

# MONECO FINANCIAL TRAINING

## INVESTMENT ANALYSIS IN MICROSOFT EXCEL USING EXCEL FOR RISK/RETURN CALCULATIONS AND PORTFOLIO MANAGEMENT

**April 18 - 19, 2018**

**Lecturer: Andreas Steiner**

## Attend this intensive 2-day training and learn to...

- **Unlocking the potential of Microsoft Excel:** Get an overview of the powerful built-in functionality without external add-ins and software.
- **Smart analytics:** Learn about smart solutions to standard problems in investment analytics
- **Spreadsheet templates:** build customized solutions based on the many spreadsheet templates distributed to participants in this course.
- **Spreadsheet risk management:** Use Excel in a structured way and minimize operational issues

### Course Overview:

This course gives an overview of applying Excel in a most efficient manner for typical calculations in investment analysis and portfolio management. Delegates will be introduced to some of the less widely known but highly useful built-in functions. Spreadsheet templates are used in group exercises to solve case study – like problems. The focus of the course is to deliver practical value for working professionals. The calculations discussed in the course are typical examples encountered in performance measurement, risk management and portfolio management.

### Methodology:

The training consists of classroom-based teaching combined with group exercises (four per day).

### Who should attend?

The course is not only for specialists but for a wider audience including investment managers, asset management executives of all levels, institutional investors and research analysts. This course has been designed for the benefit of:

- Research analysts
- Portfolio managers
- Risk managers
- Fund analysts
- Performance analysts
- Quantitative investment analysts

The course assumes a general familiarity with financial markets, instruments and investment portfolios. A basic understanding of statistical and mathematical concepts is an advantage.

### Materials:

Delegates will receive colour printouts of all slides and electronic access to Excel spreadsheets used during the course.

WEDNESDAY, APRIL 18<sup>th</sup>

09<sup>00</sup>–09<sup>15</sup>

### Welcome and Introduction

09<sup>15</sup>–12<sup>30</sup>

#### Background

- The origins of Microsoft Excel (help to understand some of its current features)
- Application versions
- Specifications and limitations
- Basic configuration after installation

#### Overview Basic Functions

- Cell formulas
- Array formulas
- Solver for numerical search problems
- Pivot Table for data management
- Regression analysis
- Conditional formatting
- Important charts
- Recording macros, introduction to Visual Basic for Applications

12<sup>30</sup>–13<sup>30</sup>

#### Lunch

13<sup>30</sup>–17<sup>30</sup>

#### Return Calculations

- Discrete and continuous compounded returns
- Chain-Linking and annualizing returns
- Money-weighted return calculations
- Benchmark-relative statistics: alpha, beta and gamma

### Risk Calculations

- Ex post volatility, annualized volatility
- Covariance matrix
- Ex ante and ex post contributions to volatility and tracking error
- Tail and downside dependency: conditional correlation
- Historical VaR and CVaR
- Maximum drawdown, underwater chart

**Four group exercises will be solved during the first day**

THURSDAY, APRIL 19<sup>th</sup>

09<sup>00</sup>–12<sup>30</sup>

### Simulation Methods

- Normally distributed returns
- Normally distributed correlated returns
- Non-normal returns
- Random portfolios

### Portfolio Construction

- Mean-variance portfolio optimization with realistic constraints
- Risk parity portfolio construction
- Non-optimized portfolio construction methodologies: deriving allocations from scores
- Expected returns using the Black/Litterman methodology

12<sup>30</sup>–13<sup>30</sup>

#### Lunch

13<sup>30</sup>–17<sup>30</sup>

### Advanced Risk Measurement

- Resampling
- Historical Scenarios
- Confidence intervals for skewness and kurtosis
- Factor analysis of a portfolio: contributions of factors to portfolio risk and return

**Four group exercises will be solved during the second day**

### Review and Conclusions

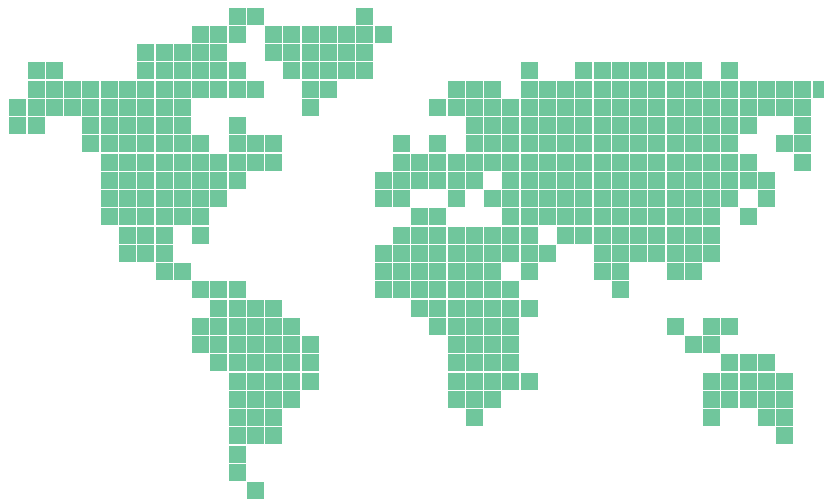
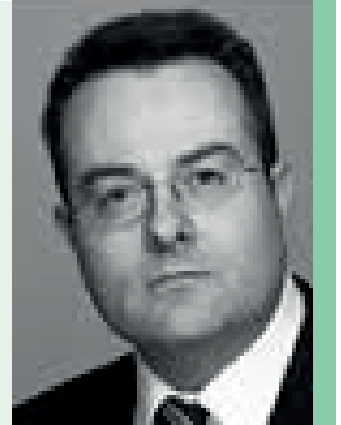


