

Guidelines for Scientific Work

To be adhered to for theses and seminars

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Objectives

- This presentation is to be used as a guiding tool to writing a scientific paper.
- These guidelines hold for both seminar papers and final theses at the Institute of Risk and Insurance.
- It will discuss both content-related guidelines and formal aspects.
- **Failure to comply with the requirements will result in a lower grade;** this applies to both content-related, and formal requirements.

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Topics

- Papers at the Institute for Risk and Insurance address questions and problems in the area of economics and business administration.
- In a seminar, different topics will be offered by the lecturers and allocated with the help of a preference system. For final theses, it is often possible to jointly determine the topic.

Topics

All topics at the Institute for Risk and Insurance can be be roughly classified into the area of risk management, finance, and insurance. Topics include, among others:

- Insurance markets and their regulation
- Insurance demand
- Decision-making under risk and uncertainty
- Operational risk management
- Experimental economics / experimental finance

Narrowing down a topic

Many scientific topics have already been extensively researched.

- For example, the specific topic of “moral hazard in health insurance” is enriched every year with several thousands of pages of high quality literature.
- Established literature, contemporary research, and subtopics exist for virtually all topics.
- Therefore, one of the most important contributions in the writing of a seminar paper is the **reasonable thematic delimitation** of the subject to be worked on.
 - It is important that the scope of the seminar paper is sufficient to fully address the topic. That is, the delimitation of the topic is not too broad.
 - However, a too narrow topic should also be avoided to ensure that the paper does meet the requirements of the seminar.
- An initial screening of the available literature helps to discover different aspects of the topic. The appropriate delimitation of the subject also depends on the applied research method.

Topic and outline

- Generally, it is expected that you send an outline before you start writing the actual paper.
- This outline contains your topic and research question, as well as some initial literature to show the relevance of your proposed project.
 - You show using titles of paragraphs and sub-paragraphs in combination with this what your paper will approximately look like.
 - Although you can of course always make changes in the later paper compared to the outline, make sure you are actually doing what is asked! If you deviate from the expected topic this may result in a lower grade if it end up not being relevant.
- Starting a paper can be difficult. It is therefore important to **plan a meeting with your supervisor to go through this outline** before you end up writing a project that would not have been approved in the first place!

Scientific research methods

- Generally, research methods in the area of economics and business administration can be classified into **five categories**:
 - 1 Literature reviews and analyses
 - 2 Theoretical research
 - 3 Qualitative research
 - 4 Quantitative research
 - 5 Experimental research
- **At the Institute of Risk and Insurance, we generally look at research that is of quantitative, or experimental basis.**
 - Make sure to check which requirements are relevant to you. **Literature reviews will generally not be sufficient!**

Research methods - Literature reviews

In **literature reviews and analyses**, research questions are investigated based on results and findings from existing literature.

- Results and findings from existing literature relevant for the research question are evaluated and analyzed in a new context.
- No new data is generated. Rather, existing findings have to be assessed with regard to their relevance and objectively evaluated, and conclusions have to be derived.
- The consistent effort to maintain scientific objectivity is important.
- The central research questions should form a consistent guideline throughout the entire paper.
- **Merely reproducing existing literature is not sufficient.** All adoptions from existing literature should be relevant to the research questions and put into context.

Research methods - Theoretical research

In **theoretical research**, research questions are investigated based on theoretical models.

- Models are assumption-based systems from which logical conclusions can be derived.
- Models can arise on the basis of verbal reasoning, but in the field of economics and business administration they are primarily of a mathematical nature.
- Models are either normative or descriptive and should, at best, derive empirically testable hypotheses. They are usually abstract and rarely claim to be exhaustive. They rather represent a structured way of reasoning and allow the researcher to model all existing effects within an assumption space.
- Models allow to better understand sub-aspects of complex systems.
- A nice example for an economic model is Akerlof's (1970) market for lemons.

Research methods - Qualitative research

In **qualitative research**, research questions are investigated based on data that cannot be fully captured quantitatively.

- In most cases, current issues that are not yet captured by structured data are analyzed by interviews or surveys. That is, some specific issues are not (yet) quantifiable and are therefore analyzed on a qualitative level.
- Examples of issues that are (currently) analyzed on a qualitative level are cyber-risks and potential solutions to manage these risks, risks from terrorist activities, or the motivation and fears of employees in the context of digitization.
- Often, qualitative studies are the starting point for the development of new sub-areas of scientific research.
- Stringent planning of data generation and a highly structured evaluation of the data are prerequisites for successful qualitative research.

