MEASURING THE POTENTIAL FOR FINANCIAL REPORTING FRAUD IN A HIGHLY REGULATED INDUSTRY

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Abstract

Fraud in financial reporting is an intentional misstatement of financial statements to mislead the users. It caused huge losses to the organizations, erodes accounting profession's image and affects the public confidence on published financial statements. This paper aims to examine the relevance of the theory of reasoned action in measuring the intention towards fraud in financial reporting in a highly regulated industry. Partial least squares structural equation modelling was used for data analysis. Findings indicate that the attitude and subjective norms influencedintention for fraud in financial reporting among the participants in financial reporting process,controlling for the effect of firm type. The findings expand the applicability of the theory of reasoned action to the highly regulated industry and provide better understanding on the factors influencing fraud in financial reporting to the top management within the industry. This paper concludes with limitations and avenues for future research.

Keywords: Attitude, subjective norms, fraud in financial reporting, highly regulated industry, firm type,partial least squares structural equation modelling

Introduction

Fraud resulted in loss of assets and business reputation, declined in staff moral and damaged business relations (Mung-Ling, Sze-Ling, & Chin-Hong, 2008). Fraud cost about 6% of company's total revenue (Watson, 2003) and, 7% or $994 billion in total of revenue per year (Bierstaker, 2009). Fraud is a significant ethical dilemma for businesses and believed to be the most serious corporate problem in the present business environment (Palshikar, 2002; M. Smith, Normah Haji Omar, Syed Iskandar Zulkarnain Sayd Idris, & Ithnahaini Baharuddin, 2005).The people who were implicated in fraud are those entrusted with company's sensitive information and controls, especially dealing with finance functions or finance-related role (KPMG, 2011; Rezaee, 2005). The cited reasons were economic pressures, weakening society's values and insufficient emphasis on prevention and detection (Abdolmohammadi & Owhoso, 2000).

Fraud occurs both in private and public companies, with no exception to the banking industry.According to the Global Fraud Survey, banking and financial services accounted to 16.7% of the reported 1, 388 occupational fraud cases (ACFE, 2012). This is about a similar percentage of 16.6% in year 2010 (ACFE, 2010). This caused a median loss of $232,000, with 229 reported cases, which placed the banking and financial services industry as the fifth highest median loss due to fraud, after other industries including Mining, Real Estate, Construction, and Oils and Gas.

Although the issue of fraud in financial reportingin banking institutions is notwidely documented locally or abroad,it does not necessarily indicate that accountants in the banking industry exhibit superior ethical standards.In analysing the cases of distress in Islamic banks of Bank Taqwa, Faisal Islamic Bank, Kuwait Finance House, International Islamic Bank of Denmark, it was concluded that banks failed due to bad management, improper accounting and management system (Rajhi & Hassairi, 2011). The problems of making fraud cases as a determinant of banking crisis are due to lack of paper trail, difficulty to establish the actual intentions of the agents involved, and restricted accessibility of the information to the public (Soral, İşcan, & Hebb, 2006).

Being a highly regulated industry, banking institutions are perceived to be safeguarded from fraud occurrences. However, as fraud in financial reporting involves people, the ethical loophole in banking industry may well open the room for fraud occurrences.

Theoretical background
Fraud in Financial Reporting

Being the prime source of reference in making economic decisions among the capital market participants, financial statements are expected to be reliable, transparent and comparable.Management decisions may influence the quality of financial reports whether the reports areof 'high quality' in one end or fraud at the other end(Kalbers, 2009).Attempts to mislead the financial report may be detrimental to these stakeholders.

Beyond the reliability expectation of financial statements, the financial statement fraud or fraud in financial reporting keeps occurring in the business environment (ACFE, 2012; KPMG, 2009; Rezaee, 2005).It is an "intentional material misstatement of financial statements or financial disclosures or the perpetration of an illegal act that has a material direct effect on the financial statements or financial disclosures," (Beasley, Carcello, & Hermanson, 1999: 11).

