

Audit risk model as a corporate social responsibility implementation of certified public accounting firms (evidence from Indonesia)

Muhammad Nuryatno Amin

Muhammad Nuryatno Amin is based at Trisakti University, Jakarta Barat, Indonesia.

Abstract

Purpose – *The conduct of this research represents part of an effort to modify audit risk model (ARM) as an implementation of corporate social responsibility (CSR) by certified public accounting (CPA) firms. It is intended to make clear the phenomena about the relationship between audit risk (AR), implementation of business ethics principles (IBEP) and corporate governance risk (CGR).*

Design/methodology/approach – *The method used was hypothesis testing. Unit of analysis was individual (i.e. Indonesian CPA), and the gathering of data was cross-sectional. The sample was determined by purposive sampling. Data were collected using questionnaires, and data analysis was conducted by structural equation modeling (SEM).*

Findings – *According to Indonesian CPAs' perception, the AR is affected by the client's CGR, whereas the client's IBEP does not affect AR, but clients' CGR and IBEP both significantly affect AR. It is suggested: first, that the next researcher should study audit risk related to business ethics. Second, that the management should strengthen the implementation of business ethics in running a business; and finally that the Bapepam (Capital Market Oversight Board) should oversee both public company and public accountant in the implementation of governance.*

Research limitations/implications – *This research noted some implications, including: nature and intensity of gathering data, restricted respondent (CPA-CMAF), and restricted variables of corporate governance (BoD, and Audit Committee).*

Originality/value – *This research suggests the necessity to modify ARM by dividing inherent risk into errors risk and fraud risk as bases for accumulating audit evidence.*

Keywords *Audit risk model, Corporate social responsibility, Certified public accounting firms, Audit risk, Corporate governance, Business ethics*

Paper type *Research paper*

Introduction

Audit is carried out by public accountant (auditor) in the form of gathering and evaluating audit evidence. In gathering audit evidence, an auditor refers to the audit risk model (ARM) (Elder and Allen, 2003). Allen *et al.* (2006) have especially noted the existence of various studies with regard to ARM accuracy in the last two decades, which provide different conclusions.

Some studies support the strength of ARM such as Dusenbury *et al.* (2000) who specify that ARM does not disregard material misstatements, Houston *et al.* (1999) find evidence that ARM is suitable in explaining auditor behavior, given sure errors in financial statements. However, this model does not apply to fraud. Finally, Libby *et al.* (1985) emphasize that ARM is consistent with auditor decisions.

In contrast, other studies show that ARM has some weaknesses. The weaknesses for instance, can be seen in the form of inherent risk and control risk that can become obscure (for example: Haskins and Dirsmith, 1995; Messier and Austen, 2000). Furthermore, ARM is not in line with the quality of audit evidence (Dusenbury *et al.*, 2000); also, ARM is not commensurate with the wrong unaccepted risk (example: Kinney, 1989; Sennetti, 1990; Boritz and Zhang, 1999). Finally, ARM is inconsistent with actual auditor consideration (Daniel, 1988; Strawser, 1990).

Out of those studies, Bedard and Johnstone (2004) and Cohen and Hanno (2000) provide evidence that the auditor evaluates a situation in relation to aggressive management and inadequate corporate governance, and there is a relationship with such evaluation with planning and pricing made by the auditor.

Findings by Cohen and Hanno (2000) are consistent with public companies' obligation in compliance with corporate governance and ethics code to senior management (SOX 2002 in Elder *et al.*, 2008; SK Meneg. BUMN No. 17/2002 in Tjager *et al.*, 2003). Considering that the stipulation of SOX 2002 and SK Meneg. BUMN No. 17/2002 is relatively new, it is necessary to conduct research to obtain empirical evidence related to corporate governance risk and to implementation of clients' business ethics principle related to audit risk, based on Indonesian Public Accountants' (Indonesian CPAs') perception, especially in an Indonesian context. Perception approach is used due to risk components determined by the auditor based on professional judgment, i.e. consideration or evaluation which is conducted by a person having adequate skills and education (Elder *et al.*, 2008; Louwers *et al.*, 2007).

Based on those identified research problems, research questions are formulated as follows:

1. How significant is, according to Indonesian CPAs' perception, the effect of the clients' corporate governance risk to the audit risk?
2. How significant is, according to Indonesian CPAs' perception, the effect of the clients' implementation of business ethics principles to the audit risk?
3. How significant is, according to Indonesian CPAs' perception, the effect of the clients' corporate governance risk and implementation of business ethics principles, simultaneously, to the audit risk?

Theory and hypothesis

Corporate governance and audit risk

Several empirical evidences show that weak corporate governance is related to fraudulent financial reporting (Dechow *et al.*, 1996; Agrawal *et al.*, 1999; Karpoff and Lott, 1993; Farber, 2005). Dechow *et al.* (1996) reports on companies conducted fraud tend to have board of director (BoD) dominated by insider, only few of them have audit committees. They do not reveal significant effect to fraud by using the Big Six.

Agrawal *et al.* (1999) investigate the relationship among fraud finding, rotation of director and senior manager, however the intended relationship fails to occur. Agrawal *et al.* (199) continue on investigating 103 companies that conducted fraud, in which four companies provide evidence of conducting fraudulent financial report. Karpoff and Lott (1993) extend the evidence of fraud that on average the abnormal return in two or three days period when fraud is found, significantly more negative in fraudulent financial reporting rather than in any other fraud.

Finally, Farber (2005) conducts a study on the relationship between credibility of financial reporting system and governance mechanism quality by using companies as identified by SEC as manipulating fraudulent financial report as sample. The results of the study are follows: fraud companies have bad governance relative to control sample one year before fraud is found. Further, fraud companies take action to improve their governance; three years after fraud is found, those companies have the same governance characteristics with the control companies, in terms of total and percentage of BoD from outside, but it is beyond



the control companies in terms of total of audit committee meeting. Finally, institutional analysts and investors do not increase in fraud companies, which indicate that credibility is still a problem in those companies.