Research methods - Quantitative research

In **quantitative research**, research questions are investigated based on data that are statistically analyzed.

- Data are analyzed by means of statistical methodology to present conditions descriptively or to test hypotheses inductively.
- Nearly every economic activity can generate data that can then be analyzed empirically.
- Common sources of data are activities on financial markets or information provided by the financial industry.
- One of the challenges of quantitative research is the selection of an appropriate econometric methodology to analyze a given dataset with regard to a given research question or set of hypotheses.

Research methods - Experimental research

In **experimental research**, research questions are analyzed based on an artificial economic system that can be directly manipulated by researchers.

- Participants of experiments can be students (e.g. Leibniz Laboratory for Experimental Economic Research) or recruited online (e.g. Amazon's MTurk).
- One of the main advantages of experimental research is the complete control over the circumstances in which decisions are made. Additionally, the possibility of randomized manipulation can eliminate many statistical challenges.
- One of the main disadvantages is that the external validity may be low. Decisions are made in abstract and artificial environments and monetary stakes are often relatively low.
- Experiments are subject to (ethical) guidelines. For example, it is commonly not accepted to expose participants to conditions in which they face the risk to lose substantial amounts of their own money.

Structure - Table of Contents

- The main part of the paper is to be preceded by a table of contents.
 - This outline is intended to help the reader understand the focuses that have been placed throughout the paper. Thus, the table of contents should be consistent and coherent in the line of argumentation.
- The preparation of the table of contents represents an important milestone in the development of the paper.
 - **It can be utilized also for your initial outline.** You can start with a rough overview of the structure, use it for the outline, and fine-tune it later for the final paper.
 - For the outline (not the final table of contents), it may be helpful to formulate a few bullet point for each (sub-)section in the table of contents. Those can serve as a starting point for formulating the final text.

Structure - Introduction

- The introduction should present the **motivation, relevance, as well as the objective of the paper.**
- The motivation of the paper can be based on different lines of argumentation:
 - **Active research stream:** Connection to a research gap in an active and current research area.
 - **Current events:** For example, a study about climate risk or sustainability in the context of current extreme weather events.
- Building on the motivation, the objective of the paper and the structure should be briefly elaborated on. However, a complete reproduction of the table of contents should be avoided.
- A brief overview of the results and their relevance (e.g., for academia, regulators, or corporations) should also be included in the introduction. However, interpretations of the results should not be included.

Structure - Main Part

- The main part usually consists of several chapters, whereby a balanced structure should be maintained.
- The length of each (sub-)section should be at least half a page.
- For literature reviews in particular, but also generally:
 - The individual sections of the main body should be divided into an (roughly) equal number of subsections.
 - Furthermore, it should be ensured that the individual chapters are weighted approximately equally in terms of content.

Structure - Conclusion/Discussion

- The conclusion includes the main results of the paper and their implications.
- This final chapter should also include an outlook on problems that remain to be addressed as well as suggestions for further research.
 - These should not just be obvious things such as "the sample size could have been larger", but thoroughly constructed suggestions following from the limitations of your analysis.
- Generally, the final chapter refers to the research question or objective of the paper defined in the introduction.

Tables and Figures

- Tables and figures can provide useful support for a scientific line of argumentation.
 - However, tables and figures do not necessarily need to be included in a paper. **Only tables and figures truly relevant to the argumentation should be included.**
 - The paper should not be overloaded with too many tables and figures.
- Tables and figures should be unambiguous and well structured.
- Tables and figures must always be integrated into the text. They never appear in isolation, but must be addressed and included in the line of argumentation.
- Tables and figures should generally be created or at least replicated by the author. Only in rare cases is direct copying acceptable.

Footnotes

- It is often appropriate to supplement the continuous text with translations, explanations and notes in footnotes.
- As a general rule, these are remarks that provide the reader with additional information but are not relevant to the main text and may disturb the line of argumentation. For example, a footnote may refer to a theory underlying the respective matter, which is not directly useful in the argumentation.
- These additions are placed at the bottom of the page in a footnote.
- Footnotes should be used sparsely.

