

# Guidelines for Bachelor's and Master's Theses

at the Chair of Corporate Finance

Prof. Dr. Marc Arnold\*

Vanessa Zeh<sup>†</sup>

January 23, 2024

---

\*marc.arnold@unisg.ch

<sup>†</sup>vanessa.zeh@unisg.ch

# Contents

- 1 General Information 3**
  - 1.1 Application for Supervision . . . . . 3
  - 1.2 Expectations . . . . . 3
  
- 2 Proposal Template 4**
  
- 3 Writing Guidelines 6**
  - 3.1 Structure of a Paper . . . . . 6
    - 3.1.1 Abstract . . . . . 6
    - 3.1.2 Introduction . . . . . 6
    - 3.1.3 Literature Review . . . . . 7
    - 3.1.4 Main Body . . . . . 7
    - 3.1.5 Conclusion . . . . . 8
    - 3.1.6 Appendix . . . . . 8
    - 3.1.7 Figures and Tables . . . . . 9
    - 3.1.8 Citation and Referencing . . . . . 10
  - 3.2 Miscellaneous . . . . . 11
  - 3.3 Additional Information . . . . . 11

# 1 General Information

This section serves as a comprehensive guide to the application process at Professor Arnold's Chair, elucidating the expectations associated with undertaking your thesis under our supervision.

## 1.1 Application for Supervision

We are pleased to consider applicants for supervision in the realms of corporate finance, investment banking, financial economics, and financial investments for their Bachelor's or Master's theses. Prospective candidates are required to have successfully completed one of the chair's courses with an outstanding grade.

To initiate the application process with a self-proposed topic, candidates should submit a concise proposal adhering to the template outlined in Chapter 2. Utilize the provided proposal template, based on Frauendorfer (2018) and Faff (2015), as the foundational structure for crafting your proposal. Additionally, include your current CV and the most recent academic transcript to provide insights into your areas of interest. This information will facilitate a comprehensive discussion concerning the viability of undertaking your proposed thesis topic, either in person or through a virtual meeting using platforms such as Zoom. Should you express interest in undertaking your thesis under the auspices of our chair, kindly adhere to the instructions outlined in our Writing Guidelines. Complete application materials should be forwarded to [marc.arnold@unisg.ch](mailto:marc.arnold@unisg.ch).

## 1.2 Expectations

Aim for a thesis of exceptional quality, aspiring towards a standard comparable to a peer-reviewed article in an academic finance or economics journal. Attaining a commendable grade necessitates the incorporation of a well-grounded empirical or qualitative analysis, contributing innovatively to the existing literature in finance or economics.

For empirical research, proficiency in a statistical software package such as STATA, MATLAB, R, or Python is expected, while Excel and SPSS are considered insufficient. Additionally, your thesis should be composed using LaTeX (preferred) or Word. Employing a literature manager such as Mendeley, BibTeX for Mac, or JabRef is crucial for accurate citation within your thesis.

Prepare for your thesis by familiarizing yourself with the Writing Guidelines outlined in Chapter 3.

## 2 Proposal Template

Name	
Student ID	
Research field	
Working title	Insert succinct/informative title
Basic research question	
Key paper(s)	Identify the key papers essential to the foundational understanding of the topic, presenting standard citation details. Aim for a single primary reference, with a maximum of three papers being permissible. Prioritize works authored by influential experts in the field, particularly those recently published in Tier 1 journals or available as recent working papers, for instance, on platforms such as SSRN.
Idea	Identify the fundamental concept that forms the intellectual foundation of this research topic. Articulate, if possible, the central hypothesis or hypotheses. Pinpoint the primary dependent ("explained") variable and the key test/independent ("explanatory") variable(s). Assess the potential for significant endogeneity concerns in this context. If such concerns exist, elucidate the identification strategy, such as the utilization of a natural experiment or the exploitation of an exogenous shock. Additionally, explore whether any theoretical "tension" can be leveraged to enhance the research approach.
Data	(1) What data do you propose to use? E.g. country/setting; Why? Unit of analysis? Individuals, firms, portfolios, industries, countries...? Sample period; sampling interval? Daily, weekly, monthly, quarterly, annual...? Type of data: firm-specific vs. industry vs. macro vs. ...? (2) What sample size do you expect? Cross-sectional? In Time-series/longitudinal? (3) Is it a panel dataset? (4) Data sources? Are the data commercially available? Any hand-collecting required? Are the data to be created based on your survey instrument? Or by interviews? Timeframe? Research assistance needed? Funding/grants? Are they novel new data? (5) Will there be any problem with missing data/observations? Database merge issues? Data manipulation/"cleansing" issues? (6) Will your "test" variab-