Other studies have also provided evidences on the contribution of board of directors and audit committee to corporate governance (Beasley and Petroni, 2001; DeZoort and Salterio, 2001). Beasley and Petroni (2001) for instance, investigate the role of outside board of directors in the selection of external auditor for property-liability insurance companies. They further report that insurance company which employs good reputation auditor specializing in insurance industry is likely to increase in line with the percentage of outside board member. However they do not provide significant relationship between the composition of board of directors and unspecialized insurance auditor with both good reputation and bad reputation which suggests that specialization is important.

DeZoort and Salterio (2001) investigate the effect of corporate governance experience of audit committee member, financial reporting and audit knowledge, towards decision making in conflict situation of management-auditor in the USA. Unit of analysis of this research is committee audit members. This research is conducted by asking audit committee member to complete conflict accounting policies cases. The research reveals that the more experienced the independent director is, the more knowledgeable he is to audit, the more supportive audit committee member which substance over form approach in resolving conflict with client's management. In contrast, the similar experiences of board of directors and senior management members is related to the increasing support to the management.

Furthermore, study of factors related to CFO intention towards misleading financial statement has been conducted in the USA by Gillet and Uddin (2005). They use CFO as unit of analysis and survey as method of the study. The results show that extended reasoned action model (ERAM) describes CFO intention to prepare misleading financial report. The researchers find that CFO at large companies intend to prepare misleading financial report, and compensation structure is not a good indicator of CFO intention to prepare misleading financial report.

Finally, Utama and Leonardo (2006) conduct a study in Indonesia to prove a hypothesis that majority as shareholder views audit committee as threat for their control to the company, so they use their influences in the board of commissioners, board of directors to limit the authority, resources, and efforts of audit committee. Unit of analysis of this study are audit committee of public companies listed in Jakarta Stock Exchange (BEJ). Survey is administer to audit committee in those public companies. The result of this study shows that the composition of audit committee has a positive impact to effectiveness of audit committee, which is influenced by company's governance and controlled by majority of shareholders.

Business ethics and audit risk

There are many studies related to auditors' evaluation towards risky client, that is client that likely meets a problem in financial reporting (Asare *et al.*, 1994; Bernardi, 1994; Beasley, 1996; KPMG, 1999; Wright, 1996). Asare *et al.* (1994) interview audit partner from Big Six accounting firms, and propose that evaluation of management integrity is the main concern in the process of client acceptance. Bernardi (1994) conducts manipulation to macro-level factors related to client's integrity, and finds evidence that those factors do not have any effect on the ability to find fraud.

Beasley (1996) later on suggests that audit committee does significantly reduce the possibility of fraudulent financial reporting. KPMG (1999) investigated corporate fraud, and reveals that the majority of cases of fraud related to factors in control environment, such as low management integrity. Finally, Wright (1996) emphasizes that weak corporate governance is related to increasing control action of SEC to company and its auditor.

Corporate governance, business ethics and audit risk

There are several studies conducted in the relationship between risk and audit tests (Glover *et al.*, 2000; Wright and Bedard, 2000; Johnstone and Bedard, 2001; Elder and Allen, 2003).



Glover *et al.* (2000) find that most auditors do not revise their audit planning (no additional test, for instance) when analytical procedure provides unexpected significant fluctuation. Wright and Bedard (2000) report on the client's risk factor affecting various audit planning tasks, such as effectiveness of audit program and justification of audit investigation; however client's risk factors are not significantly related to the difference and justification of investigation scope. The findings of these studies show the importance of identification and communication of fraud risk factors to all audit team members in the phase of audit planning.

Similarly, Johnstone and Bedard (2001) provide evidence that high-risk client is in line with the use of specialist, expert involvement, and high audit fee; but it does not relate to additional audit hours. Thereby, the nature of audit test varies according to the risk, but the scope of test remains the same. Finally, Elder and Allen (2003) evaluate the modification in risk evaluation and sample size at three public accounting firms (CPA Firms) in the period 1994 until 1999. They find that auditors who rely upon control and evaluate inherent risk below maximum in most of their audits, tend to conduct as such in the period 1999. Generally, the results on the research show that there was a strong relation between risk evaluation and sample size in the 1994 period, which was not significant to many CPA firms.

Different from previous studies, there are many studies that report on significant relationship between risk and audit investigation scope (Guess *et al.*, 2000; Beaulieu, 2001; Graham and Bedard, 2003; Bedard and Johnstone, 2004; Johnstone and Bedard, 2005). Guess *et al.* (2000) provide evidence that higher risk is related to more audit tests, whereas Walo (1995) promotes that risk is related to additional audit work. Beaulieu (2001) suggests that low risk assessment is related to decreasing audit effort and lower fee. Graham and Bedard (2003) describe weak relationship between risk and audit effort. In conclusion, these researches argue that the planned investigation is related more to the existence of specific fraud risk factors than to fraud risk assessment.

Model of the study

Based on the various studies discussed previously, the following model is developed as the basis of this study and illustrated in Figure 1.

Hypothesis

The auditor must consider the effectiveness of the client's corporate governance because it is influenced by audit risk (Dechow *et al.*, 1996; Agrawal *et al.*, 1999; Karpoff and Lott, 1993; Farber, 2005; Beasley and Petroni, 2001; DeZoort and Salterio, 2001). *H1* is formulated as follows:

- H1.* According to Indonesian CPAs' perception, clients' corporate governance risk has a significant effect on the audit risk.