Definitions

- The procedure of describing the topic and the research question often includes the conceptualization or definition of relevant terms.
- When introducing a term, it must be defined briefly but comprehensively. The term and thus its definition must fit logically into the paper.
- If different definitions exist for a term, reference should be made to their origin.
 - It is necessary to choose one definition and justify its selection.
 - Sometimes it may be useful to develop an own working definition.
- Once a definition has been selected, it should be retained throughout the paper.
A term should not be defined differently within a paper.

Formulas

- It may be necessary or useful to present mathematical formulas in a paper.
- As with figures and tables, these need to be integrated into the text in a meaningful way.
- **Formulas should never be used for their complexity, but always to foster the reader's understanding.**
- Mathematical symbols and uncommon operators should be defined in the text and listed in a list of symbols at the beginning of the paper.
- A consistent use of symbols must be maintained throughout the paper.

Scientific sources

- The theoretical part of a paper discusses information that stems from the relevant literature.
- Relevant scientific literature includes:
 - **Especially scientific journals** (e.g., Journal of Risk and Insurance)
 - Reference books
 - Sometimes textbooks
 - Sometimes websites
 - Sometimes newspapers
- It is not sufficient to only refer to standard books or basic literature in the respective field. **Emphasis should be placed on the use of up-to-date literature from journals that are relevant to and respected in the field.**

Legitimate sources

- Scientific journals have the benefit of being subject to the peer review process
 - **The quality of a journal should always be considered during the literature research process.**
 - However, measuring the quality of a scientific journal is not trivial. Rankings such as the *VHB-JOURQUAL 3* or the impact factor of a journal provide an indication of the quality.
 - The quality of papers in a scientific journal can also be assessed by looking at the number of citations (e.g., on Google Scholar).
- Books are usually not subject to peer review processes, but have some quality assurance from publishers.
- Newspapers and websites are especially citeable when specifically seeking opinions or statistical data (not necessarily their interpretation).

A Warning

- Sometimes it can be observed that the literature research is neglected and the topic is not grasped in its full breadth and depth as a result.
- Therefore, in addition to the active search of literature, “backward search” or the so-called “snowball system” is particularly important: Studies cite other important studies, thus careful reading is especially important when researching the literature.
- On the other hand, a mere series of citations should be avoided. Connections within the existing literature should be discussed in order to show the ability for independent scientific working.

Google Scholar

Google Scholar is by far the most powerful tool in literature research

The logo for Google Scholar, with "Google" in its multi-colored font and "Scholar" in a grey sans-serif font.A white search bar with a blue search button on the right side containing a magnifying glass icon.

Articles Case law

Stand on the shoulders of giants

Google Scholar

- Google Scholar offers a search in virtually all scientific journals. Abstract and keywords are usually visible immediately. Full texts must be accessed via e-libraries.
- Proper keyword searching is critically important:
 - The same concept may be termed differently in different strands of literature.
 - The title of a work does not always directly indicate the content. Reading the abstract of potentially relevant papers often provides clarification.
 - **“Backward search”** can be very helpful to identify relevant literature.
- Google Scholar also offers a **“forward search”** by clicking on “Related articles” or “Cited by”:

Google Scholar

Don't lapse into temptation: A behavioral explanation for policy surrender

S Nolte, **JC Schneider** - Journal of Banking & Finance, 2017 - Elsevier

Many policyholders surrender their life insurance policies early, leading to substantial monetary losses for private households. Surrender can be explained rationally if it constitutes the ...

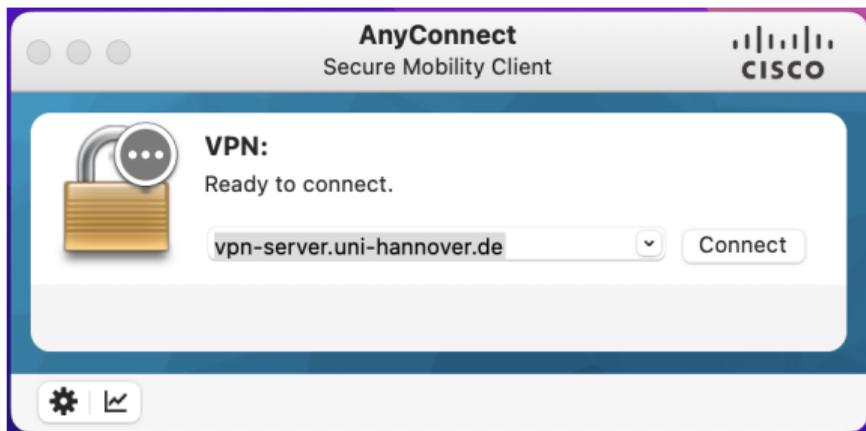
☆ Save  Cite **Cited by 44** Related articles All 7 versions Web of Science: 15 

