

2019.FS

Module Name: Practical Exercises in Research Methods	
Module Code	w.MA.XX.PFM-M9.16HS
Module Description	Development of econometric methodological skills (regression, dealing with cross-sectional and time-series data, diagnosis, prognosis) with applications from the financial sector. Deepening the methodological knowledge by analyzing published research and replicating it.
Program and Specialization	Accounting and Controlling
Legal Framework	Academic Regulations MSc in Accounting and Controlling dated 10.12.2015, Appendix to the Academic Regulations for the degree program in Accounting and Controlling, first adopted on 26.01.2016
Module Category	Module Type: Compulsory
ECTS	6
Organizational Unit	W Abt. Banking, Finance, Insurance Ltg.
Module Coordinator	Armin Bänziger-Aiba (banz)
Deputy Module Coordinator	Ursina Hüppin (huep)
Prerequisite Knowledge	Module w.FOM-M4 (Research Methods)
Contribution to Program Learning Goals (Affected by Module)	<ul style="list-style-type: none"> § Professional Competence § Methodological Competence § Social Competence § Self-Competence
Contribution to Program Learning Objectives	<ul style="list-style-type: none"> Professional Competence § Knowing and Understanding Content of Theoretical and Practical Relevance § Apply, Analyze, and Synthesize Content of Theoretical and Practical Relevance § Evaluate Content of Theoretical and Practical Relevance Methodological Competence § Problem-Solving & Critical Thinking § Scientific Methodology § Work Methods, Techniques, and Procedures § Information Literacy § Creativity & Innovation Social Competence § Written Communication § Oral Communication § Teamwork & Conflict Management § Intercultural Insight & Ability to Change Perspective Self-Competence § Self-Management & Self-Reflection § Ethical & Social Responsibility § Learning & Change
Module Learning Objectives	<ul style="list-style-type: none"> Students... § understand why different types of data have to be analyzed differently. § understand the linear regression model and its assumptions and can estimate and interpret regression equations with several regressors in R. § test and evaluate hypotheses and estimate confidence intervals regarding regression parameters in R. § analyze regression residuals (diagnosis) and find adequate solutions to violations of regression assumptions. § recognize the peculiarities of working with time-series data. § use time-series data for forecasting purposes and for estimating model parameters. § deepen their understanding of statistical methods in the application context. § study research papers and understand the issues and findings discussed therein. § deepen their methodological knowledge through critical reproduction of third-party research results. § question substantive results of research and their methodological foundations.

Module Content	§ The linear regression model and its assumptions § Testing hypotheses and confidence intervals § Violations of assumptions of the classical regression model § Special features of working with time-series data § Volatility models § Applications from the financial sector (CAPM, investment fund performance) § Prognosis with estimated regression models § Reading research papers (journal articles) and answering method-oriented leading questions § Replication of empirical results of research / application of methodologies in the programming environment R		
Links to other modules	The content of this module is linked to the following modules: w.MA.XX.FOM-M4.16HS w.MA.XX.MTAC-M13.16HS w.MA.XX.POF-M11.16HS		
Methods of Instruction	§ Interactive Instruction § Exercises § Literature Review § Discussion § Lectures	Social Settings Used: -	
Digital Resources	§ Practice and Application Exercises (with Key) § Multiple Choice Tests § Electronic aids: teaching materials (pdf), R-environment, R scripts		
Type of Instruction	Classroom Instruction	Guided Self-Study	Autonomous Self-Study
Lecture	40 h	-	
Excercise	40 h	56 h	
Project Work	-	-	
Seminar	-	-	
Total	80 h	56 h	
Performance Assessment			
End-of-module exam	Form	Length (min.)	Weighting
Written exam	Specified documentation	60	100,00%
Permitted Resources	Non-programmable calculator	With dictionary	
Others			
	Assessment	Length (min.)	Weighting
	-	-	-
Students are not allowed to revise and resubmit performance assessment tasks.			
Classroom Attendance Requirement	-		
Language of Instruction/Examination	German		
Compulsory Reading	§ Auer, B. & Rottmann, H. (2015). Statistik und Ökonometrie für Wirtschaftswissenschaftler: Eine anwendungsorientierte Einführung. 3rd edition. Wiesbaden: Springer Gabler. ISBN 78-3-658-06438-9. § Empirische Forschungsarbeiten (tbd).		
Recommended Reading	§ Gujarati, D. (2015). Econometrics by Example. 2nd edition. London: Palgrave Macmillan. ISBN 978-1137375018.		
Comments	The book "Statistik und Ökonometrie für Wirtschaftswissenschaftler: Eine anwendungsorientierte Einführung " is freely available as an e-book (pdf) from the ZHAW library.		