Auditors must also consider the aggressive situation of management because it affects the audit risk (Asare *et al.*, 1994; Bernardi, 1994; Beasley, 1996; KPMG, 1999; Wright, 1996). *H2* is formulated as follows:

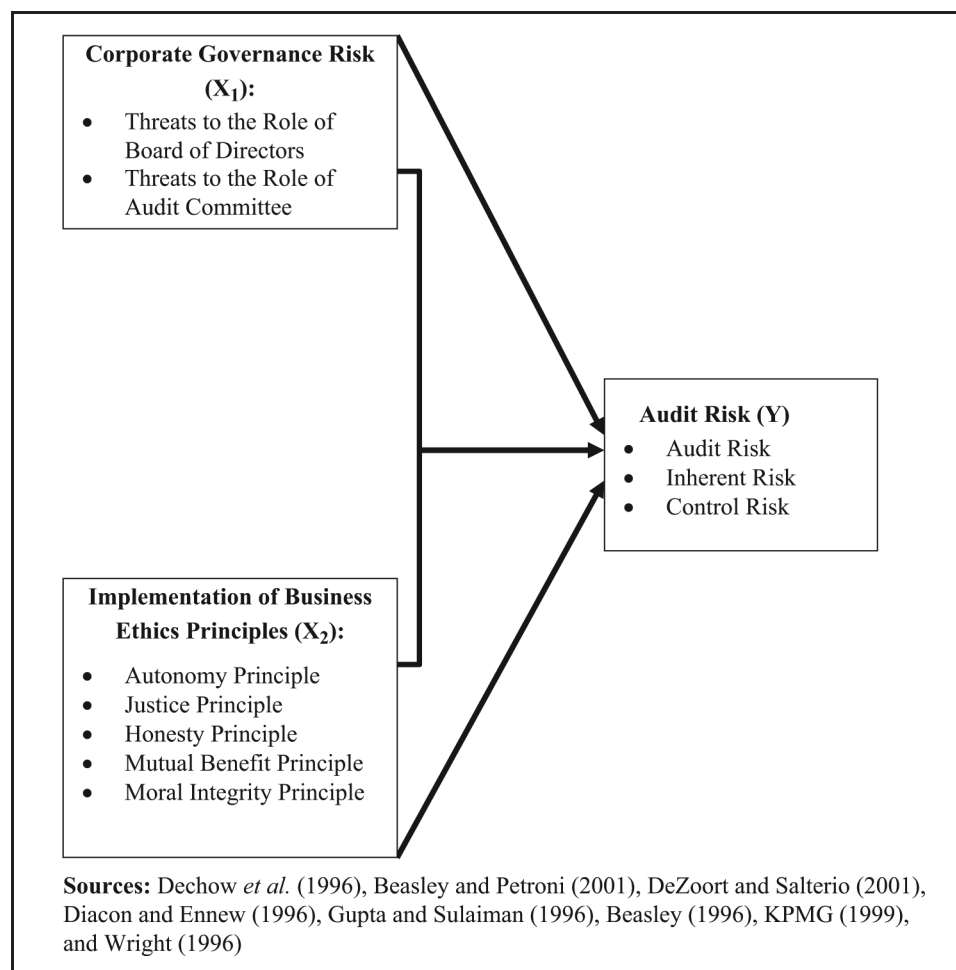
- H2.* According to Indonesian CPAs' perception, clients' implementation of business ethics principles has a significant effect on the audit risk.

Auditors must also consider the clients' corporate governance risk and the implementation of business ethics principles, simultaneously, as part of management integrity because it affects the audit risk (Glover *et al.*, 2000; Wright and Bedard, 2000; Johnstone and Bedard, 2001; Elder and Allen, 2003; Guess *et al.*, 2000; Beaulieu, 2001; Graham and Bedard, 2003; Bedard, 2003; Bedard and Johnstone, 2004; Johnstone and Bedard, 2005). *H3* is formulated as follows:

- H3.* According to Indonesian CPAs' perception, clients' corporate governance risk and implementation of business ethics principles have a significant effect on the audit risk.



Figure 1 Conceptual framework of the study



Research methods

Method used

Related to the method used, there are many important aspects that must be expressed clearly, which are referred to by Sekaran (2003, pp. 117-118) as details of study. It includes: nature of the study, type of investigation, extent of researcher intervention, setting of the study, unit of analysis, and time horizon.

Based on the nature of the study, this research is hypothesis testing because it determines the independence of the variables of the research. Furthermore, the type of the research is causal, because it proves a cause-effect relationship between the variables. Viewed from the researcher intervention, this study is conducted in the natural environment of the organization by minimum intervention in the normal workflow. From the setting of the study, this study is a field experiment, because it is conducted by using the natural environment, where the job is processed as normally (non-contrived). The unit of analysis of this study is the individual, i.e. Indonesian public accountants (Indonesian CPAs). Finally, this study is categorized as cross-sectional (one-shot), because data are gathered only one time, in the form of a questionnaire about Indonesian CPAs' perception related to the three variables under research.

Operational variable

Referring to the research questions and hypothesis, there are three variables under study, i.e. corporate governance risk, implementation of business ethics principles, and audit risk.

The three variables are measured by formulating operational definition. Defining variable operationally involves the following steps: determine the variables, define the dimension (sub-variable), and define elements (indicators), and determine the relevant measurement scale (Sekaran, 2003).

Table I presents operational variable, which consists of: variables (concepts), sub-variables (dimensions) and sources, and indicators (elements).

Source of data and sampling

Referring to the research questions and hypothesis, the data source of this study is primary data, i.e. individual Indonesian CPA related to the professional job performed, whereas audited client consists of public companies and non-public companies. The information is gathered from Indonesian CPAs related to variables under study to prove the purpose of study. Thereby Indonesian CPAs are the population of this study.

After defining the population, the sampling is determined (i.e. small portion of population that represents all important elements of population), with the following steps. First, determining population of the study. Then, defining sampling framework. Selecting sampling method (which is used to select unit of analysis of the study). Finally, defining sample size (Ghauri and Gronhaug, 2002, pp. 112-114).

