Master of Financial Technical Analysis (MFTA)

Thesis Paper Submission

and

IFTA Journal Style Guide

Manual

10 March 2015 (last revised)
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INTRODUCTION

This manual is designed as an aid in completing and submitting the Master of Financial Technical Analysis thesis and preparing it for publication in the *IFTA Journal*. The submission of your master's paper is the last step in the program leading to the award of your designation, MFTA. Your manuscript is a scholarly statement of the results of your work and a contribution to the international body of knowledge of Financial Technical Analysis. We hope this will be useful for those preparing their thesis or submitting a paper to the *IFTA Journal*.

Your thesis or journal paper must meet all the guidelines set forth in this Manual. You should check with the offices of IFTA and the instructions as published on www.ifta.org to make sure you understand how to submit your paper.

The submission of your master’s paper is the last step in the program leading to the award of your designation, MFTA. Your manuscript is a scholarly statement of the results of your work. Your MFTA thesis will be made available for submission to the *IFTA Journal*. For these reasons, IFTA has established guidelines for formatting your manuscript in order to obtain a professional product in a permanent and readily reproducible form for presentation, and with consistency in the arrangement of the contents. The finished document reflects on both you and any institution or organization you represent.

Any deviation from presentation requirements may result in the rejection of your submission.
TIMELINE AND SCHEDULES

Timeline Information

Session 1

May 2: Application, outline and fees deadline. Response to the outline will normally be made no later than June 1 in the same year.

October 15: Paper submission deadline. Delivery must be in electronic form (via e-mail), in the required format. Papers received after October 15 will not be accepted, and candidates will need to re-enroll (and pay a second registration fee) for MFTA the following year. If you are applying to the program via the alternate path, you must submit the Alternate Path pre-application by February 28, and then follow the requirements above.

Session 2

October 2: Application, outline and fees deadline. Response to the outline will normally be made no later than November 1 in the same year.

March 15: Paper submission deadline. Delivery must be in electronic form (via e-mail), in the required format. Papers received after March 15 will not be accepted, and candidates will need to re-enroll (and pay a second registration fee) for MFTA the following year. If you are applying to the program via the alternate path, you must submit the Alternate Path pre-application by July 31, and then follow the requirements above.

For more information, please e-mail admin@ifta.org.
PREPARATION AND SUBMISSION FORMAT

Submission Format

Final papers must be electronically submitted as a Word document, with all images embedded. A PDF version must also be submitted. Additionally, please submit a separate file of all charts and tables as original high resolution images.

Spacing

Use double spacing throughout except in footnotes, indented quotations set off from the text, bibliography entries of more than one line, and materials such as captions or tables and appendices of data or charts.

Margins

Some reviewers will print out your submission, and you might want to as well. Use of standard margins will also aid in preparing your document for publication. For this purpose, every page of the paper must be kept within the following margins: 1-1/2 inches (3.8 cm) on the left side of the page; 1 inch (2.54 cm) at the top, right and bottom sides. All pagination (page numbers) must fall within these margins.

Fonts

Use one of the “Roman” or serif fonts, such as Times New Roman, or Bookman in either an 11-point or 12-point size. Italics are used for all Latin phrases, such as et al. and etc.

Justification and Hyphenation

A paper will have a straight-line (justified) left margin and a ragged right margin, with text formatted to less than 1 inch (2.54 cm) from the right edge. Long words may be hyphenated at the discretion of the author to prevent unusually short lines from
appearing, but hyphenation should be minimized. Each paragraph must be indented five (5) spaces. Do not end a page with a hyphen.

**Arrangement of Your Manuscript**

The pages of your thesis will appear in the following order:

- Title Page
- Abstract
- Copyright Page (or a blank page should your thesis not be copyrighted)
- Acknowledgements
- Table of Contents
- List of Figures
- List of Tables
- Body of Thesis
  - A. Introduction
  - B. Materials and Methods
  - C. Results
  - D. Discussion
  - E. Summary and/or Conclusions
- References
- Figures (optional use if figures inserted within text)
- Tables (optional use if tables inserted within text)
- Endnotes
- Appendices
Pagination

The Title Page is not numbered. The Abstract through the List of Tables are numbered using small Roman numerals (ii, iii, iv, etc.). (See thesis template.) The Abstract page is page “ii”, and all pages are numbered consecutively thereafter.

The pages starting with the body of the thesis through the last page are numbered using Arabic numerals (1, 2, 3, etc.). The first page of the body of the thesis is page “1”, and all pages are numbered consecutively thereafter. The page numbers that are displayed must be centered at the bottom of each page, within the bottom margin. Note that no words, punctuation, or diacritics of any kind accompany the page number: it says "4", not "-4-" or "4." or "Page 4".

