54.3
Female	32	45.7
Total	70	100.0

**Table 2 Descriptive Statistics**

Industry Specialisation	Size	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
Q1. In general, how would you assess the achievability of the time budgets for this client? (Time Budget Pressure1)							
		<b>Mining Industry</b>		<b>Financial Services Industry</b>		<b>Overall</b>	
<b>Specialised</b>	Large client	3.27	0.88	3.47	0.92	3.37	0.77
	Small client	3.44	1.15	3.31	0.87	3.38	0.92
	Total	3.35	1.02	3.39	0.88	3.37	0.84
<b>Non-specialised</b>	Large client	2.82	1.00	2.59	0.91	2.70	0.85
	Small client	2.76	0.90	2.71	0.99	2.74	0.92
	Total	2.79	0.95	2.64	0.93	2.72	0.87
<b>Total</b>	Large client	3.00	0.97	2.95	1.00	2.97	0.87





Industry Specialisation	Size	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
	Small client	3.09	1.07	3.00	0.97	3.05	0.96
	Total	3.04	1.01	2.97	0.98	3.01	0.91
Q2. If you did not underreport any time spent on this client, would you meet the time budgets? (Time Budget Pressure 2)							
<b>Time Deadline Pressure</b>		<b>Mining Industry</b>		<b>Financial Services Industry</b>		<b>Overall</b>	
<b>Specialised</b>	Large client	3.07	0.88	3.00	0.85	3.03	0.79
	Small client	3.62	1.03	3.31	0.87	3.47	0.83
	Total	3.35	0.99	3.16	0.86	3.26	0.83
<b>Non-specialised</b>	Large client	2.45	0.80	2.41	0.80	2.43	0.68
	Small client	2.76	0.66	3.00	0.87	2.88	0.70
	Total	2.59	0.75	2.67	0.87	2.63	0.71
<b>Total</b>	Large client	2.70	0.88	2.65	0.86	2.68	0.77
	Small client	3.18	0.95	3.15	0.87	3.12	0.81
	Total	2.93	0.94	2.89	0.90	2.91	0.82
Q3. Do you believe you have adequate time to complete this audit assignment? (Time deadline pressure 1)							
<b>Time Deadline Pressure</b>		<b>Mining Industry</b>		<b>Financial Services Industry</b>		<b>Overall</b>	
<b>Specialised</b>	Large client	3.33	0.90	3.07	0.704	3.20	0.73
	Small client	3.56	0.73	3.50	0.73	3.53	0.62
	Total	3.45	0.81	3.29	0.74	3.37	0.68
<b>Non-specialised</b>	Large client	2.95	0.84	2.82	0.91	2.89	0.79
	Small client	2.94	0.75	2.71	0.69	2.82	0.64
	Total	2.95	0.79	2.77	0.81	2.86	0.72
<b>Total</b>	Large client	3.11	0.88	2.92	0.83	3.01	0.77
	Small client	3.24	0.79	3.09	0.81	3.17	0.71
	Total	3.17	0.83	3.00	0.82	3.09	0.74
Q4. Would you feel competent to deal with any time budget related pressure for this client? (Time Budget Pressure 3)							
<b>Time Deadline Pressure</b>		<b>Mining Industry</b>		<b>Financial Services Industry</b>		<b>Overall</b>	
<b>Specialised</b>	Large client	4.53	1.60	4.93	1.28	4.73	1.18
	Small client	4.87	1.09	4.88	0.96	4.88	0.96
	Total	4.71	1.35	4.90	1.11	4.81	1.05
<b>Non-specialised</b>	Large client	4.00	1.38	3.64	1.18	3.82	1.08



Industry Specialisation	Size	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
	Small client	3.82	1.38	4.06	1.20	3.94	1.16
	Total	3.92	1.37	3.82	1.19	3.87	1.10
Total	Large client	4.22	1.48	4.16	1.37	4.19	1.19
	Small client	4.33	1.34	4.45	1.15	4.39	1.15
	Total	4.27	1.40	4.30	1.27	4.29	1.17
Q5. Would you feel competent to deal with time deadline related pressure? (Time Deadline Pressure 2)							
Time Deadline Pressure		Mining Industry		Financial Services Industry		Overall	
Specialised	Large client	4.67	1.18	5.00	1.20	4.80	1.07
	Small client	4.75	1.18	5.06	1.06	4.91	1.08
	Total	4.71	1.16	5.03	1.11	4.85	1.06
Non-specialised	Large client	4.05	1.29	3.95	1.17	4.02	1.13
	Small client	4.06	1.39	4.12	1.17	4.09	1.18
	Total	4.05	1.32	4.03	1.16	4.05	1.13
Total	Large client	4.30	1.27	4.38	1.28	4.34	1.16
	Small client	4.39	1.32	4.58	1.20	4.48	1.19
	Total	4.34	1.28	4.47	1.24	4.41	1.16