As previously stated, the population of this study is IPAs. Referring to public accounting firms and public accountant: *Directory 2006* (IAI-KAP, 2006), there are 927 CPAs, affiliated in 465 CPA firms (KAP) included in their branch. From total 927 CPAs, there are 356 CPAs from Capital Market Accountants Forum (CMAF or FAPM) members (employed by 224 CPA firms). Based on the population defined, sampling frame of this study is Indonesian CPAs and sampling method used in this study is purposive sampling. The criteria used are as follows:

- Choose CPA who is member of CMAF (CPA-CMAF).
- Identify CPA-CMAF who audited public companies and non-public companies.
- Determine partners or managing partners of CPA firms.
- Select five to ten respondents for each dimension.

The underlying reason is that information gathered by the questionnaire can only be given by CPA-CMAF (consisting of: managing partners, and partners), so the sample in this study is CPA-CMAF (AP-FAPM). Based on SK Bapepam No. VIII.A.I about registering CPAs who have activity in capital market, only CPA-CMAF are allowed to audit public companies, beside non-public companies.

Total sample is determined based on sampling criteria under SEM as stated by Hair *et al.* (2006) as follows: minimal five up to ten respondents for each parameter (dimension), or 100 respondents for a study. This study, which consists of ten dimensions, determines minimally 100 respondents.

Data collection technique

Data collection technique is conducted by using a questionnaire that was distributed to CPA-CMAF (AP-FAPM) in Indonesia. Addresses of the respondents are cited from public accounting firms and public accountant: *Directory 2006* (IAI-KAP, 2006). Questionnaires were distributed by two ways, via post and courier.

A tentative questionnaire of this study was developed with the following steps. Theory constructs are developed from research questions and hypothesis, as variables under study. Sources of identification are textbooks and research findings from robust accounting journal. Such identification creates the model of the study represented in Figure 1. Sources of empirical indicators are mostly adopted from research findings relevant to variables under study that are represented in Table I. In the operationalization of variables, especially in sub-variable or dimension column, are also written their sources. The organization of questionnaire is based on indicators of the empirical situations, and written in question form



Table I Operational variable

<i>Variable</i>	<i>Dimensions and sources</i>	<i>Indicators</i>
Corporate governance risk: risk in governance activity conducted by board of director (BoD) and audit committee to oversee the integrity of financial reporting process (identical by quality of corporate governance)	Role of commissioner board: treats to the existence and involvement of BoD	<ol style="list-style-type: none"> 1. In many final years, client's company rarely meet problems about withdrawal of BoD member 2. BoD is independent of client's management 3. BoD provides timely meeting with directors and client's accounting official 4. BoD is given timely information, so it is likely or makes possible performing monitoring of important management actions 5. Client's BoD is given timely information about important matter
	Role of audit committee: treats to the existence and involvement of audit committee	<ol style="list-style-type: none"> 1. Audit committee has written company charter 2. Audit committee provides timely meeting with directors and client's accounting official 3. Audit committee often consists of outsider director 4. Audit committee is independent of client's management 5. Audit committee has financial expertise 6. Audit committee is given timely information, so it is likely or makes it possible to perform monitoring of important management actions
Implementation of business ethics principle: implementation of five principles of business ethics in client company	Implementation of autonomy principles: the existence and implementation of autonomy principles	<ol style="list-style-type: none"> 1. As a matter of pressure, technical problem is solved to the advantage of client 2. Client is concerned with effect of technical problem which is solved to the advantage of client 3. Client often using legal facility to assist company's interest 4. Client often plans sales commission structure, if necessary, in order to avoid deviation 5. Client often supports product conformance with the health and safety requirements
	Implementation of fairness principles: the existence and implementation of fairness principles	<ol style="list-style-type: none"> 1. Work hours not reported accurately 2. Client concerns with the effect of work hours not reported accurately 3. Company's cost is not reported accurately 4. Client concerns with the effect of company's cost not reported accurately
	Implementation of honesty principles: the existence and implementation of honesty principles	<ol style="list-style-type: none"> 1. No correction done to known omission 2. Client concerns with the effect of no correction done to the known omission 3. No correction done to the known errors 4. Client concerns with the effect of no correction done to the known errors
	Implementation of mutual benefit principles: the existence and implementation of mutual benefit principles Implementation of moral integrity principles: the existence and implementation of moral integrity principle	<ol style="list-style-type: none"> 1. Unfair performance evaluation 2. Client concerns with the effect of unfair performance evaluation <ol style="list-style-type: none"> 1. Client rarely using misleading information about competitor 2. Client avoids action to improve short-term performance, if such actions give no benefit in the long term 3. Client rarely using creative accounting to manage earnings

(Continued)

Table I

<i>Variable</i>	<i>Dimensions and sources</i>	<i>Indicators</i>
Audit risk: risk rests with auditor due to giving wrong opinion	Audit risk: risk rests on auditor due to giving wrong opinion	<ol style="list-style-type: none"> 1. The extent of external users rely on financial statements 2. The possibility of client's difficulties after issuing financial statements 3. Management integrity of client's management
	Inherent risk: risk of material misstatement due to the nature of the accounts	<ol style="list-style-type: none"> 1. Nature of client's business 2. Results of previous audit 3. Initial or repeat engagement 4. Related parties 5. Non-routine transaction 6. Judgment required 7. Make-up of population
	Control risk: risk of material misstatement due to existing internal control	<ol style="list-style-type: none"> 1. Auditor evaluation of whether financial statements can be audited 2. Preliminary evaluation to control risk 3. Auditor assessment to preliminary evaluation of lower control risk 4. The real control risk assessment

Source: Adapted from Bedard and Johnstone (2004), Diacon and Ennew (1996), Gupta and Sulaiman (1996), AICPA (1996), IAI (2001), Arens *et al.* (2006)

or positive statement, to reduce misinterpretation by CPA-CMAF (the questionnaires are not attached here, but are available on request). Measurement scale is determined by using Likert scale or attitude scale in the form of questionnaire.