Access to Scientific Journals

- If you have found a source in a scientific journal, it is often not immediately accessible. Publishers often demand fees.
- **Normally, paying these fees is not necessary:**
 - ① In the first step, you should check the access rights and licenses of the LUH.
 - ② If the university does not provide access, the internet can be searched for working paper versions in a second step. Often, links to working paper version of a paper are provided by Google Scholar.
 - ③ In a third step (but only if really important), you can contact the author via e-mail or Researchgate and kindly ask for a full version of the paper.
 - However, be prepared to not get a response and therefore do look into alternatives.

University Library

- Literature can be searched at the Electronic Journals Library (EZB) at LUH's TIB – Leibniz Information Centre for Science and Technology and University Library.
- It can be accessed by either using a computer on-campus, or by using a VPN client (more information on this *here*)



After you have either connected through VPN or are on-campus, go to *the TIB website* and search for the journal you are looking for.

Electronic journals

The Electronic Journals Library (EZB) enables you to use electronic journals. This way, members of Leibniz Universität Hannover have access to licensed e-journals as well as freely accessible scientific journals that are available for free on the internet.

Search for journals in the EZB

[Extended search](#)

Journal List

[List by subject](#)

[List by Title](#)

Journal of Risk and Insurance, The (aktuelle Jahrgänge)

Availability:  free for the staff and students of the University of Hannover. Please see the Readme for more information.

Licensed Period: DEAL: Vol. 69 (2002) -  [ReadMe](#)

Fulltext: <http://shan01.han.tib.eu/ezb/start?ezbid=20121&title=Journal+of+Risk+a...>

Homepage(s): <https://onlinelibrary.wiley.com/journal/15396975>

Fulltext available since: Volume 69 , H. 1 (2002)



Appearance: Fulltext, online and print

Costs: subject to fee

[List of participate institutions which offer full access.](#)

- EZB leads to two types of websites:
 - ① Journal homepages – the most recent articles are usually available there, but not always all historical volumes.
 - ② Archives (e.g., JSTOR, EBSCO, ...) – Long histories of the journals are usually available there. However, the most recent 1-5 years are usually not available.
- It is recommended to download the required articles and save them locally. You often need to access the sources several times and you can thus avoid searching the databases multiple times.

Working papers

- In the scientific publication process, working paper versions are usually submitted to a journal for publication and then published after passing the peer review process.
- Before submission, however, there is usually a process of numerous presentations and discussions. For this purpose, the working paper version is often made available online. Even after the publication process, some of these working paper versions remain available on the web for a long time.
- Thus, if one does not have access to the published paper, one can often download a working paper version.
- However, **caution is required here**. In most cases, the working paper is no longer fully consistent with the published paper. In some cases, important analyses and discussions are missing. **Thus, whenever possible, the published version of the paper should be preferably used.**

Scientific language

- You should avoid the use of casual phrases, including expressions like "unfortunately", "regrettable", "outstanding", "amazing", etc.
- Adjectives should be used with caution.
- Use of fill words should be avoided.
- The author should not refer to themselves. Expressions as "I" or "In my opinion" should be avoided.
- Make sure to check technical terms whether it is used correctly. Also make sure to check whether your references match the theories, concepts, and evidence used.
- Avoid repetition of phrases
- Language should be objective, avoid stating opinions. Exceptions to this may be sections where a sound evaluation of the topic or referenced literature is made.

General formatting

- For formatting, you are required to use:
Times New Roman font, font size 12, 1.5 line spacing and justification.
- In case you have to print, each sheet is to be printed on one-sided only and white DIN-A4 sheets are to be used.
- Margins are 3cm on the left side, 2.5cm on the right side, and 3cm on the top and bottom each.
- Headings should not exceed font size 16 (also Times New Roman), but may be the same size as the text.
- Visual emphasis (bold, italics, etc.) should be used sparingly.
- Individual lines of thought should be separated from each other by paragraphs. In no case should a single sentence constitute an entire paragraph.
- Hyphenation must be applied throughout the text.
- The norms of US-English spelling and grammar must be adhered to.

