



**The occurrences and potential mitigation of occupational fraud in the international non-governmental organisation (INGO) sector in Vietnam: An empirical holistic approach**

A Thesis submitted by

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# Abstract

**Purpose** – This research investigated the *overall* research question as follows: *How do factors (individual-level, organisational-level, industry-level, and country-level) influence occupational fraud in the INGO sector in Vietnam?* This thesis addresses occupational fraud or internal fraud, rather than external fraud, because the former accounted for the majority of losses due to fraud. Additionally, this thesis has two foci: *what may contribute to fraud* – the second focus, and *what may prevent fraud* – the first focus. Specifically, the first focus is on how effective *organisational-level* factors are at preventing or reducing fraud (*undetected, suspected, actual/detected, and future*). Whilst, the second focus is on factors (*individual-level, organisational-level, industry-level, and country-level*) that may contribute to fraud (*future only*).

**Design/methodology/approach** – This study develops a conceptual model, built on the fraud triangle by Cressey in 1950. The model combines: fraud (undetected, suspected, actual/detected, and future); individual-level determinants (e.g. pressures); organisational-level determinants [e.g. organisational ethical culture (OEC), organisational ethics program (OEP), and organisational internal control (OIC)]; the industry-level determinant (e.g. the non-profit nature); and country-level determinants (e.g. cultural, political, legal, economic, and technological). The methodological choice of research design is quantitative, using the survey strategy with a self-administered questionnaire to collect data. The questionnaires were administered to the entire target population of 408 INGOs (a census) in Vietnam. In each INGO, *only one* potential survey respondent was approached. Potential respondents were high-level staff members such as Chief Executive Officers (CEOs), Chief Financial Officers (CFOs), Chief Accountants (CAs), accounting/auditing/financial employees, and other managers (e.g. human resources managers). In order to approach potential respondents, the current research used two survey modes: the paper-based (drop-off) mode (administered through Indochina, a research company) and the web-based (online) mode (administered through the Internet). Furthermore, descriptive and inferential data analysis was performed. In inferential analysis, testing the goodness of the data, including the scales used, was undertaken, prior to hypotheses testing. Chi-square test for independence, independent-samples t-test, exploratory factor analysis (EFA), confirmatory factor analysis (CFA), multivariate analysis of variance

(MANOVA), logistic regression, and multiple regression were statistical techniques employed in inferential analysis. CFA was executed by AMOS, whilst the rest were performed by SPSS.

**Results** – This thesis attained 177 usable returned questionnaires, representing the overall response rate to be 47.6%. The results of statistical analyses are as follows.

*What may prevent fraud?* – The first focus.

#### *Actual fraud*

At the model level, the combination of OEC, the effectiveness of OEP, and the effectiveness of OIC, to some extent, significantly predicted actual fraud. Likewise, the combination of the degree of OEP and the degree of OIC, to some extent, significantly predicted actual fraud. Moreover, at the independent variable level, the dimension of *supportability* under OEC as well as both the degree and effectiveness of OIC make unique statistically significant contributions to predicting/explaining actual fraud. Specifically, the latter is related to the effectiveness of the three dimensions under OIC. They are: management-performed monitoring activities and process-level control activities; commitment-to-competence control environment; and audits-performed monitoring activities and gifts-hospitality control activities. In which, *commitment-to-competence control environment* made the strongest unique contribution to predicting actual fraud. Conversely, the degree and effectiveness of OEP play no role in mitigating actual fraud.

#### *Undetected fraud*

At the model level, the combination of OEC, the effectiveness of OEP, and the effectiveness of OIC, to some extent, significantly predicted undetected fraud, whilst the combination of the degree of OEP, and the degree of OIC did not. In addition, at the independent variable level, only the dimension of *supportability* under OEC made a unique statistically significant contribution to predicting undetected fraud, but not the effectiveness and degree of OEP and OIC.

### *Suspected fraud*

At the model level, the combination of OEC, the effectiveness of OEP, and the effectiveness of OIC, to some extent, significantly predicted suspected fraud, whilst the combination of the degree of OEP, and the degree of OIC did not. Additionally, at the independent variable level, there were three dimensions making unique statistically significant contributions to predicting suspected fraud. They were: the dimension of *discussability* under OEC, the effectiveness of the dimension of ethics-incorporated performance and employment under OEP, and the effectiveness of the dimension of monitoring activities and process-level control activities under OIC. In which, *ethics-incorporated performance and employment* made the strongest unique contribution to predicting suspected fraud. Conversely, the degree of OEP and OIC played no role in mitigating suspected fraud.

### *Future fraud*

At the model level, the combination of OEC, the effectiveness of OEP, and the effectiveness of OIC, to some extent, significantly predicted future fraud, whilst the combination of the degree of OEP, and the degree of OIC did not. Moreover, at the independent variable level, only the dimension of *supportability* under OEC made a unique statistically significant contribution to predicting future fraud, but not the effectiveness and degree of OEP and OIC.

*What may contribute to fraud (future only)?* – The second focus.

For the purposes of this thesis, individual-level determinants (e.g. pressures), organisational-level determinants (e.g. poor OEC, poor OIC), and the industry-level determinant (e.g. the non-profit nature) are micro factors, whilst country-level determinants (e.g. cultural, political, legal, economic, technological) are macro factors. At the model level, the combination of the determinants, to some extent, significantly contributed to engendering future fraud. In addition, at the independent variable level, there were five factors making unique statistically significant contributions to engendering future fraud. They are: two individual-level factors: non-financial personal pressure (e.g. lack of personal discipline, greed) and financial corporate/employment pressure (e.g. management financial interest, low salary); one organisational-level factor: poor OIC; one industry-level factor: the non-profit nature

in the operation of INGOs; and one country-level factor: the legal factor in Vietnam. In which, *the non-profit nature* was the strongest source of future fraud, whilst poor OIC is considered to be a silent source of future fraud.

