

CZECH FINANCIAL ACADEMY

Upcoming Seminars:

FINANCIAL MODELLING IN MICROSOFT® EXCEL®

September 21–22, 2010

COUNTRY AND SOVEREIGN RISK ANALYSIS, RATING AND RISK MANAGEMENT

September 23–24, 2010

2+2

- **Introduction to Excel as an Analysis Tool**
- **Working with Cash Flows**
- **Basic Statistical and Financial Functions**
- **Random Number Generation and Monte Carlo Simulation**
- **Using Goal Seek/Solver for Optimization Problems**
- **Recording and Using Visual Basic Macros**

2+2

The purpose of this highly practical, workshop is to give you a thorough introduction to and hands-on, practical experience with Excel as a financial analysis tool.

We start with a general overview of the Excel environment and its standard and add-in analysis features.

We then show how to create and analyze cash flows of basic financial instruments such as bonds and swaps, and we calculate important key ratios such as yield, duration, convexity etc.

Further, we explain and demonstrate how built-in statistical and analytical tools can be used to calculate variance, covariance, correlation etc., and how they can be used for option pricing and other interesting applications. We also explain and demonstrate how random numbers are generated and how to build up a Monte Carlo simulation. We show how risk measures such as “Value-at-Risk” can be calculated for simple positions and correlated portfolios. The “Solver” will be used to find solutions for optimizing problems (such as the mean/variance optimization), and regression analysis will be used to establish the relationship between series of financial data, e.g. in calculating “Beta” for stocks.

Finally, we give a quick introduction to Visual Basic for Applications (VBA) and show how macros can be recorded and/or individually programmed and tested to enhance the flexibility of Excel.

During the workshop, you will be programming a number of small, practical applications that you can use later. You will also design a small “program” in the Excel/VBA environment.



Participants are requested to bring their own notebook equipped with Microsoft Excel. If you can't bring your own notebook, please make a clear note in the registration form.

TUESDAY, SEPTEMBER 21

09.00–09.15

Welcome and Introduction

09.15–12.00

Introduction to Excel® as an Analysis Tool

- Overview of the Excel® Environment
- The Excel® Object Model
- Things you can do in Excel®

Working with Cash Flows

- Tips & Tricks
- Examples
 - Generating cash flows for bonds, swaps and other financial instruments
- Using Date and Time Functions for Dynamic Cash Flow Generation
- Calculating Day Count and Accrued Interest
- Formatting Cash Flows
 - Dates, currencies, borders etc.
- Hands-on Workshop: Analysis of Cash Flows

12.00–13.00

Lunch

13.00–16.30

Basic Statistical and Financial Functions

- Financial Functions
 - Price, yield, internal rate of return
 - Workshop: Calculating key ratios for bonds, swaps, irregular cash flows
- Statistical Functions
 - Average, variance, standard deviation, covariance and correlation
 - Uniform, normal and log-normal distributions
- Hands-on Workshop: Calculating “beta” and other financial analytics using statistical functions. Organizing data using “frequency” and other functions

Random Number Generation and Monte Carlo Simulation

- Excel's Rand® Function
- Sampling from Selected Distributions
- Hands-on Workshop: Sampling from selected distributions and pricing of different instruments
- Hands-on Workshop: Sampling from an empirical distribution and calculation of Value-at-Risk on longer horizons

WEDNESDAY, SEPTEMBER 22

09.00–09.15

Recap

09.15–12.00

Using the Goal-seek and Solver for Optimization Problems

- Introduction to Excel's “Solver”
- Types of Problems that can be Solved
- The Balance Between Constraints and Object Function
- Local and Global Maximum
- Speeding up Convergence
- Examples of Linear and Non-linear Optimization Problems
- Hands-on Workshop:
 - Using the “Solver” to find the optimal stock portfolio
 - Using the “Solver” to find optimal bond portfolio



12.00–13.00

Lunch

13.00–16.30

Recording and Using Visual Basic Macros

- Introduction to Visual Basic
- Simple Macro Recording
- Creating Custom add-in Functions
- Event-driven Actions
- Sharing your Programs with other Users
- Working with Forms and Active-X objects
- Creating a Simple User Dialogue
- Hands-on workshop: Programming and implementing simple user-defined functions
- Running Recorded Macros
- Hands-on Workshop: Recording and Running Macros
- Working with Objects
- Enhancing and Debugging the Recorded Macros
- Programming and Implementing User-defined Functions

Evaluation and Termination of the Seminar

2+2

- **Financial Crises, Country Risk and Sovereign Default Risk**
- **Economic and Financial Foundations of Country Risk Assessment**
- **Country Risk Assessment Methodologies**
- **Country and Sovereign Ratings and their Interpretations**
- **Risk Models for Sovereign Credit Risk**
- **International Portfolio Investment Analysis**
- **Hedging Country and Sovereign Risk**

2+2

The recent European debt crisis has led to a hugely increased focus on country risk in general and on sovereign credit risk in particular.

The purpose of this seminar is to give you a good introduction to country and sovereign risk and a good and practical understanding of tools and methods for assessing and managing these risks.

