

Institut für Financial Management Fachgebiet für Unternehmensfinanzierung (510E) Leitung: Prof. Dr. Daniel Hoang

## Research Seminar in Finance (Master) Topic: "FinTech, AI in Finance, and Digital Finance"

## **Seminar Overview**

This seminar focuses on **FinTech**, **Digital Finance**, and the **growing role of AI in Finance**, using current research papers as a foundation.

FinTech, as the name suggests, combines finance and technology and is currently transforming the financial industry. What makes this development unique is that much of the change is coming from outside the traditional financial sector: young start-ups and large tech companies are challenging established players by launching new products and technologies and creating strong competitive pressure. Initially, FinTech and Digital Finance activity centered around mobile payments, money transfers, peer-to-peer lending, and crowdfunding. In recent years, it has expanded into well-known areas such as blockchain, cryptocurrencies, and big data.

At the same time, AI is becoming increasingly important in finance. From credit scoring and fraud detection to algorithmic trading and automated investment tools, AI is enabling more data-driven and (perhaps) more efficient decision-making.

The seminar will explore these topics, based on a selection of **research papers**.

## **Organizational Matters**

The seminar is intended for **<u>all</u>** students in the Master's program:

- Management: Schwerpunktseminar "Corporate Finance" (5105-611)
- **Management:** Schwerpunktseminar "Finance" (**5100-511**)
- Management: Schwerpunktseminar "Financial Concepts und Methods" (5106-650)
- **Management:** Schwerpunktseminar "Investments and Institutions" (**5104-640**)
- International Business and Economics: "Master Seminar in Finance" (5104-650)

Seminar participants discuss recent research and the corresponding introductory literature.

Seminar participants will:

- write a **seminar thesis** (10-15 pages) based on <u>one</u> selected research paper
- hold a group presentation in a block seminar (2 days)

The **"official"** seminar language is **English**. However, the seminar thesis may be conducted in **German** or **English**.

The seminar will take place in-person and via Microsoft Teams (details below and to be announced).

Students can select up to three preferred topics (see pages 3-4 for an overview of the seminar topics).

#### Note: No prior knowledge of AI, cryptocurrencies, or related technologies is required!

The final assignment of seminar topics will be announced at the **Kick-Off Meeting**. Furthermore, all seminar participants will attend a **Scientific Writing Class** as outlined in the schedule on page 6.

The seminar is held by **Prof. Dr. Daniel Hoang**. If you have organizational questions, please contact **Dr. Andreas Benz** (andreas.benz@uni-hohenheim.de).

## **Seminar Topics**

#### **Topic 1: Digital Currencies and Payments**

• Foley, S., Karlsen, J.R., Putnins, T.J., 2019. Sex, Drugs, and Bitcoin: How Much Illegal Activity is Financed Through Cryptocurrencies? The Review of Financial Studies 32(5): 1798-1853.

#### Additional Literature:

- Thakor, A.V., 2020. Fintech and Banking: What Do We Know? Journal of Financial Intermediation 41, 100833. (Chapter 2.4, 5)
- Allen, F., Gu, X., Jagtiani, J., 2021. A Survey of Fintech Research and Policy Discussion. Review of Corporate Finance 1, 259–339. (Chapter 4, 5)

In addition to discussing the main paper, please provide a brief overview of the digital currencies/payment market but <u>avoid</u> deeper examinations of the Blockchain technology.

#### **Topic 2: Alternative Data in Finance: Credit Scoring Using Digital Footprints**

• Berg, T., Burg, V., Gombovic, A., Puri, M., 2020. On the Rise of FinTechs: Credit Scoring Using Digital Footprints. The Review of Financial Studies 33(7): 2845-2897.

#### Additional Literature:

• Allen, F., Gu, X., Jagtiani, J., 2021. A Survey of Fintech Research and Policy Discussion. Review of Corporate Finance 1, 259–339. (Chapter 2.1, 3.2)

In addition to discussing the main paper, please provide a brief overview on the usage of alternative data for credit risk, see the paper by Allen, Gu, and Jagtiani (2021).

# **Topic 3: Alternative Data in Finance: Leveraging AI in Debt Collection from Delinquent Borrowers**

• Zhou, Y., 2024. Artificial Intelligence and Debt Collection: Evidence from a Field Experiment. SSRN Journal.

#### Supplementary Literature:

• To be determined and added later.

#### Topic 4: How Banks Respond to Fintech Competition: Venture Investments in Fintech

• Puri, M., Qian, Y., Zheng, X., 2024. From Competitors to Partners: Banks' Venture Investments in Fintech.

#### Supplementary Literature:

• To be determined and added later.

#### Topic 5: Robo-Advisors and Their Role in Improving Financial Decision-Making

• D'Acunto, F., Prabhala, N., Rossi, A.G., 2019. The Promises and Pitfalls of Robo-Advising. The Review of Financial Studies 32, 1983–2020.