**Originality/value** – This thesis has made three distinct contributions to the literature. Firstly, it is the first comprehensive study worldwide to incorporate individual-level, organisational-level, industry-level, and country-level factors into predicting future fraud in the INGO/NPO (non-profit organisation) sector in a specific country (e.g. Vietnam), with statistically empirical evidence. Secondly, it is the first comprehensive study worldwide to examine different stages of fraud occurrence (undetected, suspected, actual/detected, and future), with statistically empirical evidence. Thirdly, it is the first comprehensive study in Vietnam as well as in developing countries to investigate fraud in the INGO/NPO sector (industry-level), with statistically empirical evidence. Besides, this thesis also provided other remarkable theoretical contributions.

**Practical implications** – The results of this thesis are useful for different stakeholders in the INGO sector in Vietnam. The results may also be beneficial to stakeholders in the INGO/NPO sectors in other developing countries, which have similar or close national context factors as in Vietnam. The groups of stakeholders include: (1) CEOs, CFOs, CAs and other directors/managers of INGOs; (2) donors of INGOs; (3) auditors related to INGOs; and (4) the Vietnamese government. Furthermore, fruitful areas of further research were identified, in which five research areas, being equivalent to five research projects, could use the data collected by this thesis.

## **Certification of Thesis**

This Thesis is entirely the work of Khanh Nguyen, except where otherwise acknowledged. The work is original and has not previously been submitted for any other award, except where acknowledged.

Principal Supervisor: Professor Karen Trimmer

Associate Supervisor: Professor John Sands

Student and supervisors signatures of endorsement are held at the University.

# Thesis-related publications

## Conference papers

Nguyen, K 2015, 'A conceptual model for proactive prevention of potential fraud in the non-profit/international non-governmental organisation (INGO) sector in Vietnam', *Proceedings of the USQ School of Commerce Higher Degree Research Student Seminar 19-20 Nov 2015*, Toowoomba, Australia.

Nguyen, K 2016, 'Prevention of fraud in the non-profit/international non-governmental organisation (INGO) sector in Vietnam: The effects of organisational ethical culture, organisational ethics program, and anti-fraud internal controls', *Proceedings of the USQ School of Commerce Research Week 6-10 June 2016*, Toowoomba, Australia.

## Other

During the course of this PhD journey, the researcher made contributions of advice to the following book. Appendix 18 presents acknowledgement letters from the book authors and Cengage Learning.

Albrecht, WS, Albrecht, CO, Albrecht, CC & Zimbelman, MF 2016, *Fraud examination* 5edn, Cengage Learning, USA.

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Completing a PhD thesis is an enormous task, especially when coping with the challenging area of research – fraud, as in this thesis. Although this thesis reflects the work of one individual, the completion of this thesis could not have been made a reality without the support of people and organisations. Hence, I would like to acknowledge their support contributed in several ways, namely academic, technical, financial, administrative and personal.

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## List of abbreviations

AGFI	: Adjusted goodness-of-fit index
AU\$	: Australian dollar
AV	: Auxiliary variable
AVE	: Average variance extracted
BTA	: The bilateral trade agreement
CA	: Chief accountant
CEO	: Chief executive officer
CFA	: Confirmatory factor analysis
CFI	: Comparative fit index
CFO	: Chief financial officer
CMB	: Common method bias
CMIN	: Minimum discrepancy
COMINGO	: Committee for Foreign Non-governmental Organisation Affairs
COSO	: The Committee of Sponsoring Organisations
CPA	: Certified practising accountant
CPV	: The Communist Party of Vietnam
DF	: Degrees of freedom
DRV	: Democratic Republic of Vietnam
DV	: Dependent variable
EFA	: Exploratory factor analysis
EM algorithm	: Expectation-maximization algorithm
FDI	: Foreign direct investment
FPO	: For-profit organisation
GBP	: Great Britain pound
GDP	: Gross domestic product
GFI	: Goodness-of-fit index
IAS	: International accounting standards
IFRS	: International financial reporting standards
INGO	: International non-governmental organisation
ISA	: International standard on auditing

IV	: Independent variable
MANOVA	: Multivariate analysis of variance
MAR	: Missing at random
MCAR	: Missing completely at random
MI	: Multiple imputation
ML	: Maximum likelihood
MNAR	: Missing not at random
MOF	: Ministry of Finance
NFI	: Normed fit index
NLF	: The National Liberation Front
NPO	: Non-profit organisation
OCV	: Organisational characteristic variable
OEC	: Organisational ethical culture
OEP	: Organisational ethics program
OIC	: Organisational internal control
OR	: Odds ratio
PAF	: Principal axis factoring
PCA	: Principal components analysis
QC	: Quality control
RMSEA	: Root mean square error of approximation
RR	: Response rate
RVN	: Republic of Vietnam
SEM	: Structural equation modelling
SRMR	: Standardised root mean residual
SRV	: The Socialist Republic of Vietnam
UAS	: Uniform accounting system
US\$	: United States dollar
USQ	: The University of Southern Queensland
VAS	: Vietnamese accounting standards
VND	: Vietnamese Dong
VUFO	: Vietnam Union of Friendship Organisations

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