Scope of papers

The length of the main text of your paper, that is excluding directories, references, and appendices, should be approximately:

- Seminar papers:
 - Single author: 16 ± 2 pages
 - Two authors: 20 ± 2 pages
 - Three authors: 24 ± 2 pages
 - Four authors: 28 ± 2 pages
- Bachelor theses: 24 ± 3 pages
- Master theses: 50 ± 5 pages

The order in which the paper should be organised can be found on the next slide.

Structure of papers - order

- Blank page (only for Bachelor's/Master's theses)
- Title page
- Abstract (only for Master's theses)
- Table of Contents
- List of tables (if necessary)
- List of figures (if necessary)
- List of symbols (if necessary)
- List of abbreviations
- Main text
- List of appendices (if necessary; starting from two appendices)
- Appendices
- References
- Statutory declaration (only for Bachelor's and Master's theses; **not** to be included in ToC)
- Blank page (only for Bachelor's/Master's theses)

Numbering and page breaks

- Except for the blank pages (only for Bachelor's and Master's theses), the title page, and the statutory declaration, all pages have to be numbered consecutively.
- Consecutive numbering starts on the first page after the title page with Roman numerals (i.e., I, II, III, ...). On the first page of the main text, numbering starts with Arabic numerals (i.e., 1, 2, 3, ...) and continues until the last page of the references.
- Page numbers (Times New Roman font, font size 12) are placed in the foot line on the right side.
- The word processing software must be set such that the last line of a paragraph does not stand alone on the new page or the first line of the new paragraph does not stand alone on the old page.
- No page should end with the heading of the following section.

Outline and Directories

- In structuring, the decimal format is used. The last number of the bullet point is not preceded by a full stop (not 4.2.2. but 4.2.2).
- Items that are on the same level in the structure must have the same rank in terms of content and clearly start from a common, overarching problem (i.e., items 2.1.1-2.1.4 clarify all problems that pertain to area 2.1).
- A sub-item 1.1 should also be followed by a sub-item 1.2.
- Subheadings should avoid verbatim repetition of the top heading (e.g., 4.2 Allocative and Distributive Impacts, 4.2.1 Allocative Impacts, 4.2.2 Distributive Impacts).

Tables and Figures

- Tables and figures should be headed with a concise and precise indication of their contents; the designation of columns and rows as well as of axes in coordinate systems and of individual graphs is obligatory.
- The title of the figure or table is placed above (font size 10, bold).
- Tables and figures should be numbered consecutively and appear in the list of tables and list of figures.

Tables and Figures

- Additional comments as well as reference(s) should be placed immediately below the tables or charts and not in a footnote (font size 10, not bold).
 - References have to be indicated. In the case of modified tables or figures, sources have to be indicated as “adapted from”.
 - In case the author has created the illustration independently, the wording “own illustration” is used.
 - If data, for example from the Federal Statistical Office, is used to create a figure or table, citation is included as follows: “Source: Own illustration, raw data obtained from ...”
- If you believe that you cannot omit extensive material, or if the tables or charts are disproportionately large compared to the text and their importance for the paper, you can include them as an appendix to the paper.

Abbreviations

- Common abbreviations such as “e.g.”, “i.e.”, “etc.” and those for currencies, weights and measures can be used.
- In addition, abbreviations for institutions (e.g., ECB) and laws (e.g., BGB, HGB) as well as symbols for mathematical quantities and terms are allowed.
- All abbreviations used in the text (and only these) are to be listed in the list of abbreviations preceding the main text.
- Abbreviations for convenience and own otherwise uncommon abbreviations are not allowed.

Footnotes

- The numbering and marking of footnotes in the text is made using superscript numbers: like this¹.
- Footnotes are formulated in sentence form with a full stop at the end.
- They are typed in single-line spacing with font size 10 (Times New Roman font).
- Footnotes should be separated from the text by a horizontal line.
- Longer explanations with footnote character should be placed in the appendix.
- If a footnote is longer than one line, the text should be indented starting from the second line.