Before the questionnaires were distributed, a trial was conducted from mid-December 2006 until mid-January 2007. From 45 of the tentative questionnaires distributed to permanent and part-time lecturers in the Faculty of Economics Trisakti University (Usakti), Tarumanagara University (Untar), Krida Wacana University (Ukrida) which are located in West Jakarta, 37 respondents returned the questionnaire. Tabulation of respondent responses is made, and a validity and reliability test was conducted. Significant validity indicator items are items with a correlation coefficient more than 0.30, according to sample criteria from *t* table *r* Pearson Product Moment test; whereas α Cronbach value that meets criteria is higher than 0.60 (Sekaran, 2003). Hair *et al.* (2006, p. 778) state that general provision to reliability prediction at 0.7 or more shows good reliability, whereas reliability among 0.6 up to 0.7 can be accepted, which shows construct validity of the model based on a good indicator. Based on the findings, it can be concluded that the tentative questionnaire can be used as final questionnaire, and it can be distributed to collect actual data.

Actual data were conducted by the following stages. Data were collected by using a final questionnaire which was distributed from mid-January 2007 until mid-March 2007. Their address referred to public accounting firms and public accountant: *Directory 2006* (IAI-KAP, 2006). Distributed questionnaires and their responses can be seen in Table II.

Table II shows the following results. It is related to distributed questionnaire of 356 respondents. The amount is identical with total population of CPA-CMAF in Indonesia. From the amount, 80.39 percent is distributed in the Jakarta region as most of the respondents live in Jakarta, in total 287. The remaining 19.61 percent was distributed outside the Jakarta region.

Related to the questionnaire, there are 189 (52.95 percent) respondents who returned it. There were 12 questionnaires that cannot be processed because of:

- moving address (5 respondents);
- resigned (2 respondents);



Table II Summary of final questionnaire response

<i>Distribution of questionnaire</i>	<i>Location</i>	<i>Total</i>	<i>Total %</i>
Total distributed questionnaires	Jakarta	287	80.39
	Outside Jakarta	69	19.61
	Total	356	100.00
Total returned questionnaires	Jakarta	(135)	
	Outside Jakarta	(32)	
	Total	(167)	(47.05)
Returned questionnaires	Jakarta	142	
	Outside Jakarta	47	
	Total	189	52.95
Unprocessed questionnaires	Jakarta	(7)	
	Outside Jakarta	(5)	
	Total	(12)	(3.36)
Processed questionnaires	Jakarta	135	
	Outside Jakarta	42	
	Total	177	49.59

- incomplete answers (2 respondents); and
- blank questionnaire (3 respondents).

Therefore only the rest of 177 questionnaires can be processed, which exceed the total sample required by SEM criteria (minimal 100) and also exceed the total sample determined for this study.

Data analysis design and hypothesis testing

Data analysis was conducted through the following stages. First, the researcher performed the following activities such: as editing data, treating blank response, coding the data, categorizing the data, preparing the archive, and defining program. Second, examine data accuracy. In this stage, validity and reliability tests are conducted. The validity and reliability test is not conducted in the final data because it has been conducted at the trial phase. Finally, at the hypothesis testing stage statistical manipulation is conducted.

Structural equation modeling (SEM) is used to examine the model, because the constructs consist of exogenous and endogenous variables. Before developing SEM formulation, it must perform adjustments to the main table of data previously programmed in Excel format, with performing transformation by a supporting program of successive intervals so it can be processed in LISREL 8.30 program. It must be performed as such, because the measurement scale in excel format and SPSS are still in ordinal level, whereas SEM analysis required continued measurement scale (that is interval and ratio). After all the process is conducted, the main table of data in successive intervals is operated in LISREL 8.30 program.

Results and discussions

The research results

Respondent characteristics. Table III shows level of age, education, university, and residence areas of the respondent characteristics based on gender. Male respondents dominated the study (85.9 percent), compared with females who were only 14.1 percent. The second characteristic is based on age. Most of the respondents were between 51 to 55 years old (39 percent), followed by between 46 to 50 years old (21.5 percent), and between 41 to 45 years old (16.9 percent). This is because all of the respondents are managing partners, or partners of CPA firms. Normally, it takes between 12 and 15 years of work in order to become a partner in any CPA firm (Arens *et al.*, 2006). If one begins one's career from 25 to 30 years of age, they may stay at the same company until the age of 40-45 years without moving to another business, for instance moving to other KAP, or other companies.

Table III Indonesia AP-FAPM characteristics

<i>Respondent characteristics</i>	<i>Frequency</i>	<i>%</i>
<i>A. Gender</i>		
Male	152	85.9
Female	25	14.1
Total	177	100
<i>B. Age</i>		
1. < 40 years	15	8.5
2. 41-45 years	30	16.9
3. 46-50 years	38	21.5
4. 51-55 years	69	39.0
5. > 56 years	25	14.1
Total	177	100
<i>C. Education level</i>		
1. S1 with Ak title	119	67.2
2. S2 with Ak or BAP title	41	23.2
3. S3 with Ak and BAP title	17	9.6
Total	177	100
<i>D. Source of university</i>		
1. State university (PTN)	125	70.6
2. Private university (PTS)	52	29.4
Total	177	100
<i>E. City</i>		
1. Jakarta	135	76.2
2. Bandung	7	3.9
3. Yogyakarta	1	0.6
4. Surabaya	13	7.3
5. Bandar Lampung	1	0.6
6. Batam	1	0.6
7. Balikpapan	1	0.6
8. Others	18	10.2
Total	177	100

The third characteristic is based on the level of education. Table III indicates that 67.1 percent of the respondents hold bachelor degrees in accountancy. This is in line with CPA-CMAF age composition, in which the majority as individuals are above 50 years old. Such situation has impact on the level of education, because generally senior offices of CPA-CMAF do not continue their formal education. The fourth characteristic is based on institutional background. Based on Table III, respondents (70.6 percent) graduating from state university were the highest proportion, whereas 29.4 percent respondents graduated from private university. The reason was because state university has a longer service than private university; also the opportunity for their graduates is greater because in the past there was a dichotomy between state university and private university, so its impact continued up to now.