Table 2 presents the mean and standard deviation for the time expectation gap by conditions for, (1) specialised in the industry and client being a small/large company, and (2) not specialised in the industry and client being a small/large company. A higher score means a lower time expectation gap. Table 3 indicates that the overall level of the time expectation gap (time budget pressure measured by achievability of time budget) is mainly lower for auditors who are industry specialists (Mean = 3.37 vs. Mean = 2.72) and where the client is a small company (Mean = 3.05 vs. Mean = 2.97). The time expectation gap (time budget pressure measured by achieving time budget without underreporting time) is also lower when auditors are specialised in the industry (Mean = 3.26 vs. Mean = 2.63) and the client is a small company (Mean = 3.12 vs. Mean = 2.68).

### Manipulation Check

Table 3 reports the industry specialisation manipulation and the client's size manipulation. When the audit firm is an industry specialist, the level of agreement on whether the firm is specialised in the industry is higher ( $p = 0.00$ ). When the client is a



large company, the level of agreement on whether the client is a large company is higher ( $p = 0.00$ ).

**Table 3 Manipulation Check**

	t-test for Equality of Means				
	t	Sig.	Mean Difference	Mean	
				Lower Level	Upper Level
1. Please indicate your agreement on whether your firm is specialised in the industry.	5.37	.000	4.27	3.87	4.67
2. Please indicate your agreement on whether the client is a large company	3.69	.000	4.71	4.33	5.10

### **HYPOTHESIS TESTS**

Four hypotheses were developed in this paper concerning whether the time expectation gap is affected by: (1) specialisation of audit firm and (2) the size of the client. Analysis of variance (ANOVA) is used to test hypotheses 1a, 1b, 2a and 2b.

#### **Hypothesis 1a and 1b**

Hypothesis 1a states that the level of the time expectation gap is lower when the auditors are industry specialists, and hypothesis 1b states that the time expectation gap increases when the auditors are not specialized in the industry. As highlighted previously, industry specialisation is expected to significantly influence the time expectation gap.



**Table 4 Summary of ANOVA tests**

Source	SS	df	MS	F	Sig.	SS	df	MS	F	Sig.
Q1. In general, how would you assess the achievability of the time budgets for this client? (Time Budget Pressure1)										
	Mining Industry					Financial Services Industry				
specialisation	5.39	1	5.39	5.45	0.02	9.41	1	9.413	11.09	0.00
size	0.06	1	0.06	0.06	0.81	0.01	1	0.007	0.01	0.93
specialisation * size	0.22	1	0.22	0.22	0.64	0.31	1	0.31	0.37	0.55
Error	65.20	66	0.988			56.02	66	0.85		
Total	719.00	70				684.00	70			
Corrected Total	70.87	69				65.94	69			
	R Squared = 0.08 (Adjusted R Squared= 0.0r)					R Squared = 0.151 (Adjusted R Squared = 0.112)				
Q2. If you did not underreport any time spent on this client, would you meet the time budgets? (Time Budget Pressure 2)										
Pressure	Mining Industry					Financial Services Industry				
specialisation	9.29	1	9.29	12.99	0.00	3.50	1	3.50	4.94	0.03
size	3.23	1	3.23	4.52	0.04	3.50	1	3.50	4.94	0.03
specialisation * size	0.26	1	0.26	0.37	0.55	0.33	1	0.33	0.47	0.50
Error	47.20	66	0.72			46.76	66	0.71		
Total	661.00	70				638.00	70			
Corrected Total	60.64	69				55.09	69			
	R Squared = 0.222 (Adjusted R Squared = 0.186)					R Squared = 0.118 (Adjusted R Squared = 0.078)				



