

Cambridge Elements

Elements in Quantitative Finance

edited by

Riccardo Rebonato

EDHEC Business School

A PRACTITIONER'S GUIDE TO DISCRETE-TIME YIELD CURVE MODELLING

WITH EMPIRICAL ILLUSTRATIONS AND
MATLAB EXAMPLES

Ken Nyholm

*European Central Bank,
Frankfurt*



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With Empirical Illustrations and MATLAB Examples

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Ken Nyholm
European Central Bank, Frankfurt

Author for correspondence: Ken Nyholm, ken.nyholm@ecb.europa.eu

Abstract: This Element is intended for students and practitioners as a gentle and intuitive introduction to the field of discrete-time yield curve modelling. I strive to be as comprehensive as possible, while still adhering to the overall premise of putting a strong focus on practical applications. In addition to a thorough description of the Nelson-Siegel family of model, the Element contains a section on the intuitive relationship between P and Q measures, one on how the structure of a Nelson-Siegel model can be retained in the arbitrage-free framework, and a dedicated section that provides a detailed explanation for the Joslin, Singleton, and Zhu (2011) model.

Keywords: yield curve modelling, discrete-time, arbitrage-free models, Nelson-Siegel type models

JEL classifications: G1, E4, C5, C13

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