The last characteristic is based on the areas of residence. The highest percentage of respondents are from Jakarta, followed by Surabaya and Bandung. Generally, CPA-CMAF concentrate in a large city, especially in Jakarta, Surabaya and Bandung. It occurs because skilled accountants tend to be more concentrated in large cities, due to the immediate needs.

Hypothesis testing. First hypothesis is formulated as follows: according to Indonesian CPAs' perception, the clients' corporate governance risk has a significant effect on the audit risk. Result of the hypothesis testing conducted with statistic program of LISREL 8.30 shows as it is presented in Table IV. The table resumes the value of parameter and test of coefficient in order to make understanding a hypothesis decision easier. Table IV shows parameter estimation value (γ) is 0.35, and t_{count} is 2.56. It means that it is significant in confidence level of 95 percent. Because p -value from t_{count} ($p = 0.00$) is lower than $\alpha 0.05$, null hypothesis (stating that according to Indonesian CPAs' perception, there is no



Table IV Summary of hypothesis testing

Variable	Parameter estimation	t_{count}	R^2	Variance error	Decision
KTKK → RA	0.35	2.56			Ho is rejected
IPEB → RA	0.07	0.64			Ho is accepted
KTKK and IPEB → RA			0.16	0.84	

significant effect between client's corporate governance risk to audit risk) is rejected. Thus, according to Indonesian CPAs' perception, clients' corporate governance risk has significant effect on the audit risk (by 35 percent). Based on the result, it can be concluded that, according to Indonesian CPAs' perception, clients' corporate governance risk has significant effect on the audit risk.

H2 is formulated as: According to Indonesian CPAs' perception, implementation of clients' business ethic principles has significant effect on the audit risk. The test results parameter estimation value (γ) is 0.07, and t_{count} value is 0.64. It means that it is insignificant in confidence level of 95 percent. Because p -value from t_{count} ($p = 0.00$) is lower than α 0.05, null hypothesis (stated that according to Indonesian CPAs' perception, there was no effect from implementation of client's business ethics principle on the audit risk) is not rejected. Thus, according to Indonesian CPAs' perception, implementation of clients' business ethics principle has no effect on audit risk. Based on the finding, it can be concluded that, according to Indonesian CPAs' perception, implementation of clients' business ethics principle has no significant effect on the audit risk.

The third hypothesis is as follows: according to Indonesian CPAs' perception, clients' corporate governance risk and implementation of business ethics principles, simultaneously, have a significant effect on the audit risk. As shown in Table IV, R^2 value is 0.16 (16 percent). It means that clients' corporate governance risk and implementation of business ethics principle, simultaneously, have significant effect on audit risk (by 16 percent). Based on the result, it can be concluded that, according to Indonesian CPAs' perception, clients' corporate governance risk and implementation of business ethics principle, simultaneously, have significant effect to the audit risk.

Discussion of the results

Testing *H1*, *H2* and *H3* provides the evidence with result that clients' corporate governance risk has significant effect on the audit risk, whereas implementation of clients' business ethics principles has no effect on the audit risk. However, clients' corporate governance risk and implementation of business ethics principles, simultaneously, have significant effect on audit risk.

The results of hypothesis testing show that clients' corporate governance risk has significant effect on the audit risk, which means that this study provides evidence in terms of: Audit risk is affected significantly by clients' corporate governance risk. This finding is consistent with other studies which identify evidence related to contribution of BoD and audit committee to corporate governance (Beasley and Petroni, 2001; DeZoort and Salterio, 2001); while other studies, that weak corporate governance is related to fraudulent financial statement, resulted as risky audit (Dechow *et al.*, 1996; Agrawal *et al.*, 1999; Karpoff and Lott, 1993; Farber, 2005).

Further, results of hypothesis testing also show that implementation of clients' business ethics principles has no effect on audit risk. It means that audit risk is not affected by the implementation of clients' business ethics principles. This finding is consistent with other studies which emphasize that audit risk is not affected by management in relation to their attention to business ethic principles (Asare *et al.*, 1994; Beasley, 1999; KPMG, 1999; Wright, 1996).

Finally, results of hypothesis testing express that clients' corporate governance risk and implementation of business ethics principle, simultaneously, have significant effect on audit risk. It means that this study provides evidence that, according to Indonesian CPAs' perception, audit risk is affected by clients' corporate governance risk and implementation



of business ethics principles. This finding is consistent with several studies which confirm that audit risk is affected by clients' corporate governance risk and management integrity related to their attention to business ethic principles, because there is a relation between risk and audit investigation (Glover *et al.*, 2000; Wright and Bedard, 2000; Johnstone and Bedard, 2001; Elder and Allen, 2003). It also supports significant effect between risk and audit investigation scope (Guess *et al.*, 2000; Beaulieu, 2001; Graham and Bedard, 2003; Bedard and Johnstone, 2004; Johnstone and Bedard, 2005).

Conclusions, implications and recommendations

Based on the results of hypothesis testing and the discussion of research questions, the following serve as findings of the study. According to Indonesian CPAs' perception:

- clients' corporate governance risk has significant effect on the audit risk;
- implementation of clients' business ethics principles has no effect on the audit risk; and
- clients' corporate governance risk and implementation of business ethics principles, simultaneously, have significant effect on the audit risk.