Methods used includeillegitimate revenue recognition, inappropriate deferral of expenses, understatement of expenses/liabilities, fictitious sales, premature sales, reversal or use of unjustified reserves,overstatement of assets other than accounts receivable,misappropriation of assets, inappropriate disclosure, and other miscellaneous techniques(Beasley et al., 1999; Rezaee, 2002).

Intention for Fraud in Financial Reporting

As human deviant behaviour factor is involved in fraud in financial reporting, the root causes for such behaviour need to be identified(Siti Noor Hayati, Kamil, Rashidah, & Wah, 2011). Unfortunately, the actual fraud in financial reporting is not easily detected as the decisions for fraud in financial reporting are aggregated into financial statements (Carpenter & Reimers, 2005). Little research was done measuring the actual ethical/unethical behaviour as the sensitivity and the difficulties for observing the occurrence of ethical/unethical behaviour (Ahmed, 2010; Haines & Leonard, 2007; Sweeney & Costello, 2009; Trevino, 1992). However, strong link was indicated

between behavioural intention and the actual behaviour, allowing researchers to measure behavioural intention rather than the actual behaviour (Carpenter & Reimers, 2005).Behaviour intention acts as a proxy for behaviour as the intention to behave unethically provide a basis to influence the behaviour (Buchan, 2005; Gibson & Frakes, 1997).

Thus, to measure the likelihood of fraud in financial reportingthe individuals' intention of committing such fraud is examined.Human behaviour intention are subjective probabilities for the likelihood of choosing a given behavioural alternative (Ajzen & Fishbein, 1980). Understanding behavioural factors that motivate behavioural intention could give guidance to management, regulators and minority shareholder group to develop strategies to curb its occurrence(Siti Noor Hayati et al., 2011). Pertaining to accounting and auditing practices, identifying the behavioural intention for fraud in financial reporting is relevant due to the difficulties and costs associated with its deterrence(Rezaee, 2005). Prior studies examined the intention for fraudulent financial reportinginclude namely Gillett and Uddin (2005); Carpenter and Reimers (2005); and,Siti Noor Hayati et al., (2009; 2011). Researches on intention towards cheating behaviour that has characteristics similar to fraudulent financial reporting as both behaviours were done for personal gain or reward and led to ethical implicationswere also conducted in other fields(e.g. Chang, 1998; Kurland, 1995; Randall & Gibson, 1991; Stone, Jawahar, & Kisamore, 2009).

Theory of Reasoned Action (TRA)

The theory of reasoned action wasconsidered as the best known theory for measuring ethical intention (Leonard, Cronan, & Kreie, 2004). The major goal of TRA is to predict and understand an individual's behaviour and posits that an individual's intention to perform (or not to perform) the behaviour is the immediate determinant of behaviour (Ajzen & Fishbein, 1980; Dubinsky & Loken, 1989).Intentions are "assumed to capture the motivational factors that influence a behaviour; they are indications of how hard people are willing to try, of how much an effort they are willing to exert in order to perform the behaviour,"(Ajzen & Fishbein, 1980: 181).

According to TRA, behavioural intention is depicted as a function of two basic determinants of attitude and subjective norm. Attitude reflects one's feeling towards performing a behaviour or whether the person is in favour of doing it, whilstsubjective norm refers to the influence of referent groups (i.e. family members, friends or those who are close to an individual) that could change one's opinion or ideas, or how much the person feels social pressure to do it(Carpenter & Reimers, 2005; Francis et al., 2004).

Past studies indicated that attitude toward behaviour is a significant predictor of behavioural intention (e.g. Ajzen & Fishbein, 1980; Buchan, 2005; Doll & Ajzen, 1992; Harding, Mayhew, Finelli, & Carpenter, 2007; Peterson, 2002). It is predicted that if an individual evaluates performing a particular behaviour as favourable, it is more likely he or she will intend to perform that particular behaviour(Fishbein & Ajzen, 1975). Specific to fraud in financial reporting, if an individual had a positive attitude for a transaction and felt that it was the right thing to do, even if those procedures would violate generally accepted accounting principle, then it is predicted that he or she would be willing to violate generally accepted accounting principle to reach a specific earnings prediction or goal (Carpenter & Reimers, 2005).Hence, more positive attitude toward the specific behaviour would lead to higher intention of fraudulent financial reporting (Gillett & Uddin, 2005).Thus, it is hypothesized that:

H₁: There is a significant positive relationship between attitudes and the intention for fraud in financial reporting among Muslim accountants.

