



3

Econometric IFRS9 and Stress Testing using SAS



The IFRS9 course focuses on econometric modelling with the aim of performing a full end-to-end ECL calculation and developing applied stress tests using Mortgage, Credit Card and Personal Loan data under several economic scenarios as required by IFRS9 regulation.

- ✓ Introduction: Expected Credit Loss Calculation
- ✓ Chapter 1: Customer Data Preparation for IFRS9 Advanced Models
- ✓ Chapter 2: Economic Data Preparation for Longitudinal Lifetime Models
- ✓ Chapter 3: Econometric Modelling using Survival Analysis
- ✓ Chapter 4: Econometric Modelling using Splines
- ✓ Chapter 5: Econometric Modelling using Longitudinal Panel (Vintage)
- ✓ Chapter 6: Econometric Modelling using Fractional Loss Given Default-LGD

Learning outcomes

- Develop the modelling skills to achieve robust methodologies
- Understand how the economic simulation changes may impact the stress test
- Learn best practice in graphical techniques interpretation
- Review the relevant statistical theory to understand and develop any kind of model
- Gain a detailed exposition of the theory and practice of modelling
- Explain and interpret the results of the model clearly and simply to senior management

Who should attend?

- Quantitative analysts
- Credit risk managers
- Liquidity risk managers
- Risk control managers
- Compliance managers
- Chief economists
- Econometricians

From Financial Institutions, Investment Banks, Private Banks, Retail Banks, Building Societies, Insurance Companies, Consultancy Groups and Solution Providers.

SAS Forum Russia - Moscow September



I can meet with you anywhere around the globe

BENEFIT FROM TAILORED COURSES AT YOUR OWN SITE

Save time, money and improve performance with our cost-effective, bespoke training courses. We can deliver all of our programs in your chosen location at a time which is convenient for you.

I can utilise your own data and systems within the training to make it even more applicable and will ensure your employees benefit from a real-world focus.

Companies who have attended Jorge Ribeiro financial training include:

- Barclays Bank
- Direct Line Group
- Yorkshire Bank
- Lloyds Group
- Provident Financial
- Clydesdale Bank
- Cooperative Bank
- J. D. Williams Group
- NAB (National Australia Bank)
- BIL (Bank International in Luxembourg)

Jorge Ribeiro

www.jorgeribeiro.co.uk

info@jorgeribeiro.co.uk

Basel (AIRB) and IFRS9 Modelling Training Courses Using SAS® and R

- 1 - Introduction to Financial Modelling using SAS/STAT
- 2 - Basel (Advanced Internal Rating Based) Modelling using SAS/STAT
- 3 - Econometric IFRS9 and Stress Testing Modelling using SAS STAT/ETS

Jorge Ribeiro

WWW.JORGERIBEIRO.CO.UK



1

Introduction to Financial Modelling using SAS



This course is an Introduction to Modelling used in Marketing, Building Societies, Forecasting Services, etc. It provides the basic modelling knowledge using SAS/STAT.

- ✔ Chapter 1: Introduction to Modelling using SAS
- ✔ Chapter 2: Univariate Analysis
- ✔ Chapter 3: Creating a Sample Data Set for Financial Modelling
- ✔ Chapter 4: Applied Linear Regression Models to Bank Balance Account
- ✔ Chapter 5: Applied Logistic Regression for Propensity Models
- ✔ Chapter 6: Introduction to Survival Models (Marketing - Time to Next Purchase)
- ✔ Chapter 7: Introduction to Time Series Forecasting

Learning outcomes

- Develop the modelling skills to achieve robust methodologies
- Learn best practice in graphical techniques interpretation
- Review the relevant statistical theory to understand and develop any kind of model
- Gain a detailed exposition of the theory and practice of modelling
- Explain and interpret the results of the model clearly



2

Basel (Advanced Internal Rating Based) Modelling using SAS

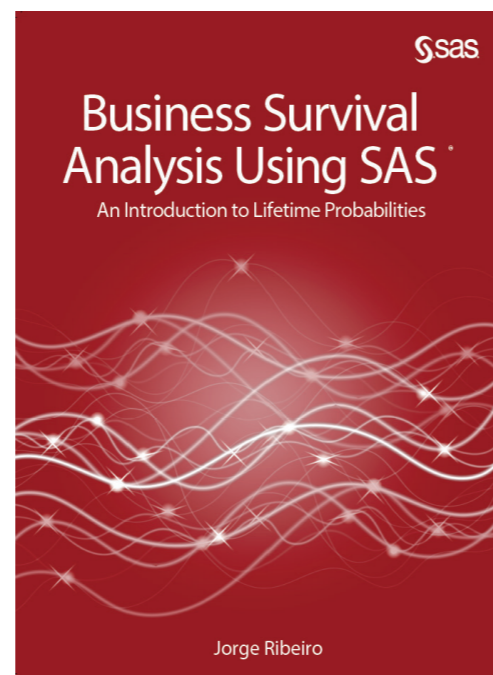


This course is about Introduction to Basel Modelling as (PD - LGD - EAD). It provides different approach for Credit Risk Modelling using SAS/STAT.

- ✔ Introduction: Expected Credit Loss Calculation
- ✔ Chapter 1: Introduction to Probability of Default (PD)
- ✔ Chapter 2: Identifying Missing Data
- ✔ Chapter 3: Outliers
- ✔ Chapter 4: Winsorisation
- ✔ Chapter 5: Multiple Imputation
- ✔ Chapter 6: Sampling
- ✔ Chapter 7: Oversampling and weight
- ✔ Chapter 8: Log Transformation and Heteroscedasticity
- ✔ Chapter 9: Advanced Loss Given Default Modelling
- ✔ Chapter 10: Economic Capital Calculation

Professor Jorge Ribeiro

Head of Modelling and SAS Writer



About your expert trainer:

Jorge Ribeiro has a Master's degree in Economics, a Post-Graduation in Financial Modelling and attended a Doctorate program in Econometrics. Alongside working internationally as an independent SAS consultant with the likes of Barclays, National Australia Bank, HML and the Direct Line Group for the last 21 years; he has held tenure as a Professor of Applied Econometrics and Stress Test in France and Brazil.

Nine years ago, he began delivering international training in SAS modelling using SAS ETS(Econometric Time Series), SAS/STAT and Data Mining.

An expert in Multi SAS platform as SAS Ent Miner applied in Mortgages services using Survival models, Business Intelligence using SAS/ ETS and Simulation Studio to create Optimization Models for Call Centres; Jorge is also the author of two SAS books including "Business Survival Analysis using SAS"(2017) and "Econometric IFRS9 models using SAS" (2019).

Cooperative Bank - Manchester 2017



Financial Modelling in 4 months

All modelling training courses are delivered from March to June and from September to December in London.

- 1 - Introduction to Financial Modelling using SAS/STAT
- 2 - Basel (Advanced Internal Rating Based) Modelling using SAS/STAT
- 3 - Econometric IFRS9 and Stress Testing Modelling using SAS STAT/ETS

This format features a broader and more complete training course comprising of Introduction to modelling, Basel and Econometric IFRS9 from 6:00pm to 8:30pm over 16 weeks.

In addition to mitigating business disturbance, the principal advantage in opting for a longer 16 week evening session format is to give employees the opportunity to consolidate learning by providing papers to read and homework to attempt each week between sessions, so that analysts can learn better pro-actively.



Gary O'Brien



Head of Modelling - Co-operative Bank

Jorge merits the overused term 'expert' on Quantitative Risk Modelling on SAS. After working with him closely for a year and seeing him untangle a real mess, I contracted him to deliver 36 hours of training to my model development team covering IRB and IFRS9 ie cross sectional and time series models. Best investment I've made in years.