National and Kapodistrian University of Athens

Applied Risk Management - Internal Audit

Meeting on
DISSERTATION GUIDELINES

Subject Selection

The Subject of the Thesis should:

- be somehow relevant to Risk Management/Internal Audit

- refer to issues for which bibliography and scientific references exist

- be a subject for which empirical data are available, can be collected and be used for the empirical part of the thesis

The brief description of the subject under investigation (1-2 pages) should include a brief description of the following parts of the thesis:

- Proposed title

- Description and formulation of the research question

- Importance of the issue and justification of the interest for the preparation of this thesis

- Indicative table of contents

- Research methodology

- *Anticipated contribution*

Brief description of the subject under investigation

The brief description should be developed after:

- having done an initial literature review on the subject

- having discussed the thesis topic, along with its importance, structure and methodology to be followed with the tutor – supervisor. The comments of the supervisor should be incorporated in the final subject description.

Suggested Structure of the Thesis

- Title page

- Abstract / Executive Summary

- Table of Contents

- Introduction

- THEORETICAL PART

- EMPIRICAL PART

- Discussion / Conclusions and Policy Implications

- References

- Appendices

Suggested Structure of the Thesis

The theoretical analysis of the thesis should be restricted to 30-40% of the whole thesis, while the empirical analysis should be over 50-60%. The remaining 10% of the thesis refers to the Abstract, the Introduction and Conclusion-Policy Implications.

The size of the thesis should not exceed 9.000 words, approximately up to 30-35 pages plus tables and diagrams.

Each section starts with a small introduction of 5-6 lines referring to what the section investigates. Also, the basic conclusions of each section are referred at its end.

The text must have a continuous flow. The analysis takes place from the general to the specific subject. Each section is divided into paragraphs. Care is taken so that all the text, graphs and tables have a common format.

Suggested Structure of the Thesis

- Times New Romans, 11pt
- 1,5 spacing
- Fully justified
- Headings in bold and sequentially numbered
- Sub-headings in *italics*

Tables and figures must be titled and explicitly commented and referred to in the text. They should be numbered consecutively within each chapter (chapter number first; e.g. Table 2.1 and Figure 2.1 are the first table and the first figure in Chapter 2, respectively). Sources to original or derived tables and figures from other authors must always be cited [e.g. Source: Boddy, 2008 (p.227, Table 7.2)].

Mathematical equations must be written clearly and numbered in parentheses. They should be numbered consecutively within each chapter (chapter number first; e.g. (3.1) is the first equation presented in Chapter 3).

Appendices should be explicitly cited in the text (e.g. "..., *which is presented analytically on Appendix B.*").

Title Page

- The **first page** includes the following information:

    o Title of the Program

    o Course

    o Tutor

    o Title of IAT

    o Name – surname of writer

    o Communication data for each writer

    o Date and place

Executive summary

- This should summarise: what the study was about, its purpose (aim), methodological outline, key findings, and key conclusions/recommendations.

- Should not be too long or lacking in key information as above. About half a page is sufficient.

- It should be edited well to make sure that it is very well written.

1. Introduction

What is the study about? Why was it done? What areas does the report cover?

This section is brief and introduces the report.

INTRODUCTION

Introduction: This is broader than the above abstract and includes, in a comprehensive way, not only what is analyzed in each section, but also its basic findings. This section is also written at the end of the study. The size of the Introduction cannot overcome 500 words.

THEORETICAL PART

- The subject under examination is defined

- The relevant bibliography that has been developed for the subject so far is analyzed

- If the thesis is focused on a particular sector, an overview of the relevant market should be presented

- If the thesis is focused on a particular company (e.g. case study), an overview of this organization should be presented

- Care should be given on reporting references (author/s, chronology) inside the text when analyzing existing literature of the subject under investigation (see next slide).

IN-TEXT

To cite information directly or indirectly, there are two ways to acknowledge citations:
1) Make it a part of a sentence or 2) put it in parentheses at the end of the sentence.

Direct quotation – *use quotation marks around the quote and **include page numbers***
1) Cohen and Lotan (2014) argue that "many different kinds of abilities are essential for any profession" (p.151).
2) "Many different kinds of abilities are essential for any profession" (Cohen & Lotan, 2014, p.151).

N.B. See the Library's APA webpage for a quotation of 40 or more words.

Indirect quotation/paraphrasing/summarising – *no quotation marks*
1) Professional knowledge alone does not make someone a very capable professional (Cohen & Lotan, 2014).
2) According to Cohen and Lotan (2014), professional knowledge alone does not make someone a very capable professional.