As for the subjective norm, the referent group especially the superiors influenced the behavioural intention and consequent behaviour (N. C. Smith, Simpson, & Huang, 2007). The social network of relationships at work or personal communities where individuals are integrated into, comprising of family, relatives, friends, and associates, or the set of people that directly involved with the individuals (Cornwall, 1989)had also contributed towards unethical behaviour (Brass, Butterfield, & Skaggs, 1998).Other studies also concluded on the significant effect of referent groups of both peer groups and top management influences on ethical decision behaviour namely the intenders more likely to feel pressure from referents especially top management and supervisors(Dubinsky & Loken, 1989); and, absence of top management actions against unethicalbehaviour resulted in stronger approval of questionable practices (Akaah & Riordan, 1989).

The more an individual perceives that referent groups think he should engage in a behaviour, the more likely he intends to do such behaviour(Fishbein & Ajzen, 1975). In the case of fraud in financial reporting, an individual who perceive that referent group would approve or support the violation of generally accepted accounting principle (i.e. fraudulent financial reporting), he or she will highly likely to violate generally accepted accounting principle thus committingfraud in financial reporting to meet earnings predictions (Carpenter & Reimers, 2005; Siti Noor Hayati et al., 2009).This study hypothesized that:

H₂: There is a significant positive relationship between subjective norm and the intention for fraud in financial reporting among Muslim accountants.

Bank Type as a Control Variable
Control variable is defined as "any exogenous or extraneous variable that could contaminate the cause-and-effect relationship, but the effects of which can be controlled through a process of either matching or randomization,"(Sekaran & Bougie, 2010: 437). Control variables are included in the investigation to address problems related to the potential threat of alternative explanations (Troy, Smith, & Domino, 2011) and to ensure that the results are not biased by excluding them (Cooper & Schindler, 2011).

In the current study, two major types of banks with different underlying philosophy and values were involved. The Islamic banks are considered as having *ethical identity* as their business philosophy was grounded on religion with the social goal are at least of equal important as making profit, unlike its conventional counterparts which is interest based (Haniffa & Hudaib, 2007). The principle underlying the operation and activities of Islamic banks is the *Shari'ah* law, whereas conventional banks are operating solely for business purpose with no religious aspect(Sudin & Wan Nursofiza, 2009).

As religion is the basis for its establishment, Islamic banks are expected to internalize the teaching of religion not only in terms of its operations which need to conform to Islamic principles, but their employees are also expected to embed the religion or religiosity in fulfilling their professional obligations. Those who manage and govern Islamic banks are not only expected to make economic decisions on behalf of the shareholders and fund depositors in enforcing the rules of God, but to be believers imbued with piety and righteousness (Haniffa & Hudaib, 2007). Moreover, it was found that firms with strongreligious social norms generally experience lower incidences of

financial reportingirregularities (Dyreng, Mayew, & Williams, 2012; McGuire, Omer, & Sharp, 2012). Thus, to avoid making any improper inferences and reduces the possibility of spurious statistical influences, bank type was measured in the analysis as a control variableby a dummy variable. No specific prediction was made for bank type andthe expected sign of bank type was not hypothesized. It was dummy coded as 1 (conventional) and 0 (Islamic).