Source	SS	df	MS	F	Sig.	SS	df	MS	F	Sig.
Q3. Do you believe you have adequate time to complete this audit assignment? (Time deadline pressure 1)										
	Mining Industry					Financial Services Industry				
specialisation	4.29	1	4.29	6.55	0.01	4.66	1	4.66	7.73	0.01
size	0.20	1	0.20	0.31	0.58	0.44	1	0.44	0.73	0.40
specialisation * size	0.25	1	0.25	0.39	0.54	1.28	1	1.28	2.12	0.15
Error	43.17	66	0.65			39.74	66	0.60		
Total	752.00	70				676.00	70			
Corrected Total	47.94	69				46.00	69			
	R Squared = 0.100 (Adjusted R Squared = 0.059)					R Squared = 0.136 (Adjusted R Squared = 0.097)				
Q4. Would you feel competent to deal with any time budget related pressure for this client? (Time Budget Pressure 3)										
Time Deadline Pressure	Mining Industry					Financial Services Industry				
specialisation	10.76	1	10.76	5.73	0.02	19.13	1	19.13	14.23	0.00
size	0.12	1	0.12	0.06	0.80	0.57	1	0.57	0.42	0.52
specialisation * size	1.15	1	1.15	0.612	0.44	0.99	1	0.99	0.74	0.39
Error	123.95	66	1.88			88.72	66	1.34		
Total	1413.00	70				1405.00	70			
Corrected Total	135.84	69				110.70	69			
	R Squared = 0.09 (Adjusted R Squared = 0.05)					R Squared = 0.20 (Adjusted R Squared = 0.16)				



Source	SS	df	MS	F	Sig.	SS	df	MS	F	Sig.
Q5. Would you feel competent to deal with time deadline related pressure? (Time Deadline Pressure 2)										
	Mining Industry					Financial Services Industry				
specialisation	7.38	1	7.38	4.58	0.04	16.97	1	16.97	12.78	0.00
Size	0.04	1	0.04	0.03	0.88	0.22	1	0.22	0.16	0.69
specialisation * size	0.02	1	0.02	0.01	0.91	0.04	1	0.04	0.03	0.86
Error	106.23	66	1.61			87.66	66	1.328		
Total	1434.00	70				1505.00	70			
Corrected Total	113.77	69				105.44	69			
	R Squared = 0.06 (Adjusted R Squared = 0.02)					R Squared = 0.17 (Adjusted R Squared = 0.13)				



Table 4 summarises the results of the ANOVAs for all the dependent variables. The table indicates a significant relationship between the industry specialisation of auditor and the time expectation gap (time budget pressure measured by achievability of time budgets) in both mining ( $F = 5.45$ ,  $p = 0.02$ ) and financial services industries ( $F = 11.09$ ,  $p = 0.00$ ). There is also a significant relationship between the industry specialisation of auditors and the time expectation gap (time budget pressure measured by achievability of time budgets without underreporting time) in both mining ( $F = 12.99$ ,  $p = 0.00$ ) and financial services industries ( $F = 4.94$ ,  $p = 0.03$ ).

The industry specialisation of auditors is also significantly related to the time expectation gap (time deadline pressure measured by perceived adequacy of time to complete audit assignment) in both mining ( $F = 6.55$ ,  $p = 0.01$ ) and financial services industry ( $F = 7.73$ ,  $p = 0.01$ ). There is also a significant relationship between industry specialisation and the time expectation gap (time deadline pressure measured by competence to deal with time deadline pressure in terms of competence to deal with time deadline related pressure) in both mining ( $F = 4.58$ ,  $p = 0.04$ ) and financial services industry ( $F = 12.78$ ,  $p = 0.00$ ).

### **Hypothesis 2a and 2b**

Table 4 reports no significant relationship between the time expectation gap (time budget pressure measured by achievability of time budgets) and the size of audit clients in the mining industry ( $F = 0.06$ ,  $p = 0.81$ ) or the financial services industry ( $F = 0.01$ ,  $p = 0.93$ ). There is significant relationship between the time expectation gap (time budget pressure measured by achievability of time budgets without underreporting time) and the size of audit clients in the mining industry ( $F = 4.52$ ,  $p = 0.04$ ) and the financial services industry ( $F = 4.94$ ,  $p = 0.03$ ). The size of the clients is not significantly related to the time expectation gap (time budget pressure measured by competence to deal with time budget related pressure) in the mining industry ( $F = 0.06$ ,  $p = 0.80$ ) and the financial services industry ( $F = 0.42$ ,  $p = 0.52$ ).

Table 4 also indicates no significant relationship between the size of the client and the time expectation gap (time deadline pressure measured by perceived adequacy of audit time) in both the mining industry case ( $F = 0.31$ ,  $p = 0.58$ ) and the financial services industry ( $F = 0.73$ ,  $p = 0.40$ ). There is also no significant relationship between the size of the client and the time expectation gap (time deadline pressure measured by competence to deal with time deadline related pressure) in the mining industry ( $F = 0.03$ ,  $p = 0.88$ ) and the financial services industry ( $F = 0.16$ ,  $p = 0.69$ ).