Graphs, Tables and Illustrations

Graphs, tables, and illustrations should be embedded into the text. In all cases, figures are numbered consecutively, separate from table numbers. Thus, you will have “Figure 1,” Figure 2,” etc. and “Table 1,” Table 2,” etc.

If figures and tables are embedded within text:

Figures and graphs

Figures are numbered with Arabic numerals assigned in consecutive order as the figures are referred to in the text. The figure number always appears below the figure. The figure number is followed by two spaces and the figure title. A figure title should informatively describe in a short form the content of the figure; it is usually a sentence fragment. The title is capitalized in sentence style, and no period follows the title unless additional information is presented in the title block. The figure title may contain abbreviations and symbols that have been defined in the text. If the title is longer than
one line, the first line of the title should be the longest. If a source must be identified, it is set within parentheses as the last element of the caption such as: Figure 6. The parts of a table (adapted from Journal of World Results 1981; 46(2):661)

Figures are placed in a document as close as possible to the first point in the text where they are referenced. If the figure will not fit on the page with the first reference, it should go on the next available page.

Figures should be at the top or the bottom of a page. The top position is preferred; it allows the text to visually anchor the bottom of the page.

For graphs, titles should be a phrase describing what the data show. For example, a graph of rate of price change around a news event might be titled "Rate of . . . ". Titles of figures should not begin with a phrase describing the type of figure: for example, "Chart of . . . ."

Tables

Each table in a document must have a unique number and title. Table numbers should be in Arabic numerals and be assigned in the order in which the tables are referenced in the text.

The word "Table" and its number are followed by 2 spaces and the title. No period follows the title unless explanatory text is part of the title block.

The title of each table must be unique, succinct, and informative. It should be a phrase, not a sentence, but the phrase should be capitalized in sentence-style. The title is placed above the table. Terms in the title should correspond to those used in the text, and if abbreviations are used, they should have been introduced in the text before being used in a table title.

The table number may be placed flush with the table's left edge or centered on the
Column headings (also called "heads" or "boxheads") identify the entries in the columns of the table; each column of a table must have a heading. Sentence-style capitalization is used for the headings. Occasionally a column will not need a descriptive word or phrase, and the heading will consist solely of a unit designation; in such cases, the unit is not enclosed in parentheses.

**Previously Published Material**

The core of a MFTA paper should be original. Nevertheless, your own published material may be accepted as a part of the MFTA thesis or in total for the *IFTA Journal* where the publication or publications represent work comparable in the standards and where the published material is substantially the product of the author’s work. If your own previous material lists a co-author, and if the co-author is listed by reason of having directed, assisted and supervised the work, only the candidate's name is listed as the author in the preliminary pages. However, the acknowledgment page must state, “The text of this thesis includes reprint [s] of the following previously published material: [give full publication information here]. The co-author listed in this publication directed (or assisted) and supervised the research that forms the basis for the thesis. ”

If your own published material approved for submission has co-authors other than the research director, as in an academic or institutional setting, the candidate must submit signed letters to the IFTA offices from the co-authors and copyright holders giving their approval for the material to be used. A detailed statement of the contribution by the candidate to all multi-authored publications must be included in the acknowledgment.
The pages of the previously published material must be submitted as specified here.

DETAILS OF MANUSCRIPT PAGES (For a thesis submission)

Overview

Each of the following pages must conform to the following criteria.

Title Page

(see sample)

1. All text from the Title is centered on the page. The words “Approved by” and all signatures are left justified.

2. The Font should be a “Roman” font such as Times New Roman, in either 11-point or 12-point size – all bold.

3. The THESIS TITLE should be in all caps and in bold. (or PAPER TITLE when submission is not a thesis.)

4. For a thesis: two spaces down from the title, the phrase “A thesis submitted in fulfillment of the requirements for the certification of” should be written in bold upper or lower case.

5. For a thesis: two spaces down from the phrase in #4 above, place the title of the certification (e.g. MASTER OF FINANCIAL TECHNICAL ANALYSIS) in all caps, bold.

6. For a thesis: two spaces down from the name of the certification write the word “from” in bold.

INTERNATIONAL FEDERATION OF TECHNICAL ANALYSIS (in all caps, bold)
7. For a thesis: one space down from the author’s name, write the month and year of the submission (e.g., APRIL 2014) with the month in all caps, bold.

Abstract

An abstract is a succinct and precise statement of the focus of the study, the research methods used, the major findings (key results) and conclusions. This is required for both a thesis and IFTA Journal submission. It can also state the implications of your work to the field. It is important that the abstract focuses on the study itself in order to aid future analysts who may review your abstract as a resource for their own study. The abstract should be between 100-300 words and should easily guide a reader in the essentials of your study. The abstract follows immediately after the title page.