Appendices

- The appendix can be used to include large tables and figures or imprints of difficult to access sources.
- In case you have several appendices, they should be numbered (appendix A1, appendix A2, ...).
- The appendix does not contain any further explanations.
- The components of the appendix must be referenced in the text (directly in the text body or by footnote), as with any other table or figure.
- For two or more appendices, a list of appendices is inserted after the main text and before the first appendix.
- Only the list of appendices has to be included in the table of contents (i.e., not the individual appendices).

Citation

Generally, in-text-citation has to be used. Some examples:

- "The findings by Grosshans and Zeisberger (2018) and Nolte and Schneider (2018) indicate that certain (visual) characteristics of price charts are especially attractive to the eye of an investor." (narrative citation)
- "It also contains elements of behavioral models which take into account an asset's past return distribution (Cosemans and Frehen, 2021; Barberis et al., 2016)." (parenthetical citation)

The abbreviated citation method must always be used. No complete citations of sources should be included in footnotes or in the text.

Citation Style

- For more than two authors, the list of authors is abbreviated with "et al."
- If there is more than one reference with the same (abbreviated) author(s) in the same year, the years are indexed with a, b, c, ...
- No first names or initials are used in the text.
- Several citations in one bracket are separated from each other with a semicolon
- **In addition to the example on the former slide, the exact page number(s) of the reference have to be specified.**
 - You can do this either directly in the text: "The findings by Grosshans and Zeisberger (2018, p. x) ..."
 - Or using footnotes: "The findings by Grosshans and Zeisberger (2018)¹ ..."
- Direct quotes are enclosed in quotation marks.

References

- **All sources cited by the author (and only these have to be included in the references section)**
- Different types of sources (papers, books, etc.) are not separated but listed in alphabetic order by the (first) author's last name. It follows that there is one uniform references section, which is structured from A to Z. This also applies to sources without an author

References

Furthermore:

- If there are more than five authors or editors, only the first three are mentioned, followed by the suffix "et al."
- Sources by the same author are listed in order of their date.
- First names of authors/editors are abbreviated after the first letter
- Titles of sources in other languages than English are kept in their original language.
- All entries end with a full stop
- Papers already accepted for publication but not yet published are listed in the text and references section with the current year. Instead of bibliographic information (volume, number and pages), "in press" appears in the reference entry.

References - Examples

- **Papers in scientific journals:**

- Last name author 1, initial., last name author 2, initial., & last name author 3, initial. (Year). Title. *Journal*. Volume (Number), Pages.
- Nolte, S., & Schneider, J. C. (2018). How price path characteristics shape investment behavior. *Journal of Economic Behavior & Organization*, 154, 33-59.

- **Papers in anthologies:**

- Last name author 1, initial., last name author 2, initial., & last name author 3, initial. (Year). Title. In: Last name editor 1, initial., last name editor 2, initial., & last name editor 3, initial. (Eds.). *Title of the anthology*, pages. Publisher
- Schlesinger, H. (2013). The theory of insurance demand. In: Dionne, G. (Eds.). *Handbook of insurance*, 167-184. Springer

References - Examples

- **Monographs:**

- Last name author 1, initial., last name author 2, initial., & last name author 3, initial. (Year). *Title*, Edition [starting from the second edition], Publisher.
- von der Schulenburg, J.-M., Greiner, W. (2007). *Gesundheitsökonomik*, 2. Edition, Mohr Siebeck.

- **Newspaper articles:**

- Last name author 1 [when provided, otherwise "n.a."], initial., last name author 2, initial., & last name author 3, initial. (Year). Title. In: *Name of the newspaper*, Edition, pages.
- Schettler, G. (1988). Die Utopie des Wohlstands ohne Risiko. In: *Frankfurter Allgemeine Zeitung*, 12.11.1988, P. 14.

References - Examples

- **Statistical hand dictionaries, yearbooks, etc.:**

- Editor (Ed.) (Year) *Title* [if applicable: Volume]. Publisher.
- Gesamtverband der Deutschen Versicherungswirtschaft e. V. (Ed.) (2019). *Statistisches Taschenbuch der Versicherungswirtschaft*, 2019. Verlag Versicherungswirtschaft.