Research Model

This study used TRA as the main theoretical framework to examine the intention for fraud in financial reporting with the inclusion of bank type as a control variable. The research model is depicted in Figure 1.
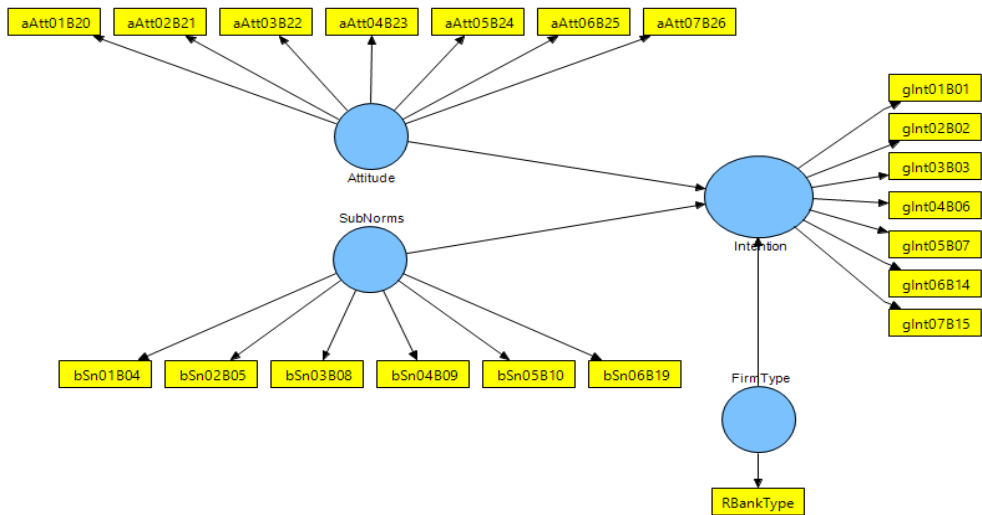

Figure 1: Research model

Research Methodology

Sample and Data

The unit of analysis in this study is the Muslim accountants that had a minimum of five years' experience in financial reporting process at the head office of Malaysian banking institutions. As the list of all the elements of the population could not be obtained, this study used a non-probability purposive sampling. As such only Muslim accountants that involved in the financial reporting process for a minimum of five years,inboth Islamic and conventional banks, either locally-owned or foreign-owned banking institutions were chosen.

A total of two hundred and six self-administered questionnaires were distributed to forty four banks through personal hand-delivery to the respective bank's contact in thirty six banks andsecured postage (courier service) to the remaining eight banks. The distribution and collection process took over a two months' period. Ultimately, 127 questionnaires were returned (61.7%) but only 121 questionnaires (58.7%) were valid for further analysis due to the incomplete responses, irrelevant respondents and outliers.

Measures

A scenario on an ethical dilemma related to the deferring of office supplies expense into the following year to meet the current year's net income target was presented in the questionnaire to examine the influence of attitude and subjective norm on the intention towards fraud in financial reporting. Deferring expenses to future period is the type of unethical financial reporting similar to that alleged at Enron and WorldCom (Burns, 2002 & Pulliam, 2003 in Carpenter & Reimers, 2005). The deferment of expense can mislead the information provided in financial statements and possibly deliberately deceive investors, crossing the line from earnings management to fraud (Carpenter & Reimers, 2005).

In evaluating the hypothetical scenario, 20 statements were presented, comprised of 7 statements for measuring intention; 7 statements for measuring attitude; and, 6 statements for measuring subjective norm, phrased and scaled using semantic differential scalesbased on a seven-point likert scale. The statements were mainly adapted from Carpenter and Reimers (2005), which have also been previously used by Madden et al.(1992) and Chang (1998).; and also partially adapted from other studies (Ajzen & Fishbein, 1980; Carpenter & Reimers, 2005; Cohen, Pant, & Sharp, 2001; Francis et al., 2004; Gillett & Uddin, 2005; Godin, Conner, & Sheeran, 2005; Hanudin, Abdul Rahim, Stephen, & Ang Magdalene, 2011; Hanudin, Abdul Rahim, & T. Ramayah, 2009; Montesarchio, 2009; Morris, Venkatesh, & Ackerman, 2005).

Data Analysis

This study used partial least squares structural equation modelling (PLS-SEM) SmartPLS Version 2.0 M3 developed by Ringle, Wende and Will (2005). PLS-SEM analysis involves the assessment of the measurement models and the structural models.