The word “ABSTRACT” (all caps and bold) should appear two lines down from the margin and centered on the page. Two spaces down from the word “ABSTRACT” the title of the paper should appear in bold/all caps – single space the title if it is longer than one line. Center the title. One space down from the title, the phrase “A thesis submitted in fulfillment of the requirements for the Master of Financial Technical Analysis” should be written in bold upper or lower case and centered.

Copyright Page (or blank if no copyright)

This page should contain your copyright information should you decided to copyright your paper. This page will be blank if you do not wish to copyright your paper as a clear indication of no personal copyright.

Acknowledgement Page

If you wish, you may include a page with a brief note of dedication or acknowledgement of help received from particular persons or sources of support for your
study.

**List of Figures**

1. The words “List of Figures” will be centered at the top of the page.

2. One space down from the “List of Figures” appears the word “Figure” on the left margin and the word “Page” on the right margin. (See example.)

3. One space down from the words “Figure” and “Page” appears the description of the first figure.

4. One (double) space down is the number, description and page number of the next figure. Repeat this step until all figures are listed.

**List of Tables**

1. The words “List of Tables” will be centered at the top of the page.

2. One space down from the “List of Tables” appears the word “Table” on the left margin and the word “Page” on the right margin.

3. One space down from the words “Table” and “Page” is the title of the first table. Directly under the word “Table” is the number “1.”, followed by two spaces, followed by a title of the table, followed by “. . .’s” until the right margin is reached, followed by the page number where the table appears. Use single spacing for the table description should you need more than one line.

4. One (double) space down is the number, description and page number of the next table. Repeat this step until all tables are listed.

**Text**

The text of the thesis follows at this point. Its first page, typically the first page of
either an introduction or a first chapter, will be numbered “1” in Arabic numerals.

Introduction

The purpose of the Introduction is to introduce the reader to the problem or question. The Introduction is a concise statement and outline of the scope and aim of the work. It may also include a short review or mention of the literature pertinent to the subject.

Materials and Methods

The purpose of the Materials and Methods is to recount, in a concise manner, all Materials (such as software, or data sources) and Methods (for example, how data collected) used for your study. It should also include sufficient information so that the study could be repeated. Care should be exercised not to include superfluous information or commentary in this section.

Results

The Results reflect the findings of your investigation only, not the findings of others in the area or a review of the subject and work by others. This is a summarized form of your data and findings that may appear in the figures, tables and/or appendices.

Discussion

The Discussion section is for analysis of the data. In this section, you may draw comparisons with findings of other analysts, researchers or authors in the field, or even speculate to some degree, and, if appropriate, suggest additional study.

Summary/Conclusion

The Summary or Conclusion is a final brief statement that pulls together the objectives and findings of your examination. Care should be taken to draw conclusions
pertinent only to the problem or question presented, and to avoid personal bias or speculative opinion.

References

Literature cited includes only the literature you actually reference in your thesis or paper. Do not include citations that are not mentioned in the text. Be sure to include all citations that appear in the figure captions and table headings. Citations typically give the last name of the author or authors and the year of publication within parentheses: (Smith 2014).

If the quotation or idea you are using comes from a specific page in your source, you should indicate that: (Smith 1998, p 73).

If you mention the name of the author in the text, then only the year belongs in parentheses: Smith's sequence of studies (1958, 1963a, 1963b, 1967). . . . **Same author, different years**: Place the years in chronological order—Smith's sequence of studies (1958, 1967). . . . **Same author, same year**: Distinguish by lowercase letters, with "a" first, "b" next, and so forth—Smith's sequence of studies (1958, 1963a, 1963b, 1967). . . .

**Authors with same last name, same year**: Give each author's initials; order alphabetically—The most recent work (Dawson GL 1986; Dawson WM 1986). . . . **Two authors**: Give both names, separated by "and"—(Dawson and Briggs 1986) . . . . **Three or more authors**: Give the first author's name followed by "and others" and the year—(Dawson and others 1987). If the names of the first author(s) and years are identical in several references, add enough author names to eliminate ambiguity: (Smith, Jones, and others 1990) (Smith, Jones, Thomas, and others 1990). **Multiple Citations**: Sequence from earliest to latest; sequence those published in same year alphabetically by author.
name; separate studies by semicolon—A number of studies (Dawson and Briggs 1974; Dawson and Jones 1974; Smith AL 1978; Smith GT 1978; Smith and others 1978; Tyndall and others 1978; O’Conner 1978; Brown 1980) have established. . . .

Secondary Citations

Secondary citations refer to material that you have not seen in its original form but have obtained from another document that cited the original source. Give the original author's name and year, followed by "cited in" and the source name and year: The original description (Powell 1990, cited in Forbes, 2006). . . .

Unpublished Material or Personal Presentation/Communication

This information cannot be referenced by readers and should not be included in the endnotes page, but within the text only: “Robert Smith stated,… (personal communication, April 20, 2014)

Endnotes

Endnotes should be used rather than footnotes. Endnotes shall be placed at the end of the text preceding the References.