It is concluded that this research provides empirical evidence related to the following:

- audit risk is influenced by clients' corporate governance risk;
- audit risk is not influenced by implementation of client's business ethics principles; and
- audit risk is influenced by both clients' corporate governance risk and implementation of business ethics principle; all according to Indonesian CPAs' perception.

This research has several implications/limitations, including: nature and intensity of gathering data (perception, and cross-sectional), restricted respondents (CPA-CMAF), restricted variable of corporate governance (BoD, and audit committee).

This research proposes theoretical and practical recommendations. Theoretically, for further research, it is suggested that one should conduct study related to audit risk (especially that focused on business ethics). Practically, for management, it is suggested they should conduct business ethically; to Bapepam (Capital Market Oversight Board) it is suggested they should conduct control over both public companies and public accounting firms, in relation to the implementation of governance.

References

- Agrawal, A., Jaffe, J.F. and Karpoff, J.M. (1999), "Management turnover and governance changes following the revelation of fraud", *Journal of Law and Economics*, Vol. 42, April, pp. 309-42.
- Allen, R.D., Hermanson, D.R., Kozloski, T.M. and Ramsay, R.J. (2006), "Auditor risk assessment: insight from the academic literature", *Accounting Horizons*, Vol. 20 No. 2, pp. 157-77.
- American Institute of Certified Public Accountants (AICPA) (1996), *Report of the Private Companies Practice Section Special Task Force on Standards Overload*, AICPA, New York, NY.
- Arens, A.A., Elder, R.J. and Beasley, M.S. (2006), *Auditing and Assurance Services: An Integrated Approach*, Pearson Education, Upper Saddle River, NJ.
- Beasley, M.S. (1996), "An empirical analysis of the relation between the board of director composition and financial statement fraud", *The Accounting Review*, Vol. 71, October, pp. 443-65.
- Beasley, M.S. and Petroni, K.R. (2001), "Board Independence and audit-firm type", *Auditing: A Journal of Practice and Theory*, Vol. 20 No. 1, pp. 97-114.
- Beaulieu, P. (2001), "The effects of judgments of new clients' integrity upon risk judgments, audit evidence, and fees", *Auditing: A Journal of Practice and Theory*, Vol. 20 No. 2, pp. 85-100.
- Bedard, J.C. and Johnstone, K.M. (2004), "Earning manipulation risk, corporate governance risk, and auditors' planning and pricing decisions", *The Accounting Review*, Vol. 79 No. 2, pp. 277-304.



- Bernardi, R. (1994), "Fraud detection: the effect of client integrity and competence and auditor cognitive style", *Auditing: A Journal of Practice and Theory*, Vol. 13, pp. 68-84.
- Boritz, J.E. and Zhang, P. (1999), "The auditor's objectivity under negligence liability system", *Auditing: A Journal of Practice & Theory*, Vol. 18, supplement, pp. 147-65.
- Cohen, J.R. and Hanno, D.M. (2000), "Auditors' consideration of corporate governance and management control philosophy in preplanning and planning judgments", *Auditing: A Journal of Practice and Theory*, Vol. 29 No. 2, pp. 133-46.
- Daniel, S. (1988), "Some empirical evidence about the assessment of audit risk in practice", *Auditing: A Journal of Practice & Theory*, Vol. 7 No. 2, pp. 174-81.
- DeZoort, F.T. and Salterio, S.E. (2001), "The effect of corporate governance experience and financial-reporting and audit knowledge on audit committee members' judgments", *Auditing: A Journal of Practice and Theory*, Vol. 20 No. 2, pp. 31-47.
- Dechow, P.M., Sloan, R.G. and Sweeney, A.P. (1996), "Causes and consequences of earnings manipulation: an analysis of firms subject to enforcement actions by the SEC", *Contemporary Accounting Research*, Vol. 13, Spring, pp. 1-36.
- Diacon, S.R. and Ennew, C.T. (1996), "Can business ethics enhance corporate governance? Evidence from a survey of UK insurance executives", *Journal of Business Ethics*, Vol. 15, pp. 623-34.
- Dusenbury, R.B., Reimers, J.L. and Wheeler, S.W. (2000), "The audit risk model: an empirical test for conditional dependencies among assessed component risks", *Auditing: A Journal of Practice and Theory*, Vol. 19 No. 2, pp. 106-17.
- Elder, R.J. and Allen, R.D. (2003), "A longitudinal field investigation of auditor risk assessment and sample size decisions", *Accounting Review*, Vol. 78 No. 4, pp. 983-1002.
- Elder, R.J. *et al.* (2008), *Auditing and Assurance Service: An Integrated Approach*, Pearson-Prentice Hall, Englewood Cliffs, NJ.
- Farber, D.B. (2005), "Restoring trust after fraud: does corporate governance matter?", *The Accounting Review*, Vol. 80 No. 2, pp. 539-61.
- Ghauri, P. and Gronhaug, K. (2002), *Research Methods in Business Studies*, Pearson Education, London.
- Gillet, P.R. and Uddin, N. (2005), "CFO intentions of fraudulent financial reporting", *Auditing: A Journal of Practice and Theory*, Vol. 24 No. 1, pp. 55-75.
- Glover, S., Jiambalvo, J. and Kennedy, J. (2000), "Analytical procedures and audit planning decisions", *Auditing: A Journal of Practice and Theory*, Vol. 19 No. 2, pp. 27-45.
- Graham, L. and Bedard, J. (2003), "Fraud risk factors and audit planning", *International Journal of Auditing*, Vol. 7 No. 1, pp. 55-70.
- Guess, A., Louwers, T. and Strawser, J. (2000), "The role of ambiguity in auditors' determination of budgeted audit hours", *Behavioral Research in Accounting*, Vol. 12, pp. 119-38.
- Gupta, G.L. and Sulaiman, M. (1996), "Ethical orientations of managers in Malaysia", *Journal of Business Ethics*, Vol. 13, pp. 735-48.
- Hair, J.F. Jr, Black, W.C., Babin, B.J., Anderson, R.E. and Tatham, R.L. (2006), *Multivariate Data Analysis*, Pearson-Prentice Hall, Upper Saddle River, NJ.
- Haskins, M.E. and Dirsmith, M.W. (1995), "Control and inherent risk assessment in client engagement: an examination of their independencies", *Journal of Accounting and Public Policy*, Vol. 14 No. 1, pp. 63-83.
- Houston, R.W., Peters, M.F. and Pratt, J.H. (1999), "The audit risk model, business risk and audit planning decisions", *Accounting Review*, Vol. 74 No. 3, pp. 281-98.
- Ikatan Akuntan Indonesia (2001), *Standar Profesional Akuntan Publik per 1 Januari 2001*, Penerbit Salemba Empat, Jakarta.
- Ikatan Akuntan Indonesia (2006), *Kompartemen Akuntan Publik Bekerjasama dengan Direktorat Pembinaan Akuntan dan Jasa Penilai Direktorat Jenderal Lembaga Keuangan Departemen Keuangan Republik Indonesia, Kantor Akuntan Publik dan Akuntan Publik: Directory 2006*, Jakarta.