In the assessment of measurement model, the reliability and validity of the items were examined through convergent and discriminant validity based on item loadingsand cross-loadings, composite reliability (CR) and average variance extracted (AVE). Convergent validity is the degree to which multiple items used to measure the same concept are in agreement as assessed through outer loadings, CR and AVE. Outer loadings are the results of single regressions of each indicator variable on their corresponding construct; CR is the degree to which the construct indicators indicate the latent construct; and, AVE is the overall amount of variance in the indicators accounted for by the latent construct.The cut-off value for item loading, CR and AVE are 0.5, 0.7, and 0.5 respectively (Hair, Black, Babin, & Anderson, 2010).

Meanwhile, the discriminant validity is "the extent to which a construct is truly distinct from other constructs by empirical standards,"(Hair, Hult, Ringle, & Sarstedt, 2014: 104). In assessing the discriminant validity of the model, an indicator's outer loadings on a construct should be higher than all its cross loadings with other constructs; and the square root of each construct's AVE is greater than its highest correlation with any other construct referred to as Fornell-Larcker Criterion (Hair et al., 2014) .

Once the measurement model was satisfied, the next step is to evaluate for the structural model. This covers the assessment of collinearity issue, significance and relevance of structural model relationships, coefficient of determination (R^2 values), effect size and predictive relevance of the constructs.

Results and discussion
Respondents' Profile

Based on 121 valid and usable responses, the respondents' profile is shown in Table 1 below. 58 (47.9%) are male respondents and 55 (45.5%) are female respondents, fall within the age group of 40 years and above (35 or 28.9%). Most of the respondents are at managerial position (50.4%), while 38.8% are at executive level. The executive level are those respondents designated as executives in the accounting or finance department; and, the managerial level are those respondents designated as Assistant Vice President/Manager/Head of accounting or finance department; or, Vice President/Senior Manager in accounting or finance department of the related banking institutions.

Besides, 61 respondents (50.4%) worked in Islamic banks with most respondents (69.4%) had 5 to 15 years working experience in banking sector, 44.6% had less than 5 years working experience at their present bank and 60.3% had 5 to less than 10 years financial reporting experience in banking institutions. Hence the respondents' profile indicates the credibility of the respondents for this study purpose as they represent both male and female groups working in Islamic and conventional banks, with adequate length of working experience as well as financial reporting experience in banking institutions.

Table 1: Respondents' Profile

Item	Category	Frequency	%
Gender	Male	58	47.9
	Female	55	45.5
	No information provided	8	6.6
Age	Less than 30 years	25	20.7
	30- less than 35 years	28	23.1
	35- less than 40 years	21	17.4
	40 years and above	35	28.9
	No information provided	12	9.9
Qualification	Bachelor	75	62.0
	Master	15	12.4
	Professional	21	17.4
	Diploma and below	9	7.4
	No information provided	1	.8
Income	RM5000 and below	44	36.4
	RM5001-RM7000	31	25.6
	RM7001-RM10000	27	22.3
	Above RM10000	12	9.9
	No information provided	7	5.8
Job Level (Position)	Executive level	47	38.8
	Managerial level	61	50.4
	No information provided	13	10.7
Working experience in banking	5- less than10 years	60	49.6

sector	10- less than 15 years	24	19.8
	15 years and above	36	29.8
	No information provided	1	.8
Working experience in financial reporting in banking	5- less than10 years	73	60.3
	10- less than 15 years	26	21.5
	15 years and above	19	15.7
	No information provided	3	2.5
Working experience at present bank	Less than 5 years	54	44.6
	5- less than10 years	32	26.4
	10- less than 15 years	15	12.4
	15 years and above	20	16.5
Bank type	Islamic banks	61	50.4
	Conventional banks	60	49.6
Bank ownership	Local-owned bank	95	78.5
	Foreign-owned bank	26	21.5

Testing the Measurement Model

Firstly the convergent validity of the model based on the items loading, AVE and CR need to be established. The results of the measurement model from Table 2 indicate all item loadings, CR values and AVE exceed the recommended value of 0.5, 0.7 and 0.5, respectively (Hair et al., 2010). Hence, convergent validity of the model is established.