In summary, there is no support for Hypotheses 2a and 2b. The possible explanation for the results is that the size of the client may affect auditors' work efficiency and audit timeliness in two different ways. On the one hand, large clients have more delegation of duties and less observable operations which lead to moral



hazard<sup>2</sup> (Leventis and Caramanis, 2005). Audit firms make reporting decisions more conservatively to protect their reputation (Reynolds and Francis, 2001). This situation requires extensive audit work in order to reduce agency costs and sustain public confidence (Naser and Nuseibeh, 2007). In addition, large clients are found to require longer periods to complete audit engagements (Habib and Bhuiyan, 2011).

## **CONCLUSION**

This part reports the main findings of this paper, implications, limitations and suggestions for future research.

### **Main Findings**

The purpose of this paper was to examine the impact of industry specialisation and the size of the client on the time expectation gap. The results show that the time expectation gap is dependable on auditor specialisation. However, the size of the client does not significantly influence the time expectation gap.

Larger clients have strong bargaining power because they are economically important to auditors and therefore may be able to enjoy audit fee discounts or resist large increases in audit fees (Huang et al., 2007). However, large clients are subject to information asymmetry, and more opportunities are available for managers to expropriate capital provided by owners and lenders (Ettredge et al., 2009). As a result, a large company more often chooses a big audit firm to evaluate its financial information and performance, because big audit firms have expertise in various industries (Ettredge et al., 2009).

As most large clients seek a leading audit firm (i.e. Big 4 firms), they pay for higher audit fees compared to other audit firms (Lawrence et al., 2011). Big audit firms that charge higher fees are more likely to spend a greater amount of time on the audit engagement and to perform a higher-quality audit (Cahan et al., 2011). As large clients prefer big audit firms that tend to have higher audit fee premiums, auditors experience less audit fee pressure. Therefore, larger clients do not significantly increase the time expectation gap compared to small clients.

### **Implications of the Study**

This paper indicates that industry specialisation significantly reduces the time expectation gap. It is important for audit firms to invest personnel and capital resources in developing industry-specific knowledge in audit firms, in order to reduce the time expectation gap and improve efficiency of the audit engagement.

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<sup>2</sup> Moral hazard is defined as an agency problem in which agents do not exert much effort on their work as the principal expects. It occurs when agents' choice of effort is private information and principals are not able to observe agents' performance (Jeon, 1996).





Audit partners may put more emphasis on developing and teaching industry-specific technology among auditors via various training programs. Auditors can gain knowledge from in-house courses, examination-based learning, and practical application (Marriott et al., 2011). Additional services such as non-audit services also enrich auditors' knowledge concerning their clients and the industries, by helping auditors with knowledge acquisition and improving the audit services (Beck and Wu, 2006).

### **Limitations of the Study**

This paper used a survey experiment to examine the time expectation gap. There is a lack of realism in the survey experiment (Barabas and Jerit, 2010). Real audit engagement is more complex and involves more information than the experimental setting.

Other factors may affect the time expectation gap in real audit procedures. More related factors may be considered in future research. For example, audit partner preference for audit quality leads to increased budgetary hours and audit partner's emphasis on audit efficiency reduces budgetary hours (Gramling, 1999). Audit partner preference for audit quality or efficiency is expected to affect the time expectation gap.

Furthermore, the survey experiment only involves a small sample size, and the participants may not represent all auditors. To have greater understanding of the time expectation gap and factors that affect it, it is more convincing to have a larger sample size.

Another limitation of the survey experiment is treatment spill-over effect (Gaines et al., 2007). Survey experiments usually have participants exposed to different scenarios, and participants are asked questions that serve as the dependent variable in one scenario, and then the process repeats in a new scenario (Transue et al., 2009). Instead of viewing each scenario as a new topic, participants may process later scenario in terms of its relevance to the first scenario (Transue et al., 2009). A chance exists that the latter scenario inherits its prior treatment effects (Gaines et al., 2007).

### **Suggestions for Future Research**

Future research could examine whether other factors such as non-auditing service fees and audit partner preference for quality affect the time expectation gap. These factors can be included in different scenarios of the survey experiment, in order to find out whether the factors interact with each other, and how they influence the time expectation gap.



Also, the participants included some junior auditors with less experience. In future, more senior auditors may be invited to participate in the research, as they are more familiar with the fiscal year-end audit engagement and have better understanding of the duration of engagement. Furthermore, this paper could extend to auditors in other countries in order to attain better knowledge of the time expectation gap.

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