We start with a general introduction to country and sovereign risk. We define the concepts “country risk” and “sovereign risk”, and we explain the sources of these risk. We also give an overview of the role that country and sovereign risks have played in the current and historical financial crises (such as the Asian currency Crisis).

We then look at the economic and financial foundations of country risk assessment. We explain the debt dynamics and “events” such as debt restructuring, debt moratorium, and currency devaluation.

Further, we present and explain a number of country risk assessment methodologies, including the analysis of socioeconomic, fiscal and monetary variables. We also discuss how country and sovereign risks are reflected in country and sovereign credit risk ratings. We give examples of country and sovereign debt ratings and we discuss their impact on sovereign debt markets. We present some quantitative risk models for country and sovereign risk and explain how these models can be used in practice for calculating “Country VaR” and other risk measures.

Further, we look at the investment implications of country and sovereign risk. We explain how sovereign debt instruments affect the risk-return characteristics of an investment portfolio, and we demonstrate how to construct optimal portfolios that include government bonds.

Finally, we present and explain a number of tools for mitigating country and sovereign risk, including the use of national and multinational guarantees, future flow securitizations, and risk transfer with sovereign credit derivatives.

THURSDAY, SEPTEMBER 23

09.00–09.15

Welcome and Introduction

09.15–12.00

Financial Crises, Country Risk and Sovereign Default Risk

- Country and Sovereign Risk: Definitions, Terminology, Sources of Risk
- The European Debt Crisis and the Future of the Euro
- Sovereign Debt Crises – the Historical Perspective
- Solving Debt Crises – Debt Reduction Strategies and Instruments

Economic and Financial Foundations of Country Risk Assessment

- Country Debt Dynamics
- Near- Medium and Long Term Fiscal Outlooks
- Default/Moratorium/Restructuring
- Devaluation
 - Relative price effects
 - Income effects
 - Stock adjustments
 - Country Risk Ratios

12.00–13.00

Lunch

13.00–16.30

Country Risk Assessment Methodologies

- Welfare and Social Indicators
- Macroeconomic Structures of Growth
- External Indebtedness, Liquidity and Solvency
- The Savings-Investment Gap and Domestic Financial Intermediation
- Growth, Crisis and Governance
- Case Study and Small Exercise

Country and Sovereign Ratings and their Interpretations

- Global Country Risk Ratings
 - Specialized ranking firms
 - Export credit agencies
 - Global country risk ranking methods
- Country (Sovereign) Credit Risk Ratings
 - The methodologies of major credit rating agencies (Moody’s, S&P and Fitch)
 - Sovereign debt ratings and their interpretations
 - The impact of ratings on sovereign bond markets (spreads etc.)
- Case Study and Small Exercise

FRIDAY, SEPTEMBER 24

09.00–09.15

Brief Recap

09.15–12.00

Quantitative Risk Models for Country and Sovereign Risk

- Econometric and Mathematical Models
- Value-at-Risk
- Principal Components Analysis
- Models for Assessment of Credit Risk
 - Probabilities of default using historical data
 - Probabilities of default using credit spreads
 - CountryMetrics
 - Loss given default and credit VaR
 - Incorporating correlation and contagion
- Case Study and Small Exercise

International Portfolio Investment Analysis

- Investment Risk
 - The Macro CAPM
 - Measuring political risk as an insurance premium

- International Portfolio and Country Risk Management
 - The impact of country risk on international portfolio investment
 - The International Capital Asset Pricing Model (ICAPM)
 - Limitations of the ICAPM
- Case Study and Small Exercise

12.00–13.00

Lunch

13.00–16.30

Hedging Country and Sovereign Risk

- Overview of Country and Sovereign Risk Mitigation Instruments
- National Export Credit Agencies
- Multilateral Risk Guarantee Institutions
- Public and private risk guarantee institutions
- The Market Based Approach
- Using Project Finance and Future Flow Securitizations to Mitigate Country Risk
- Hedging Sovereign with Credit Derivatives
- Regulatory Aspects (Basel III, Solvency II etc.)
- Case Study and Small Exercise

Summary and Outlook

Evaluation and Termination of Course

Terms and Policies of the Czech Financial Academy

CZECH FINANCIAL ACADEMY

The Czech Financial Academy is a joint venture between the consultancy companies MONECO and BASISPOINT that 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

All Czech Financial Academy seminars are held at the international four-star Mövenpick Hotel in Prague at Mozartova 1 (Mozart Street). Accommodation is not included in the seminar price, but we are happy to offer hotel reservations at discounted prices for our 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 V.A.T. "Bundle" prices represent the total fee for participation in mutually related seminars (i.e. "Models 3+2, 2+3, 2+2, 1+3, 3+1, 1+2+2 and 2+2+1"). "Bundle" prices are provided in the Calendar of the Czech Financial Academy 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 3 weeks 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 Czech Financial Academy 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.

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REGISTRATION FORM

<input type="checkbox"/> Financial Modelling in Microsoft® Excel®	<input type="checkbox"/>	September 21 – 22, 2010	€ 1,500	€ 2,500 ²⁺² <input type="checkbox"/>
<input type="checkbox"/> Country and Sovereign Risk: Analysis, Rating and Risk Management	<input type="checkbox"/>	September 23 – 24, 2010	€ 1,500	

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:
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E-mail: Position:

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