Table 2: Results of measurement model

Construct	Label	Loadings	AVE[a]	CR[b]
Attitude	aAtt01B20	0.912	0.809	0.967
	aAtt02B21	0.886		
	aAtt03B22	0.936		
	aAtt04B23	0.891		
	aAtt05B24	0.865		
	aAtt06B25	0.901		
	aAtt07B26	0.903		
Subjective Norms	bSn01B04	0.884	0.663	0.921
	bSn02B05	0.890		
	bSn03B08	0.874		
	bSn04B09	0.782		
	bSn05B10	0.766		
	bSn06B19	0.665		
Intention	gInt01B01	0.925	0.831	0.972
	gInt02B02	0.931		
	gInt03B03	0.915		
	gInt04B06	0.943		
	gInt05B07	0.834		

	gInt06B14	0.904		
	gInt07B15	0.925		

[a] Average variance extracted (AVE) = (summation of the square of the factor loadings) / {(summation of the square of the factor loadings) + (summation of the error variances)}

[b] Composite Reliability (CR) = (square of the summation of the factor loadings)/ {(square of the summation of the factor loadings) + (square of the summation of the error variance)}

Next is testing for the discriminant validity of the model.The Fornell-Larcker Criterion reveals a discriminant problem between two constructs of subjective norm and intention as indicated by the off-diagonal value greater than the diagonal value (as italicized in Table 3). The off-diagonal values are the correlations values for the relevant latent construct, whereas the diagonal values are the square root value of each construct's AVE.

Table 3: Discriminant Validity Problem of Two Constructs (*Italicized*)

	Attitude	Subjective Norms	Intention
Attitude	0.899		
Subjective Norms	0.783	*0.814*	
Intention	0.823	*0.895*	0.912

Further examination on the loadings and cross-loadings indicate some offending items (Table 4) that cross-load on more than one latent variable (Farrell, 2010) with difference in cross-loadings of lesser than 0.1 (Gefen & Straub, 2005). Low difference suggests that the respondents were unable to discriminate between the items to their respective constructs.

Table 4: Items with cross-loading problem

Construct	Label	Attitude	Subjective Norms	Intention
Attitude	*aAtt07B26*	*0.903*	0.731	*0.818*
Subjective Norms	*bSn03B08*	0.725	*0.874*	*0.859*
	bSn05B10	0.501	*0.766*	*0.743*
	bSn06B19	0.612	*0.665*	*0.573*

These items represent "I like-dislike the idea of deferring this office supply (aAtt07B26)"; "It is expected of me that I will defer this office supply expense into 2013(bSn03B08)"; "I usually do what others think I should do(bSn05B10)"; and, "If I defer this office supply expense into 2013, most people who are important to the company will disapprove-approve (bSn06B19)", respectively. These offending items were deletedto overcome the discriminant validity problem. The revised results of discriminant validity (Table 5) show the Fornell-Larcker Criterion is satisfied. Similarly, offending items no longer exist (Table 6). This suggeststhat adequate discriminant validity is established.

Table 5: Discriminant validity of constructs

	Attitude	Subjective Norms	Intention
Attitude	0.903		
Subjective Norms	0.725	0.904	
Intention	0.804	0.796		0.912

Table 6: Loadings and cross-loadings

Construct	Label	Attitude	Subjective Norms	Intention
Attitude	aAtt01B20	**0.915**	0.701	0.810
	aAtt02B21	**0.895**	0.661	0.665
	aAtt03B22	**0.943**	0.666	0.715
	aAtt04B23	**0.905**	0.709	0.699
	aAtt05B24	**0.867**	0.523	0.683
	aAtt06B25	**0.890**	0.660	0.766
Subjective Norms	bSn01B04	0.719	**0.944**	0.764
	bSn02B05	0.671	**0.957**	0.737
	bSn04B09	0.569	**0.803**	0.652
Intention	gInt01B01	0.711	0.756	**0.925**
	gInt02B02	0.742	0.763	**0.932**
	gInt03B03	0.761	0.748	**0.916**
	gInt04B06	0.757	0.800	**0.944**
	gInt05B07	0.656	0.682	**0.833**
	gInt06B14	0.759	0.637	**0.903**
	gInt07B15	0.743	0.684	**0.924**

