Course and Examination Fact Sheet: Spring Semester 2022

10,280: Market Microstructure (PhD)

ECTS credits: 4

Overview examination/s
(binding regulations see below)
Decentral - examination paper written at home (individual) (80%)
Examination time: term time
Decentral - Presentation (individual) (20%)
Examination time: term time

Attached courses
Timetable -- Language -- Lecturer
10,280.1.00 Market Microstructure (PhD) -- Englisch -- Ranaldo Angelo

Course information

Course prerequisites
PhD compulsory courses of the PhD program in Finance.

Learning objectives

- Learn the basics of theoretical and empirical market microstructure.
- Study how microstructure concepts can be applied in major areas of finance such as asset pricing.
- Learn how to write a research outline dealing with market microstructure and practice your communication and presentation skills.

Course content

Market microstructure is the study of trading mechanisms used for financial securities. It analyzes theoretically and empirically the impact of important trading frictions on the process of price formation in financial markets (for equity, government and corporate bonds, currencies, among others). It also examines how the market and security designs affect market (in)efficiency and social welfare.

First, we will survey the main theoretical concepts in this research field. Then, we will deal with the empirical analysis in market microstructure including the following issues: the link between market and funding liquidity, market microstructure and asset pricing, microstructure of some over-the-counter (OTC) markets such as foreign exchange rates and derivatives, microstructure of some markets based on central clearing (CCP) (e.g. repurchase agreements or repo in Europe) and how new regulation (e.g. Basel III and EMIR) has affected OTC and CCP markets, FINTECH issues such as algorithmic trading and cryptocurrencies, and which market design supports market quality and financial stability.

Course structure and indications of the learning and teaching design

This course will give students some insights into how to conduct independent and original research on a current topic related directly or indirectly to market microstructure. The course has three main parts:

- First, a four-day block course during the first week of the mid-term break. During four-hour lectures, the students will get introduced to market microstructure analysis and get the opportunity to learn some timely issues related to market microstructure presented by the teacher and invited speakers, if possible.

- Second, toward the end of the semester, students will present their research idea or project as if it were an academic lecture.
Finally, the students will draft a research outline as a term paper. The teacher will propose some topics that are topical in this area of research. However, students are encouraged to carry out their own research on topics that they consider interesting and related to their doctoral thesis.

The research (term) paper shall consist of less than 20 pages and can be written individually or coauthored by two students. More precise guidelines will be provided at the beginning of the course.

More detailed information about the course structure: The first part of the course (four-day block course) will be organized into 4-hour lectures. The main topics are: Introduction; Theoretical models; Empirical analysis; Liquidity; Asset Pricing; Market design; Ongoing important issues such as new regulation, (unconventional) monetary policy, and FINTECH.

Course literature


Additional course information

In the case of the President's Board having to implement new directives due to the SARS CoV 2 pandemic in SpS2022, the course information listed above will be changed as follows:

- The course is conducted online via the platform Zoom
- The lecturer informs via e mail on the changed implementation modalities of the course.

The examination information listed below would be changed as follows:

- There are no changes necessary to the examination information.

Examination information

Examination sub part/s

1. Examination sub part (1/2)

Examination time and form
Decentral - examination paper written at home (individual) (80%)
Examination time: term time

Remark
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Examination-aid rule
Term papers

Written work must be written without outside help according to the known citation standards, and a declaration of authorship must be attached, which is available as a template on the StudentWeb.

Documentation (quotations, bibliography, etc.) must be carried out universally and consistently according to the requirements of the chosen/specified citation standard such as e.g. APA or MLA.

The legal standard is recommended for legal work (cf. by way of example: FORSTMOSER, P., OGOREK R., SCHINDLER B., Juristisches Arbeiten: Eine Anleitung für Studierende (the latest edition in each case), or according to the recommendations of the Law School).

The reference sources of information (paraphrases, quotations, etc.) that has been taken over literally or in the sense of the original text must be integrated into the text in accordance with the requirements of the citation standard used. Informative and bibliographical notes must be included as footnotes (recommendations and standards e.g. in METZGER, C., Lern- und Arbeitsstrategien (latest edition)).
For all written work at the University of St.Gallen, the indication of page numbers is mandatory, regardless of the standard chosen. Where page numbers are missing in sources, the precise designation must be made differently: chapter or section title, section number, article, etc.

**Supplementary aids**

**Examination languages**
- Question language: English
- Answer language: English

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### 2. Examination sub part (2/2)

#### Examination time and form
- Decentral - Presentation (individual) (20%)
- Examination time: term time

#### Remark

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#### Examination-aid rule

Presentations
- In presentations, aids for visual presentation can be used. These aids can be specified or restricted by the lecturers.

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#### Examination languages
- Question language: English
- Answer language: English

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**Examination content**

Students should submit a research paper related to market microstructure or on another topic but applying some microstructure issues. The term paper should represent an original research proposal in some connection with the market microstructure literature. The *quality* and *originality* of the research paper will be rewarded. In the last lecture, students will have the opportunity to present their preliminary research idea. For the examination, the term paper and presentation will count 80% and 20%, respectively.

**Examination relevant literature**

The teacher’s slides and pertinent literature.
Please note

Please note that only this fact sheet and the examination schedule published at the time of bidding are binding and takes precedence over other information, such as information on StudyNet (Canvas), on lecturers' websites and information in lectures etc.

Any references and links to third-party content within the fact sheet are only of a supplementary, informative nature and lie outside the area of responsibility of the University of St.Gallen.

Documents and materials are only relevant for central examinations if they are available by the end of the lecture period (CW21) at the latest. In the case of centrally organised mid-term examinations, the documents and materials up to CW 12 are relevant for testing.

Binding nature of the fact sheets:

- Course information as well as examination date (organised centrally/decentrally) and form of examination: from bidding start in CW 04 (Thursday, 27 January 2022);
- Examination information (regulations on aids, examination contents, examination literature) for decentralised examinations: in CW 12 (Monday, 21 March 2022);
- Examination information (regulations on aids, examination contents, examination literature) for centrally organised mid-term examinations: in CW 12 (Monday, 21 March 2022);
- Examination information (regulations on aids, examination contents, examination literature) for centrally organised examinations: two weeks before the end of the registration period in CW 15 (Monday, 11 April 2022).