N.B. Page numbers are optional when paraphrasing, although it is useful to include them (Publication Manual, p. 171).

Citations from a secondary source
1) Gould's (1981) research "raises fundamental doubts as to whether we can continue to think of intelligence as unidimensional" (as cited in Cohen & Lotan, 2014, pp. 151-152).
2) Intelligence cannot be believed to consist of one single entity any more (Gould, 1981, as cited in Cohen & Lotan, 2014).

N.B. To cite a source you found in another source, you must acknowledge all the authors.
- *The author(s) of the source referred to*   *i.e. Gould, 1981*
- *The author(s) of the work which contains the original source*   *i.e. Cohen & Lotan, 2014*

In the reference list, only the book by Cohen & Lotan should be acknowledged. Do not list Gould.

- At the end of your assignment, you are required to provide the full bibliographic information for each source. References must be listed in alphabetical order by author.

- Research scope and goals

- Research Methodology

- Empirical Results

- **Identify possible literature gap**

- Ideally summarise the circumstances leading to the identification of the management problem briefly in a small paragraph

- Give Management Decision Problem

- Give Research Problem

- Give underlying objectives as a list of about 4 to 8 items.

EMPIRICAL PART: Research methodology

Research Design: Exploratory, Descriptive, Causal or Combination?

Research Method: Qualitative (e.g. in-depth interviews, focus groups), Quantitative (e.g. field survey) or a combination?

Sampling Design: Research population, sampling frame, sampling method (e.g. convenience, stratified), data collection method (e.g. telephone, mail, online, personal) period of data collection, final sample size, response rate?

Questionnaire Design: Type of questions, different sections, total number of questions, possible pilot testing?

Analytical issues: Method of analysis (e.g. content analysis for qualitative research, statistical analysis for quantitative data), analytical software used for the analysis?

Types of Research

Exploratory Research

- undertaken with the aim of clarifying ambiguous problems
- general problems usually known but not sufficiently understood
- the purpose is to get more information, not to uncover specific courses of action

Descriptive Research

- undertaken with the aim of determining the characteristics of a population or phenomenon
- Previous knowledge of problem exists
- High degree of precision or accuracy required

Causal Research

- undertaken with the aim of identifying cause and effect relationships amongst variables
- are normally preceeded by exploratory and descriptive research studies
- Often difficult to determine because of the influence of other variables

Sources of Data

Secondary

Internal Sources
- Company Accounts
- Internal Reports and Analysis
- Stock Analysis
- Retail data - loyalty cards, etc.

External Sources
- Government Statistics
- EU - Euro Stat
- Trade publications
- Commercial Data - Nielsen, ICAP, etc.
- Household Expenditure Survey
- Magazine surveys
- Other firms' research
- Research documents – publications, journals, etc.

Primary

- First hand information
- Expensive to collect, analyse and evaluate
- Can be highly focussed and relevant
- Care needs to be taken with the approach and methodology to ensure accuracy
- Types of question – closed – limited information gained; open – useful information but difficult to analyse

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Qualitative – Quantitative Research

Qualitative Research

- Small samples

- In-depth investigation of a phenomenon

- Interviews, focus groups, observations

- Open-ended questions and discussion guides

- Data that cannot be quantified

- Generalization in theory

- Applicable in exploratory research

Quantitative Research

- Large samples

- Descriptive or causal approach

- Surveys, experiments

- Structured sampling process

- Structured questionnaires

- Quantifiable data

- Generalization in the population

- Applicable mostly in descriptive and causal research design

Individual In-depth Interviews

Focus Group Discussions

Projective Techniques

Observation

Case Study approach

Primary Quantitative Research: the Survey Method

The survey method of obtaining information is based on questioning respondents.

Questions regarding behavior, intentions, attitudes, awareness, motivations, and demographic and lifestyle characteristics all lend themselves to survey research.

The questionnaire is relatively simple to administer when compared to qualitative techniques.

The data obtained are reliable as the responses are limited to the alternatives stated and the standardisation of the questionnaire reduces the variability in the results caused by differences in interviewer characteristics.

The coding, analysis and interpretation of data are also relatively simple when compared to qualitative data analysis.

Structured questions and fixed-response alternatives may result in a loss of validity for certain types of data such as evolving beliefs and feelings.

Respondents may be unwilling to respond if the information requested is sensitive or of a personal nature.