Data (continued)	les exhibit adequate (“meaningful”) variation to give good power? (7) Quality/reliability of data? Other data obstacles? E.g. external validity? Construct validity?
Tools	Is the chosen approach structured as a regression model? Are there considerations regarding the design of survey instruments or issues related to the survey instrument’s construction? Additionally, does the research involve an interview design? Is there a requirement for specific econometric software, and is it readily accessible through conventional means? Does the researcher possess the necessary expertise for implementing relevant and optimal statistical/econometric tests? Ensuring compatibility between the data and the planned empirical framework is crucial. Lastly, is there a concern regarding statistical validity in the chosen approach?
What’s new?	Does the novelty in your proposal stem from the idea, the data, or the tools employed? Identify the primary ”driver” of novelty, and assess the potential contributions of the accompanying elements—often referred to as ”passengers.” Can the novelty in your proposal be represented through a simple Venn diagram, akin to a ”Mickey Mouse” depiction, elucidating the interplay among the components?
So what?	Is it critical to ascertain the answer, and what implications does this research hold for major decisions, behaviors, activities, or related factors?
Contributions	What constitutes the primary source of contribution to the pertinent research literature?
Other considerations	Is collaboration necessary or desirable for the idea, data, or tools, either internally or externally to your institution? Have you identified target journal(s) for publication, and do they align with realistic and sufficiently ambitious goals? What is your risk assessment, considering factors such as the risk of no results, competition from others, or the risk of obsolescence? Are there notable challenges hindering the execution of your plan, and are these challenges related to the idea, data, or tools? Have ethical considerations been addressed, including the need for ethics clearance? Is the scope of your research appropriately balanced—not excessively narrow or overly broad?

## 3 Writing Guidelines

Before embarking on the task of crafting a thesis supervised by the Chair for Corporate Finance, students are strongly encouraged to familiarize themselves with the standards set by top finance journals. Examining the practices of esteemed publications such as the [Journal of Finance](#), [Journal of Financial Economics](#), and [Review of Financial Studies](#) can provide valuable insights into proper citations, formatting, language usage, and overall scholarly presentation. The following summary encapsulates essential guidelines and aims to rectify common pitfalls, specifically addressing prevalent habits observed among students from the University of St.Gallen. Adherence to these rules is imperative in all final papers. For inquiries related to citations, students are expected to follow [APA7 guidelines](#), and the following resource offers comprehensive details.

### 3.1 Structure of a Paper

The structure of your paper should adhere to the "triangular" or "newspaper" style, emphasizing the communication of the central contribution promptly. The following sections elucidate the recommended structure.

#### 3.1.1 Abstract

The abstract, a concise summary of the paper, primarily serves to communicate the unique contribution. It should encompass the following elements:

- Own contribution
- Subject of investigation
- Methodology
- Data
- Main results
- Significance of the results

The suggested length for an abstract is typically between 100 and 250 words, necessitating brevity without referencing literature or posing open questions.

#### 3.1.2 Introduction

The introduction plays a pivotal role in setting the tone for your paper. It should explicitly outline the purpose of your research and offer a compelling rationale for its significance. Your introduction must provide clarity on what the paper is about, conveying the motivation driving your work and articulating why it is both important and interesting.

In addition to framing your research within the broader context, it is crucial to present the current state of the art in the introduction. This involves situating your work within

existing research, acknowledging the relevant literature, and elucidating how your contribution fits into the ongoing scholarly discourse. Clearly indicate the unique contribution your work makes to this existing body of research.

Furthermore, within the introduction, elucidate your central findings to offer the reader a glimpse into the outcomes of your research. Avoid ambiguity and provide a concise overview of your key results.

Moreover, provide a clear rationale for your chosen approach to the problem. Explain to the reader why you employ a specific methodology and why it is preferred over alternative methods. This not only establishes the credibility of your research but also helps the reader understand the thoughtful considerations behind your methodological choices.

In essence, the introduction should serve as a comprehensive guide, motivating the reader's interest, highlighting the importance of your work, presenting the state of current research, detailing your unique contribution, previewing your central findings, and justifying your methodological approach.

### **3.1.3 Literature Review**

The primary objective of the literature review is to provide a succinct overview of a select few papers that closely align with your research, subsequently establishing connections between your work and theirs. Consequently, it is not imperative to cite every paper tangentially related to your research. Generally, a concise literature review is incorporated into the introduction, following the clarification of the paper's contribution.

However, if your research is situated within a broader and more extensive body of literature that holds substantial importance to your paper, it is appropriate to include a dedicated literature section following the introduction. This allows for a more comprehensive exploration of relevant studies, providing context and establishing a clear link between your work and the broader scholarly discourse. The decision to include a separate literature section should be guided by the depth and significance of the existing literature in relation to your research.

