Interest Rate Modeling for Risk Management: Market Price of Interest Rate Risk

Series title: Economics: Current and Future Developments Vol. 1

Description: Interest Rate Modeling for Risk Management addresses interest rate modeling for risk management. The interest rate model is specified under the real-world measure, and the result is used as to generate scenarios for interest rates. This type of system is referred to as ‘real-world model’ in this book. The book introduces a theoretical framework that allows estimating the market price of interest rate risk. For this, the book starts with a brief explanation of stochastic analysis, and introduces interest rate models such as Heath-Jarrow-Morton, Hull-White and LIBOR models. The real-world model is then introduced in subsequent chapters. Additionally, the book also explains some properties of the real-world model, along with the negative price tendency of the market price for risk and a positive market price of risk (with an example of this actually occurring). Readers will also find a handy appendix with proofs to complement the numerical methods explained in the book.

This book is intended as a primer for practitioners in financial institutions involved in interest rate risk management. It also presents a new perspective for researchers and graduates in econometrics and finance on the study of interest rate models.

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