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Research population definition

This is defining the elements or objects that possess the information the researcher seeks and about which the researcher will make inferences.

The definition should precisely define who should and who should not be in the study.

Determining the sampling frame

A sampling frame is the representation of the elements of the target population.

The sampling frame could be;

- A list (of companies or individuals)
- A telephone directory
- A database of companies or people.

Select the sampling method

There are two sampling methods

- **Random Sampling:**

  – Simple random sampling
  – Systematic random sampling
  – Stratified random sampling

- **Non-random sampling:**

  – Convenience sampling
  – Judgmental sampling
  – Quota sampling
  – Snowball sampling
  – Purposive Sampling

Random Sampling

Simple Random Sampling - This is a probability sample selected by assigning a number to every element of the population and selecting the required number of elements into the sample at random. Every member of the population has an equal chance of being selected into the sample.

Systematic Random Sampling - Probability sampling in which the entire population is numbered and elements are selected using a skip interval. For example, if the total population is 1,000 and your total sample size is 100 the skip factor is 10 (1000/100 = 10). Then select first item from the population at random and skip forward and backward until you draw a sample of 100. For example if your first item selected at random is 556, the next item is 566, 576 and so on. In backward skipping you will appoint 546, 536 etc into the sample. You continue doing this until you get 100 elements into your sample.

Stratified Random sampling - Probability sampling where the required sample size is drawn from mutually exclusive subsets of the population. The population is divided into mutually exclusive groups (such as age groups) and random samples are drawn from each group.

Non- Random Sampling

Convenience Sample - The researcher selects the most accessible population members. The major criterion in selecting elements into the sample is the convenience of the researcher.

Judgement sample - The researcher selects population members who are good prospects for accurate information.

Snowball sampling - This is where the sample is appointed as you go along by asking one element to suggest one or more suitable individuals to be appointed into the sample.
You do this until you get the required number of elements.

Survey data collection methods

- Telephone

- Personal

- Mail

- Online (e-mail, internet platforms)

Internet surveys – The questionnaire is placed in a web-site. Respondents visit the web-site, respond to the questionnaire and hit the Submit button. www.SurveyMonkey.com or www.google.co.uk/forms/about allow you to design web based surveys.

Determining the sample size – key criteria

- Cost

- All you can reach

- Average size of samples for previous similar studies

- Statistical methods (min. 100 cases)

Response rate calculation = number of completed questionnaires/total number of persons contacted

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Questionnaire design

Response Format
- Open ended
- Multiple Choice
- Dichotomous
- Multi-option

Question Wording

- Use simple words
- Use clear words
- Avoid leading questions
- Avoid estimations
- Avoid double-barrelled questions

Question Sequence
- Use a simple and interesting opening question
- Ask general questions first
- Place uninteresting and difficult questions later in the sequence.
- Arrange questions in logical order

Type of Questions

Unstructured questions are open-ended questions that respondents answer in their own words.

What do you think are the most critical challenges IA faces nowadays?
_____

- **Structured Questions**

Do you intend to buy a new car within the next six months?

_____	Definitely will not buy
_____	Probably will not buy
_____	Undecided
_____	Probably will buy
_____	Definitely will buy

Type of Questions

A dichotomous question has only two response alternatives: yes or no, agree or disagree, and so on.

Often, the two alternatives of interest are supplemented by a neutral alternative, such as "no opinion," "don't know," "both," or "none."

How likely are you to buy a new car within the next six months?

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
Not at all likely   Very Likely

Type of Questions

The **Likert scale** requires the respondents to indicate a degree of agreement or disagreement with each of a series of statements about the stimulus objects.

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1. Sears sells high quality merchandise.	1	2	3	4	5
2. Sears has poor in-store service.	1	2	3	4	5
3. I like to shop at Sears.	1	2	3	4	5

The **semantic differential** is a seven-point rating scale with end points associated with bipolar labels that have semantic meaning.

SEARS is:

Powerful	--:--:--:--:-X-:--:--: Weak
Unreliable	--:--:--:--:--:-X-:--: Reliable
Modern	--:--:--:--:--:--:-X-: Old-fashioned

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EMPIRICAL PART: Empirical Results

1. **Sample profile** (provide demographics of respondents)

2. **Empirical Results** (organize under several sub-sections, using suitable headings depending on the different sections of the research)

✓ Results of qualitative research should be presented in a logical flow by depicting the main findings of each theme investigated (aggregating the views expressed by all respondents in each theme investigated). The exact responses of each respondent should not be included in the text, although reporting some of their quotes to support the main findings presented is highly recommended.