*The course will be highly practical and hands-on. Participants are required to bring a notebook with MS Excel*

### **Andreas Steiner**

Andreas Steiner is an independent consultant specializing in portfolio analytics and risk management. The services provided include training, advanced portfolio analytics software and mandate-based projects for banks, investment managers, institutional investors and software companies. Andreas has been teaching as a lecturer at the Zurich University of Applied Sciences in Switzerland, where he gave courses covering performance analysis, international investing and Behavioral Finance. Andreas has published several articles in investment-related journals and is making available his research online in the form of research notes and blog entries.

Andreas has more than 15 years of working experience in institutional asset management and private banking. He held various performance and risk-related roles at Credit Suisse Asset Management and was head investment risk management at LGT Capital Management. Andreas holds a master's degree magna cum laude in Economics from the University of Zurich with specializations in Monetary Economics and Financial Markets.



*Knowledge Leads the Way...*

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# Terms and Conditions of the MONECO Financial Training

## MONECO Financial Training

MONECO Financial Training offers a comprehensive programme of English-language seminars, trainings and practical workshops lectured by qualified tutors. Our objective is to provide the industry professionals with advanced financial know-how and up-to-date analytical methods and skills.

## Seminar Venue and Accommodation

The bulk of the MONECO seminars are traditionally held at the international four-star NH Prague Hotel in Prague, Czech Republic. Since we are expanding our training activities, we run some selected seminars also in other European destinations. Accommodation is not included in the seminar price, but upon request we are happy to offer you hotel reservations in every of our training destinations at special discounted prices for our valued clients.

## Tuition Language

Seminar tuition is in English language, as are all manuals, training software etc. Therefore, in order to benefit from participation, at least a passive knowledge of English, including common financial phrases and related terminology, is required.

## Registration

Clients who decided to participate, should submit us in advance a registration for a particular seminar (letter, fax, internet etc.). Subject to availability, the participant will then receive a confirmation of participation. The number of participants is always strictly limited in order to secure an effective and focused learning environment.

## Seminar Prices

The quoted seminar prices are per person and include all the training manuals, lunches and refreshments, certification diploma in English and selected software solutions used at the seminar. The price does not include hotel accommodation. Quoted prices are exclusive of local VAT (21 %) "Bundle" prices represent the total fee for participation in mutually related seminars (i.e. "Bundles 3+2, 2+3, 2+2, 3+1, 1+3, 1+2+2 and 2+2+1"). "Bundle" prices are provided in the Calendar of the MONECO Financial Training seminars.

## Discounts

Bulk discounts are offered when submitting an application for the participation of more than one person. A 10 % discount is offered when at least two participants from one company register for a seminar or one participant registers at once for two or more seminars. The discounts do not apply for "bundle" prices, as these already represent discounted prices.

## Invoicing and Payment

An invoice for the seminar price will be sent to the participants no later than 10 working days prior to the beginning of the seminar. **Full payment of the invoice must be made before the start of the seminar as a precondition of participation.**

## Terms of Cancellation

If for whatever reasons a registered participant is unable to attend, a substitute delegate may be appointed to participate instead. For cancellations received 20 days or more before the beginning of the seminar, a 10 % cancellation fee of the full price will be invoiced i.e. 90 % of the price is refunded. **For cancellations received less than 20 days prior to the beginning of the seminar, the full price is payable i.e. no refund will be provided. All cancellations must be in writing.** The organizers of the MONECO Financial Training courses reserve the right to cancel the individual participation or cancel the entire seminar or part of it for whatever unspecified reasons, including possible force majeure. In this case, the price paid will be refunded in full or in part, accordingly.

## REGISTRATION FORM

• Investment Analysis in Microsoft Excel

April 18 – 19, 2018

€ 1400

### COMPANY

Name:

Approving Manager:

Person responsible for training:

Address:

Tax Registration No.:  VAT Identification No.:

### PARTICIPANTS

1. Title: Name:  Phone:   
Mr/Mrs/Ms

E-mail:  Position:

2. Title: Name:  Phone:   
Mr/Mrs/Ms

E-mail:  Position:

3. Title: Name:  Phone:   
Mr/Mrs/Ms

E-mail:  Position:

Date:  Signature: