CREDIT RISK MANAGEMENT: BASIC CONCEPTS: FINANCIAL RISK COMPONENTS, RATING ANALYSIS, MODELS, ECONOMIC AND REGULATORY CAPITAL

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The book *Credit Risk Management: Basic Concepts: Financial Risk Components, Rating Analysis, Models, Economic and Regulatory Capital* (hereinafter referred to as "*CRM – Basi Concepts*") has recently been published by Tony Gestel together with Bart Baesens. In the book, these Belgian authors focused on risk management issues, namely credit risk management, for financial institutions.

CRM – Basic Concepts, the first book in a series of three, consists of six parts: Baking risk management, Credit scoring, Credit ratings, Risk modelling and measurement, Portfolio models for credit risk and Basel II. In individual chapters the authors answer many questions relating to credit risk management. At the end of the book there is an overview of Basel II and the ongoing discussion of its practical business impact.

Names of chapters clearly specify what is dealt with inside.

The first chapter provides a general overview of banking management, including risk management. The chapter pays attention to banking history, role of banks, balance sheets of banks, sources of risk in banks, banking risk management, regulation of banks and financial products.

The second chapter is an introduction to credit scoring and includes issues of scoring at different customer stages, discusses score types, credit bureaus, business objectives of credit scoring and limitations of scoring systems.

The third chapter discusses credit ratings, provides rating and scoring systems, rating terminology, taxonomy of credit ratings, rating system architecture, rating philosophy, an overview of external rating agencies, internal rating systems of banks, application of ratings, and limitations.

The fourth chapter provides the different aspects of risk management and modelling. It mentions a system life cycle, provides an overview of rating systems and models, discusses data definition and collection, development and implementation of internal rating systems, their application and follow-up, validation, quality control and backtesting.

The fifth chapter focuses on portfolio models. The chapter defines and discusses the issue of loss distribution and the measures of portfolio risk, illustrates the impact of concentration and correlation on portfolio risk, provides an overview of industry models, explains the Basel II portfolio model, reviews implementation and application, and summarizes economic capital and capital allocation.

The sixth chapter is devoted to Basel II. The Basel Capital Accord (hereinafter referred to as "Basel I") was published in 1988. It was a major new regulatory directive under which the G-10 agreed to a minimum standard of capital adequacy for international banks. The increasing complexity of banking showed that a simple framework of Basel I was not sufficient for the needs of banking practice. The New Basel Capital Accord (known as "Basel II"), which is the revision of the original agreement on capital adequacy Basel I, is based on three pillars: minimum capital requirements, the process of supervision, and market discipline. Basel II responds to the rapid development of financial markets. Basel II was released by the Basel Committee on Banking Supervision in June 2004. The main objectives of Basel II are reflected in the more sensitive approach to measuring risk in relation to the risk profile of banks and precise quantification of regulatory capital practices of each individual bank. The last chapter mentions the issues of bank capital, pillars 1, 2 and 3, information technology aspects, market impact of Basel II rules and the supposed future evolution.

The quality and the benefit of the book can be attributed not only to the authors' theoretical knowledge but especially Tony Gestel's long-term practical experience. In 1997 Tony Gestel obtained his degree in mathematical engineering at the Katholieke Universiteit Leuven (Belgium). Five years later he completed a PhD in field of Mathematical Engineering for Finance. He specializes in mathematical modelling for financial applications. Since 2003 he has been working for Dexia Group[6], currently as the Director of Risk Quantification and Pricing. Tony Gestel is a co-author of several books and a number of articles on quantitative research in leading scientific journals. Bart Baesens has been working as an Assistant Professor at Katholieke Universiteit Leuven (Belgium) since 2003 and as a lecturer at the University of Southampton (United Kingdom) since 2004.

CRM – BasicConcepts deals with current issues. The book provides an introduction to financial risk management, namely credit risk management, defines the basic risk concepts and techniques, and provides an overview of a risk modelling process, including a number of practical examples and demonstrations. The following two books focus more on the technical details of how to develop credit risk system and they discuss model risk control.

The authors of the book managed to capture the key points of risk management issues briefly and the issues are presented in an understandable way. The first book *CRM – Basic*

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[6] Dexia is a European bank. Dexia Group focuses on Retail and Commercial Banking in Europe, Public and Wholesale Banking and Asset Management and Services.

Concepts is, through practical examples, suitable not only for young graduates and researchers, but also for people in practice in fields of mathematics or finance, who specialize in credit risk management issues and Basel II.

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