### **3.1.4 Main Body**

Consider conceptualizing your paper as a cookbook. While theoretical papers offer more flexibility in structure, the main body of your work should extensively expound on your identification strategy, especially in instances of a quasi-experimental setting. In the case of empirical papers, a thorough delineation of your methodology, data, and findings is essential. This ensures that readers can replicate your process and achieve identical results after perusing the main section. The structure of your main body may take one of two forms for empirical papers, contingent on the specific content of your study, with the more suitable option dictated by the nature of your research.

**Structure 1 (Empirical Paper):**

1. Description of the data
2. Methodology
3. Results, robustness tests, and discussion

**Structure 2 (Empirical Paper):**

1. Description of the data
2. Methodology, results, robustness tests, and discussion 1
3. Methodology, results, robustness tests, and discussion 2
4. ...

Ensuring the reliability of your findings is paramount, necessitating the performance of statistical tests on your results to alleviate concerns about chance occurrences (robustness tests). Additionally, it is imperative to address potential statistical issues within your approach. For instance, if your results could be influenced by an endogeneity problem arising from omitted variables or reverse causality, it is crucial to acknowledge and mitigate these concerns. Proactively identifying and addressing such statistical intricacies enhances the credibility and validity of your research.

**3.1.5 Conclusion**

The conclusion serves as a culmination of the paper, refraining from introducing novel arguments or lines of thought not previously explored in the main body. Instead, it circles back to the initial starting point, providing a concise summary of the paper's contents and accentuating its central contribution. By revisiting the core themes and emphasizing the primary contribution, the conclusion reinforces the key takeaways and ensures a cohesive and impactful close to the research endeavor.

**3.1.6 Appendix**

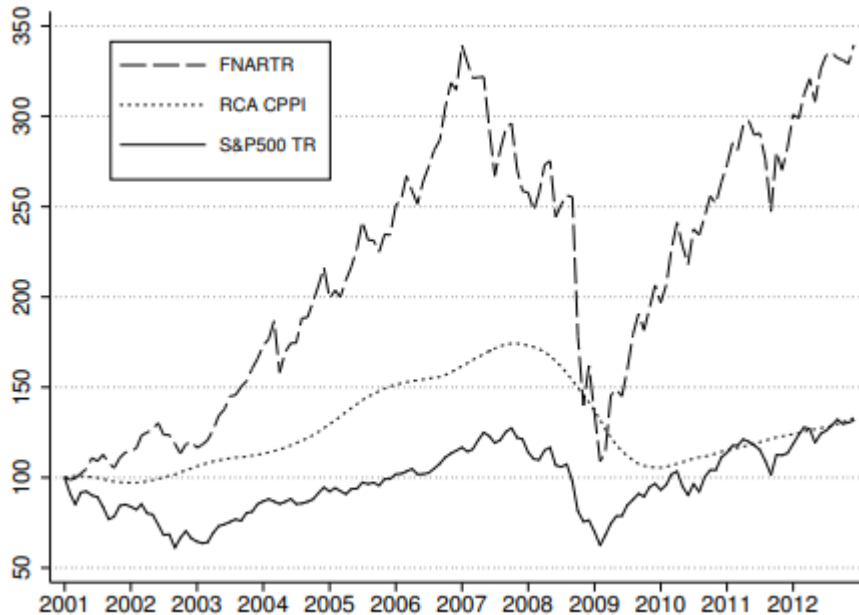
Utilizing appendices serves as an effective strategy to maintain the conciseness of your paper. For instance, it is advisable to relocate certain elements, such as robustness checks, extended variable definitions, and questionnaires, to an appendix. It is essential to exercise discretion in the content of the appendix, ensuring that it remains concise. Not every individual robustness check conducted needs to be detailed in the appendix. Rather, focus on including pertinent and crucial information.

In cases where extensive information, while of specific interest, could potentially consume several pages, it may be prudent to consider alternative formats. For instance, such content could be reported in an internet appendix or included on a memory card attached to the printed paper. This approach ensures that detailed information is accessible to readers with a specific interest in the intricacies of the research, while still maintaining the brevity and focus of the main body of the paper.



Figure 1: Performance of Direct and Securitized Real Estate Investments

This figure presents a comparative analysis of the performance of direct and securitized real estate investments against the cumulative return on the S&P500 TR Index. The RCACPPI is utilized as a benchmark for direct real estate investments, while the FNARTR serves as a metric for securitized investments in real estate. The sample period encompasses January 2001 to December 2012. Each of the three investment benchmarks has been indexed to January 2001, offering a standardized basis for performance evaluation.



### 3.1.7 Figures and Tables

Figures and tables in your paper are essential components that should be self-contained, meaning each should be accompanied by a number and a title. The caption associated with each table or figure is crucial, providing the reader with sufficient information to comprehend the content without delving into the main text. Typical contents of these captions may include variable definitions, the sample period, the estimation method, the type of standard errors employed, and other relevant details. It's important to note that the caption should refrain from including interpretations of the results.