Assessing the Control Variable

Prior to testing for the hypothesized relationships, the influence of control variable on the intention for fraud in financial reportingwas examined using a bootstrapping technique. Bootstrapping is "an approach to validate a multivariate model by drawing a large number of sub-samples and estimating models for each subsample. Estimates from all the subsamples are then combined, providing not only the "best" estimated coefficients, but their expected variability and thus their likelihood of differing from zero; that is are the estimated coefficients statistically different from zero or not," (Hair et al., 2010: 2). Bank type as a control variable was linked directly to the criterion or endogenous variable in the model. The control variable was specified in a formative way with the dummy-category (0 and 1) served as the indicator (Falk & Miller, 1992 in Berghman, 2006).

The bootstrapping result indicates a significant relationship between bank type and intention (t-value = 2.535). Further assessment on the effect size based on the f-squared value of the difference between R^2 included (0.757) and R^2 excluded (0.743) of the control variable shows small effect size (f^2= 0.060) of bank type on intention for fraud in financial reporting. The control variable should be included regardless whether it is significant or not, and the results for control variables are usually not further interpreted(Hair, Ringle, & Sarstedt, 2013). However, when the effect of control variables are significant, the findings should carefully be used when drawing conclusions or initiating additional analyses(Hair et al., 2013).Hence, bank type as

control variable is included in further analysis of structural relationship to test for the hypothesized relationships in this study.

Testing the Structural Model

The key assessment criteria in testing for the hypothesized relationships are the significance of the path coefficients, the value ofvariance explained (R^2), the f^2 effect size, the predictive relevance (Q^2) and the q^2 effect size (Hair et al., 2014). The path coefficients are the relationships between the latent variables in the structural model (Hair et al., 2014) that measure the strength of a relationship between a dependent variable and an independent variable, while holding constant the effects of all other independent variables (Allison, 1999 in Berghman, 2006). The R^2shows the amount of explained variance of endogenous latent variables in the structural model (Hair et al., 2014), with higher value indicates the better the construct is explained jointly by all latent variables in the structural model via path relationship. In this study the significance levels for loadings and path coefficients were determined based on the bootstrapping method, with 121 cases and re-sample of 500.

The resulted $R^2$of intention at0.757 suggests that 75.7% of the variance in the intention for fraud in financial reporting among Muslim accountants can be explained by the predictors in this study. The path coefficients and hypotheses testing results are shown in Table 7.

Table7: Path Coefficients and hypothesis testing

Research Hypotheses	Relationship	Standard Beta	Standard Error	t-value	Decision
H$_1$: There is a significant positive relationship between attitudes and the intention for fraud in financial reporting among Muslim accountants.	Attitude -> Intention	0.465	0.074	6.259**	Supported
H$_2$: There is a significant positive relationship between subjective norm and the intention for fraud in financial reporting among Muslim accountants.	Subjective Norms -> Intention	0.442	0.068	6.498**	Supported

**Significant at p<0.05

Based on Table 7, attitude was positively related to the intention for fraud in financial reporting among Muslim accountants (β = 0.465, ρ <0.05),thus supportedH$_1$. The higher the attitude of respondents towards fraud in financial reporting the higher is their intentions to commit fraud in financial reporting. This findings is in line with previous findings that attitude toward behaviour is a significant predictor of behavioural intention (e.g. Ajzen & Fishbein, 1980; Doll & Ajzen, 1992; Harding et al., 2007; Peterson, 2002). If an individual evaluates performing a particular behaviour as favourable, it is more likely he or she will intend to perform that particular behaviour(Fishbein & Ajzen, 1975). The more the respondents are in favour of fraud in

financial reporting, the higher their intentions to commit fraud in financial reporting. Hence, more positive attitude toward the behaviour leads to higher intention of fraudulent financial reporting(Gillett & Uddin, 2005), and the individual would reflects such intention to report unethical or fraudulent financial reporting (Carpenter & Reimers, 2005; Siti Noor Hayati et al., 2009).