Appendices

A last section may contain supporting data for the text in the form of one or more appendices. Examples of appendix materials include data sheets, questionnaire samples, illustrations, maps, charts, etc. If the appended data includes oversized illustrations or charts, several alternative methods of inclusion are available. (See section dealing with Photographs, Tables, etc.).
STYLE AND FORMAT FOR CITED LITERATURE

MLA Citation Style

The Modern Language Association (MLA) establishes internationally accepted values for acknowledging sources used in a research paper. MLA citation style uses a simple two-part parenthetical documentation system for citing sources: Citations in the text of a paper point to the alphabetical Works Cited list that appears at the end of the paper. Together, these references identify and credit the sources used in the paper and allow others to access and retrieve this material in a citations index.

http://www.mla.org/handbook_faq

Additional information on the MLA citation style can be found here at the Cornell University Library:

https://www.library.cornell.edu/research/citation/mla
THE IMPACT ON HIGH FREQUENCY TRADING ALGORITHMS UPON CLASSICAL PRICE PATTERN RECOGNITION

A thesis submitted in fulfillment of the requirements for the certification of

MASTER OF FINANCIAL ANALYSIS (MFTA)

By

(NAME)
(DATE: month and year)

From

INTERNATIONAL FEDERATION OF TECHNICAL ANALYSIS
ABSTRACT
THE IMPACT ON HIGH FREQUENCY TRADING ALGORITHMS UPON PRICE PATTERN RECOGNITION

A thesis submitted in fulfillment of the requirements for the certification

MASTER OF FINANCIAL ANALYSIS (MFTA)

By

(NAME)
(DATE: month year)

From

INTERNATIONAL FEDERATION OF TECHNICAL ANALYSIS

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ACKNOWLEDGEMENTS

This is the place to acknowledge your family, your committee, your advisor, your friends, companies, organizations and people who provided special help and anyone else who made your thesis possible. Use of special copyright materials, acknowledgements of co-authors, etc. should also be included in your acknowledgements. Your acknowledgements may, but should not exceed one page.
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INTRODUCTION

1.1 FIRST HEADING

The Introduction is your first chapter. The purpose of the Introduction is to introduce the reader to the problem. The Introduction is a concise statement of the problem and an outline of the scope, aim, and nature of the research. It should also include a review of the literature pertinent to the subject. Your introduction should lead the reader by the hand and allow him or her to understand what problem you are solving and how you are solving it. It should lead the reader into the thesis. Note that each new chapter section is two inches from the top of the page, capitalized, bold and centered. The Introduction starts on page 1 of your thesis or submitted paper.
MATERIALS AND METHODS

2.1 FIRST HEADING

The purpose of the Materials and Methods is to recount, in a concise manner, the materials and methods employed in your work. It should also include sufficient information so that the study could be repeated. Also, caution must be used to avoid including results and/or conclusions.
First Subheading

Subheadings are used to divide a chapter or section into discreet sections. Each subhead should be distinctly different from the others. For example, the 1st subhead of this chapter is flush left, capitalized and lower case letters, and bold.

Second Subheading

The second subheading is indented, capitalized and lower case letters, and not bold. Thus, it looks different from the first subheading. All subheadings should meet the criteria of the journal that the thesis is intended for.
RESULTS

The results reflect the findings of your study only, not the findings of other researchers or practitioners in the area. Your results are a summarized form of the data that may appear and be supported in the figures, tables and/or appendices. Care must be taken to include only results in this section. Do not include interpretation or discussion here. You will interpret your data in the next chapter.
DISCUSSION

The Discussion section is for an analysis of your data and study acquired. In this section, you may draw comparisons with findings of other or even speculate to some degree and, if appropriate, suggest additional research. It is in this section that you will interpret the data you presented in the previous section.
SUMMARY OR CONCLUSION

Some authors prefer to title this chapter “Summary,” while others prefer to call it “Conclusion.” The Summary or Conclusion is a final brief statement which draws together the objectives and findings of the entire project. Care should be exercised to draw conclusions pertinent only to the problem, not to introduce new topics, and to avoid personal bias.
REFERENCES: LITERATURE CITED OR CITATIONS

Literature cited includes only the literature that you actually reference in your thesis or paper. Do not include citations that are not mentioned in the text. Be sure to include all citations that might appear in the figure captions and table headings. In general, the guidelines of the MLA Style Manual of the Modern Language Association should be followed.

ENDNOTES

The note provides an author's comments on the main text or citations of a reference work in support of the text, or both.
APPENDICES

A last section may contain supporting data for the text in the form of one or more appendices. Examples of appendix material are data sheets, questionnaire samples, illustrations, maps, charts, or a bibliography. For clarity and to distinguish from body of text, each Appendix should be paginated with Roman numerals, starting at capital I.