- **Online sources:**

- Editor (Ed.) (Year). *Title*. URL: Web-address [Last accessed: Date of the last access].
- Insurance Journal (Ed.) (2021). *Insured Losses from July Floods in Germany Could Approach \$6B: AIR Worldwide*. URL: <https://www.insurancejournal.com/news/international/2021/07/28/624577.htm> [Last accessed: 20.08.2021].

References - Examples

- **Working papers:**

- Last name author 1, initial., last name author 2, initial., & last name author 3, initial. (Year). Title. *Institution/working paper series*. Number
- Bose, D., Cordes, H., Nolte, S., Schneider, J. C., & Camerer, C. (2021). Decision weights for experimental asset prices based on visual salience. *Leibniz Universität Hannover*.

Word-processing software

- You can choose yourself which word processing software you wish to use.
- The three most common options are:
 - Microsoft Word
 - Open Office Writer
 - \LaTeX (LaTeX)
- Microsoft Word and Open Office Writer use the WYSIWYG (“What you see is what you get”) concept, making them easy to use. However, they can sometimes be counter-intuitive and error-prone when processing long and complex documents.
- \LaTeX is a typesetting system using the WYSIWYM (“What you see is what you mean) concept. Working with \LaTeX is more complex in the beginning, however, in the long term, the investment may pay off. \LaTeX is free and several software options exist, most commonly being Overleaf, which allows multiple people working on a same project.

Automatic indexation

- Word processing software usually offers the possibility of automatic numbering of text elements such as tables, figures, footnotes, etc.
 - This numbering can then be referenced by automatic referencing.
 - When tables are added or removed, the numbering is automatically adjusted. All references in the text are also updated.
 - Directories (e.g., table of contents) can also be created automatically.
- Using this option can save a lot of time and prevent errors in indexation that may occur during manual editing.

Text segments

- Microsoft Word and Open Office Writer use different text segments:
 - Main body
 - Enumeration
 - Footnotes (but not their enumeration)
 - ...
- Often different fonts/spacing/paragraph settings etc. appear for different text segments.
- Make sure that your settings (especially the font type) are consistent for all text segments.

Reference management

- Similar to automatic figure and table indexing, automated literature management software can be used.
- Different software options are available for reference management:
 - Citavi can be used with Microsoft Word or Open Office Writer and be accessed via a free campus-license.
 - Bibtex is included in \LaTeX which can be used for automatic reference organisation as well as cross referencing.

Reference management

- Similar to using \LaTeX for the first time, time has to be invested in using literature management software. However, automated literature management is less error-prone than manually editing references.
- Citations data can be downloaded from journal websites and Google Scholar in a variety of formats (e.g., for \LaTeX 's Bibtex).
- Nevertheless, you have to make sure that the library file is kept clean.
 - The data from journal websites or Google Scholar may also contain errors or be incomplete. For example, sometimes volumes or numbers are missing and capitalization in journal names is inconsistent.

Time allocation

- The time allowed for writing seminar papers and theses is limited and should be fully exploited.
- An initial literature search is followed by the preparation of a rough outline, which is then discussed with the supervisor.
 - The initial literature search gives an overview on the topic and relevant sub-topics.
 - It is not sufficient to only look at the basic literature.
- The discussed rough outline is then fine-tuned with the help of further literature research.
- When writing, experience shows that further literature research will often be necessary (to further elaborate on certain topics or to substantiate statements).
- **You should not wait too long until you start writing!**

Supervision and Individual Appointments

What can you contact your supervisor about?

- Discussion of the general topic.
- Discussion and commenting of the outline.
- Discussion of specific questions.
- Help with questions regarding formal requirements.

Procedure:

- Appointments via e-mail.
- **Outline has to be send to the supervisor in advance!**

Seminar presentations

- Seminar papers are generally presented in seminars as presentations.
- Speakers are expected to consider the didactic presentation of their topic.
- The presentation should be supported by presentation slides (Powerpoint, \LaTeX).
- Laptop and beamer are provided by the supervisors.
- The presentation has to be send to the lecturer/supervisor in advance (specific dates will be provided for each seminar).

Concluding remarks

- This presentation provides guidelines for writing seminar papers and final theses. It contains the essential information for writing scientific papers. It does not, however, claim to be exhaustive.
- **In case of doubt, check with your supervisor!**
 - **If you don't ask, you will not get help!**
 - However, do make sure you put in own effort first and investigate whatever issue you have thoroughly before contacting the supervisor!

Good luck with your paper!