All tables and figures should be appropriately cited in the main text to avoid redundancy. Avoid vague phrasing like "In the table above..." and ensure each reference includes the specific number assigned to the table or figure. Additionally, refrain from leaving interpretation solely to the reader, such as stating, "The results can be seen in Table 3." It is crucial to provide commentary on some contents of each figure or table in the main text. Any information deemed worthy of inclusion in a table should also be mentioned in the text. Moreover, it is recommended not to use original outputs from statistical software, as they may lack visual appeal and contain extraneous details. Instead, concentrate on presenting essential results, emphasizing key findings, and ensuring clarity and conciseness in your statistical presentation.

### 3.1.8 Citation and Referencing

Citations must adhere to established standards, avoiding plagiarism and ensuring proper acknowledgment of sources. Specific guidelines include the citation of the original publication, avoiding word-for-word citations, and providing full reference information. For any inquiries pertaining to citations, students are expected to adhere to the [APA7 guidelines](#).

The following guidelines encompass essential principles for proper citation and referencing in your thesis. Here is a distilled summary of the dos and don'ts:

- Cite others' thoughts: Add references to all thoughts derived from others. Failure to cite others' knowledge is considered fraud and strictly prohibited.
- Cite previous work of your own: Cite previous work of your own; using the same parts of your work for different pieces without citation is not allowed.
- Avoid word-for-word citations: Steer clear of word-for-word citations. If necessary, use quotation marks and specify the exact location.
- Take meaning, not exact words: Typically, convey the meaning from others and only indicate the publication.
- Use in-text references: References should be within the text, not in footnotes or endnotes. In-text references are considered more elegant and are common in finance.
- Cite original publication: Cite the original publication; give credit to the researcher. For example, cite Black & Scholes (1973) instead of Hull (2008).
- Common knowledge: You do not have to cite common knowledge. For example, "earnings are the difference between revenues and costs."
- Avoid redundant expressions: Do not use expressions like "Source: Own Representation." If something is not cited, it is assumed to be your own work and intellectual property.
- Provide full reference information: At the end of the paper, furnish complete reference information, including journal volume and number, and article page numbers.
- Citing unpublished papers: If citing a paper not yet published, label it as a working paper or discussion paper. Include the institution of the author in the reference.
- Citing books: If citing a book, include the publisher. Citing books is less common than journals.
- References to sections: References to sections should follow the format "as shown in Section 2..."
- Numbered equations: Referenced equations must be numbered. Non-referenced equations can be numbered or unnumbered, but not both in the same document.
- Integration of equations: Equations are embedded in the text flow and are considered part of a sentence, even if separated from the text. They can extend over several lines.
- Parentheses in equation references: References to equations with parentheses should follow the format "...simplifying Equation (23)..."

## 3.2 Miscellaneous

- Hyphenation: Ensure that hyphenation is enabled.
- Avoid colors: Steer clear of using colors in your document, as they are seldom employed in scientific publications within the finance domain.
- Headings and section levels: Exercise restraint in the use of headings; it is unnecessary to have a heading on every page. Limit the number of different section levels, and avoid intricate structures like "4.1.6.4 Remark on Equation 5." Typically, two section levels are deemed sufficient. Introduce a new section level only if there are at least two headings within that level.
- Appropriate level of difficulty and abstraction: Write at an appropriate level of difficulty and abstraction, considering that your audience consists of experts. Strive for clarity and precision in conveying complex ideas.
- Avoid uncommon expressions and synonyms: Refrain from using uncommon expressions and synonyms obtained from dictionaries to minimize repetition. In scientific publications, it is acceptable and customary to frequently repeat specific terms for clarity and consistency.
- Formal language: Do not employ informal language; instead, use formal expressions. For instance, write "they do not find" rather than "they don't find."
- Decimal points: Note that decimal points should be represented by points, not commas.

## 3.3 Additional Information

For further guidance on crafting a paper or preparing for a paper presentation, consider consulting John Cochranes' "Writing Tips for Ph.D. Students," accessible [here](#). Cochranes' insights are valuable for both Ph.D. and Master's students. Additionally, Greg Anderson provides comprehensive information on his website about writing a paper in the scientific journal style and format. For those interested in learning how to write a paper using L<sup>A</sup>T<sub>E</sub>X, Richard Stanton's website offers detailed recommendations and provides L<sup>A</sup>T<sub>E</sub>X templates tailored for various financial journals.

January 2024

These guidelines are derived from an initial writing guide authored by Prof. Dr. Manuel Ammann, Dr. Michael Huetl, Prof. Dr. Markus Schmid, Dr. Ralf Seiz, Dr. Rico von Wyss, and Prof. Dr. Füss.