✓ Results of quantitative research should be presented in the form of tables and figures, accompanied by brief comments for each finding.

- **Conclusions**: critically elaborate on the empirical findings

- **Theoretical implications**: how the research findings support/advance existing literature?

- **Managerial implications**: how can the research findings be valuable in practice? How can companies use the research findings in every-day business for better results? What are the **recommendations** for business practice stemming from the thesis?

- **Limitations and Further Research directions**: what are the limitations of the research conducted (e.g. small sample size, representativeness)? How can the thesis subject be further investigated in future studies?

References

EXAMPLES OF REFERENCES BY TYPE

In a reference list

1. **Book with one author**

   King, M. (2000). *Wrestling with the angel: A life of Janet Frame*. Auckland, New Zealand: Viking.

   N.B. The first letter of the first word of the main title, subtitle and all proper nouns have capital letters.

2. **Book with two authors**

   Dancey, C. P., & Reidy, J. (2004). *Statistics without maths for psychology: Using SPSS for Windows* (3rd ed.). Harlow, England: Pearson/Prentice Hall.

   N.B. Before "&" between authors, do not forget to put a comma.
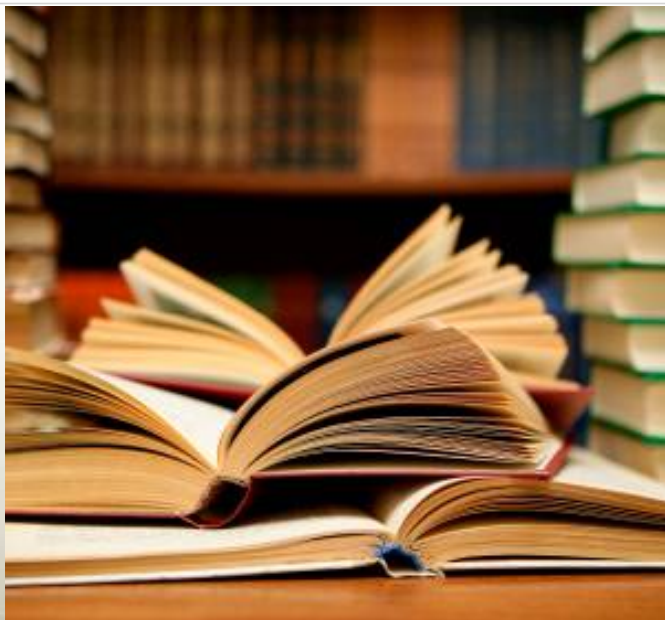
References

EXAMPLES OF REFERENCES BY TYPE

9. **Journal article (academic/scholarly) with DOI** (NEW DOI format)

   Cavenagh, N., & Ramadurai, R. (2017). On the distances between Latin squares and the smallest defining set size. *Journal of Combinatorial Designs, 25*(4), 147–158. https://doi.org/10.1002/jcd.21529

   N.B. DOI (Digital Object Identifier) is a unique code assigned to a scholarly/academic publication. The DOI's code links to the article online.

9a. **Journal article with no DOI**

   Germann, F., Ebbes, P., & Grewal, R. (2015). The chief marketing officer matters! *Journal of Marketing, 79*(3), 1-22.

   N.B. Retain original punctuation of titles. A capital letter is used for key words in the journal title. The journal title and volume number are italicised, followed by the issue number in brackets (not italicised).

10. **Magazine – popular/trade/general interest**

   Goodwin, D. K. (2002, February 4). How I caused that story. *Time, 159*(5), 69.

   N.B. Full date is used if published weekly; month and year if monthly.

11. **Newspaper article**

   Coster, D. (2017, June 12). Driver who caused man's death is placed into dementia care. *Stuff*. Retrieved from http://www.stuff.co.nz/

   N.B Use the URL of the newspaper's homepage, as a direct link to an online article in a newspaper website is not a persistent link.

14. **Webpage**

   New Zealand Trade and Enterprise. (n.d.). *Agribusiness*. Retrieved from https://www.nzte.govt.nz/en/export/market-research/agribusiness/

   N.B. (n.d.) = no date. The basic format is: (1) Author (could be organisation). (2) Date (either date of publication or latest update). (3) Title. (4) URL.

Appendices

- Discussion Guide / Questionnaire

- Software outputs related to quantitative analyses

Make sure that each appendix is numbered, each has a title, and each of them referred to at appropriate places within the report.