- Johnstone, K.M. and Bedard, J. (2001), "Engagement planning, bid pricing, and client response in the market for initial attest engagements", *The Accounting Review*, Vol. 76 No. 2, pp. 199-221.
- Johnstone, K.M. and Bedard, J. (2005), "Audit planning and pricing during the period surrounding passage of the Sarbanes-Oxley Act", working paper, University of Wisconsin-Madison, Madison, WI.
- Karpoff, J.M. and Lott, J.R. (1993), "The reputational penalty firms bear from committing criminal fraud", *Journal of Law and Economics*, Vol. 36, October, pp. 757-802.
- Kinney, W.R. Jr (1989), "Achieved audit risk and the audit outcome space", *Auditing: A Journal of Practice & Theory*, Vol. 8, Supplement, pp. 67-84.
- KPMG (1999), *Fraud Survey Results (1999)*, KPMG, New York, NY.
- Libby, R., Artman, J.T. and Willingham, J.J. (1985), "Process susceptibility, control risk, and audit planning", *The Accounting Review*, Vol. 60 No. 2, pp. 212-30.
- Louwers, T.J., Ramsay, R.J., Sinason, D. and Strawser, J.R. (2007), *Auditing and Assurance Services*, The McGraw-Hill Companies, New York, NY.
- Messier, W.F. Jr and Austen, L.A. (2000), "Inherent risk and control risk assessments: evidence on the effect of pervasive and specific risk factors", *Auditing: A Journal of Practice and Theory*, Vol. 19 No. 2, pp. 120-31.
- Sekaran, U. (2003), *Research Method for Business*, John Wiley & Sons, New York, NY.
- Sennetti, J. (1990), "Toward a more consistent model for audit risk", *Auditing: A Journal of Practice & Theory*, Vol. 9 No. 2, pp. 103-12.
- Strawser, J.R. (1990), "Human information processing and the consistency of the audit risk model", *Accounting and Business Research*, Vol. 21, Winter, pp. 67-75.
- Tjager, I.N., Alijoyo, F.A., Djemat, H.R. and Soembodo, B. (2003), *Corporate Governance: Tantangan dan Kesempatan bagi Komunitas Bisnis Indonesia*, PT Prenhallindo, Jakarta.
- Utama, S. and Leonardo, F. (2006), "Audit committee composition, control of majority shareholders and their impact on audit committee effectiveness: Indonesia evidence", *Jurnal Riset Akuntansi Indonesia*, Vol. 9 No. 3, pp. 307-26.
- Walo, J. (1995), "The effect of client characteristics on audit scope", *Auditing: A Journal of Practice & Theory*, Vol. 14 No. 1, pp. 115-24.
- Wright, D.W. (1996), "Evidence on the relation between corporate governance characteristics and the quality of financial reporting", working paper, University of Michigan, Ann Arbor, MI.
- Wright, A. and Bedard, J. (2000), "Decision processes in audit evidential planning: a multistage investigation", *Auditing: A Journal of Practice and Theory*, Vol. 19 No. 1, pp. 123-43.

Further reading

- Agoes, S. (2005), *Peranan Internal Audit Department, Enterprise Risk Management, dan Good Corporate Governance terhadap Pencegahan Fraud dan Implikasinya kepada Peningkatan Mutu Lulusan Perguruan Tinggi di Indonesia*, Penerbit Salemba Empat, Jakarta.
- Asare, S.K. and Wright, A.M. (2004), "The effectiveness of alternative risk assessment and program planning tools in a fraud setting", *Contemporary Accounting Research*, Vol. 21 No. 2, pp. 325-52.
- Carcello, J.V. and Nagy, A.L. (2004), "Audit firm tenure and fraudulent financial reporting", *Auditing: A Journal of Practice and Theory*, Vol. 23 No. 2, pp. 55-69.
- Messier, W.F. Jr, Glover, S.M. and Prawitt, D.F. (2006), *Auditing and Assurance Services: A Systematic Approach*, McGraw-Hill, New York, NY.
- Ricchiute, D.N. (2006), *Auditing*, Thomson South-Western, Mason, OH.

Corresponding author

Muhammad Nuryatno Amin can be contacted at: nanofina@gmail.com

To purchase reprints of this article please e-mail: reprints@emeraldinsight.com
 Or visit our web site for further details: www.emeraldinsight.com/reprints



Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.