#### Supplementary Literature:

- D'Acunto, F. and A. G. Rossi (2023b): Taming Behavioral Biases in Consumer Decision-Making: The Role of Robo-Advisors, SSRN, Working Paper 4666240.
- Cardillo, G., Chiappini, H., 2024. Robo-advisors: A Systematic Literature Review. Finance Research Letters 62, 105119.
- D'Acunto, F. and A. G. Rossi (2023a): Robo-advice: Transforming Households Into Rational Economic Agents, Annual Review of Financial Economics, 15(1), 543–563.

In your presentation, in addition to discussing the main paper, please provide a brief overview on Robo-Advisors based on the provided supplementary literature.

#### **Topic 6: How does Generative AI affect Firm Value?**

• Eisfeldt, A.L., Schubert, G., Zhang, M.B., Taska, B., 2023. Generative AI and Firm Values.

#### Supplementary Literature:

• Eisfeldt, A.L., Schubert, G., 2024. Generative AI and Finance. SSRN Working Paper. In your presentation, in addition to discussing the main paper, please provide a brief overview on "Generative AI and Finance" based on this paper. Also, use the relevant chapters (e.g., Chapter II) in this review to supplement your seminar thesis.

#### **Topic 7: What are the Economic Costs and the Finance Effects of Banning AI?**

• Bertomeu, J., Lin, Y., Liu, Y., 2024. What Are the Costs of Delayed Technology Adoption? Evidence from Italy's Ban of ChatGPT.

#### Supplementary Literature:

• To be determined and added later.

## **Introductory Literature**

- Allen, F., Gu, X., Jagtiani, J., 2021. A Survey of Fintech Research and Policy Discussion. Review of Corporate Finance 1, 259–339.
- Eisfeldt, A.L., Schubert, G., 2024. Generative AI and Finance. SSRN Working Paper.
- Thakor, A.V., 2020. Fintech and Banking: What Do We Know? Journal of Financial Intermediation 41, 100833.
- Stulz, R.M., 2019. FinTech, BigTech, and the Future of Banks. Journal of Applied Corporate Finance 31(4): 86-97.

## **Grading**

The final grade will be a weighted average of

- Seminar thesis (60%)
- Group presentation (30%)
- Active participation (10%)

## **Application Process**

The seminar has limited capacity with a **maximum of 16 participants**. To submit your application for the seminar, please complete the application form under the following <u>link</u>.

As part of your application, please merge the following documents into a single PDF file:

- 1) Up-to-date CV
- 2) Bachelor's degree transcript of grades
- 3) Current master's degree transcript of grades

Only complete and timely applications can be considered.

#### **Application schedule:**

- The application deadline is September 21, 2025 (Sunday).
- Applicants will be notified of their acceptance or rejection by the seminar provider no later than **September 28, 2025 (Friday)**.

## **Application form options:**

- Seminar applicants can choose **three** seminar topics of their preference.
- The assignment of seminar topics will be announced during the kick-off.
- Please keep in mind that not all individual preferences can be guaranteed.

If you have questions about the application process or other organizational matters, please contact Dr. Andreas Benz (andreas.benz@uni-hohenheim.de).

## Preliminary Schedule

The schedule provided below is tentative and subject to change based on room availability. The final schedule will be announced in the Kick-Off Meeting.

Date	Description
Oct <i>15</i> , 2025 Wednesday 16:00 – 20:00 Location: HS 34	<ul> <li>Kick-Off Meeting:</li> <li>Introduction to the PE literature</li> <li>Assignment of seminar topics, research papers, and advisors</li> <li>Seminar organization</li> </ul>
Oct 16, 2025 Thursday 16:00 – 20:00 Location: HS 34	<ul> <li>Scientific Writing Class:</li> <li>Introduction to research and scientific writing</li> <li>Aims &amp; objectives of seminar thesis and presentation</li> <li>Practical guidance and recommendations</li> </ul>
Nov 21, 2025 Friday Time: tba Location: tba	<ul> <li>Q&amp;A and Progress Discussion Session 1:</li> <li>Dedicated and interactive feedback sessions for students</li> <li>Aim: Clarify seminar topics; address questions and concerns; share progress, ideas, and challenges</li> </ul>
Dec 16, 2025 Tuesday Time: tba Location: tba	<ul> <li>Q&amp;A and Progress Discussion Session 2:</li> <li>Dedicated and interactive feedback sessions for students</li> <li>Aim: Clarify seminar topics; address questions and concerns; share progress, ideas, and challenges</li> </ul>
Jan 12, 2026 Monday Time: tba Location: tba	<ul> <li>Q&amp;A and Progress Discussion Session 3:</li> <li>Dedicated and interactive feedback sessions for students</li> <li>Aim: Clarify seminar topics; address questions and concerns; share progress, ideas, and challenges</li> </ul>
Jan 16, 2026 Thursday & Jan 16, 2025 Friday Location: tba	<ul> <li>Block Seminar (2 days):</li> <li>Submission of the seminar thesis and presentation slides</li> <li>Seminar (group) presentation</li> <li>Discussion</li> </ul>