Similarly, subjective norm was found to be positively related to the intention for fraud in financial reporting among Muslim accountants ($\beta = 0.442$, $\rho < 0.05$), thus supported H_2. This is in line with the prediction that the more an individual perceives that referent groups think he should engage in a behaviour, the more likely he intends to do such behaviour(Fishbein & Ajzen, 1975). In the case of fraud in financial reporting, an individual who perceive that referent group would approve or support the violation of generally accepted accounting principle (i.e. fraudulent financial reporting), he or she will highly likely to violate generally accepted accounting principle thus committingfraud in financial reporting to meet earnings predictions (Carpenter & Reimers, 2005; Siti Noor Hayati et al., 2009).

The next step in assessing for the structural relationship is the "blindfolding" procedure. Blindfolding is "a sample reuse technique that omits every *d*th data point in the endogenous construct's indicators and estimates the parameters with the remaining data points," (Hair et al., 2014: 178). Blindfolding procedure was conducted to measure the model's predictive relevance (Q^2). The Q^2 determines how well observed values are recommended by the model and its parameter estimates(Chin, 1998) and used to assess the relative predictive relevance of a predictor construct on an endogenous construct (Hair et al., 2014). Predictive relevance is established when the model has Q^2 value of greater than zero. Omission distance (OD) of 7 was utilized for blindfolding calculation as any value between 5 and 10 is feasible (Chin, 1998).The blindfolding result (CV red $= 0.619 > 0$) indicates model prediction is good or the model has predictive relevance for intention towards fraud in financial reporting.

Further assessment for structural relationships involvesthe effect size of blindfolding (q^2)to identify which predictor is more important in the model's predictive relevance. The results as summarized in Table 8 indicate that attitude and subjective norm had medium effect on the predictive relevance of the model. Thus, both predictors are equally important for the model's predictive relevance.

Table8: Results of effect size of blindfolding (q^2)

CV redundancy	Excluded predictor	CV redundancy	q^2	Effect size
0.619	Attitude	0.537	0.217	Medium
	Subjective Norms	0.540	0.208	Medium

Conclusion

The findings of this study indicate that the attitude and subjective norms significantly influenced the intention for fraud in financial reporting among Muslim accountants in banking institutions, controlling the effect of differentbank type.

The findings indicate the relevance of TRA in predicting intention for fraud in financial reporting in banking, thus broaden the applications of the TRA model in the context of a highly regulated industry and add up to the scarcity of literature on the

ethics in banking industry. The findings provide better understanding on the factors influencing fraud in financial reporting to the top management of banking institutions. Besides, the application of PLS-SEM shows the suitability of the PLS-SEM for data analysis in the field of accounting and business ethics.

However, the findings need to be interpreted in consideration for its limitations. Firstly, although scenarios are widely used in business ethics research(e.g. Ampofo, Mujtaba, Cavico, & Tindall, 2011; Carpenter & Reimers, 2005; Chun-Chang, 2007; Flannery & May, 2000; Randall & Gibson, 1991; Uddin & Gillett, 2002), the scenarios presented to the respondents are artificial and can only examine hypothetical situations (Brief, Dukerich, Brown, & Brett, 1996). Hence, the responses received represent, at best, the tendencies of Muslim accountants' intention for fraud in financial reporting.Secondly, the issue of social desirability bias also present in using scenarios but steps already taken in this study to minimize the issue. These included the use of self-administered questionnairewith the covering letter assuring anonymity and confidentiality of the responses receivedand the adaptation of the measurement items which were presented in a non-offensive and neutral manner to the respondents(Flannery & May, 2000; Fritzsche, 2000; Nederhof, 1985).Thus, future research using survey method should adopt similar precautionary steps but incorporates different scenarios to represent various ethical dilemmas in the Muslim accountants' financial reporting decision. The research scope could be extended to include accountants in other financial services to enhance the comparison of research results.

Future research should also examine the influence of perceived behavioural control on the intention for fraud in financial reporting in banking industryusingthe theory of planned behaviour(TPB) to compare on the relevance of the TRA and TPB in measuring the behavioural intentionin banking industry.

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