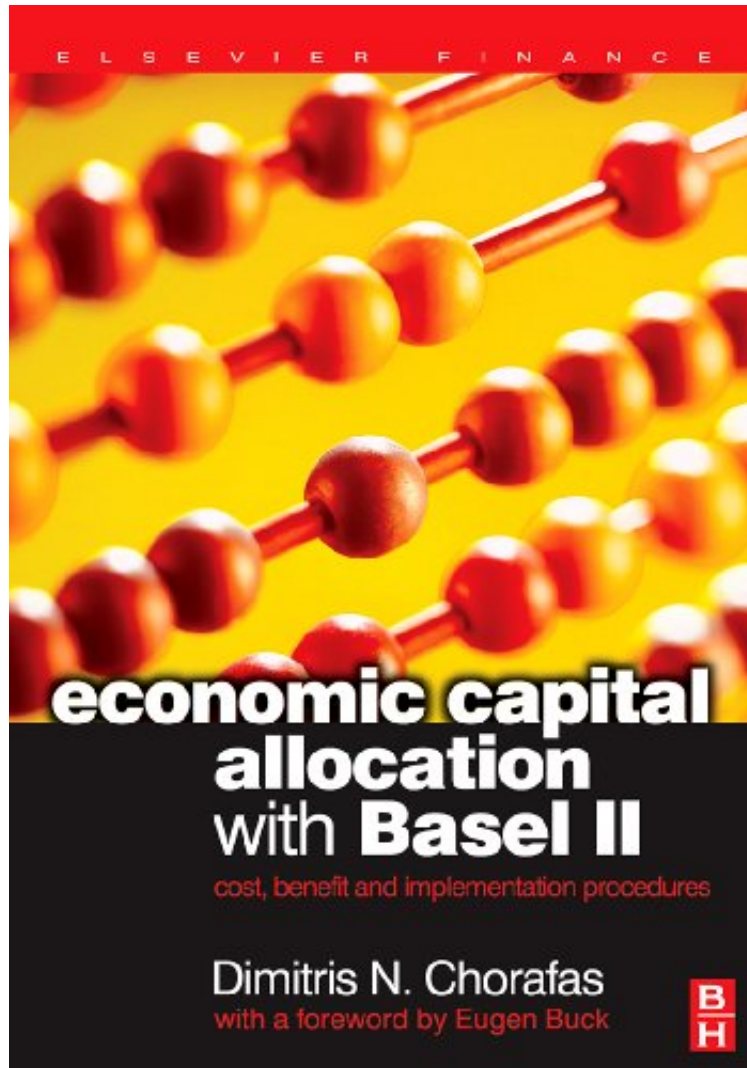


# Economic Capital Allocation with Basel II: Cost, Benefit and Implementation Procedures

*Dimitris N. Chorafas*

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**Dimitris N. Chorafas : Economic Capital Allocation with Basel II: Cost, Benefit and Implementation Procedures** before purchasing it in order to gauge whether or not it would be worth my time, and all praised Economic Capital Allocation with Basel II: Cost, Benefit and Implementation Procedures:

2 of 2 people found the following review helpful. Helpful By Dr. Lee D. Carlson Whatever one's opinion of them, the Basel II Accords are due to be implemented on January 1, 2008, and it remains to be seen if the major banking institutions in the world will meet this deadline, even if they agree with the provisions of the Accords or not. The Accords have provoked a large amount of skepticism, due mainly to the simplicity of the model that they are based on,

and the rather unrealistic choice of percentile range (99.9 for some business units). The focus of this book though is not the model itself but rather the calculation of economic capital, which as the author explains is still to be distinguished from regulatory capital. Given the extreme volatility in the financial markets at the present time, particularly in the banking industry, capital reserves have taken on major urgency in the minds of risk managers. Basel II allows the calculation of expected (EL) and unexpected losses (UL), with the former being straightforward and accepted by most risk analysts, while the latter has been subjected to more scrutiny. The author discusses some of this skepticism early on in the book, voicing the complaint that an explicit algorithm for computing the UL is not available. He then proposes three methods for finding a reliable algorithm, which are discussed at various places in the book. One of these is called 'internal beta', which takes into account the standard deviation of future returns and marginal contributions of each business unit to the overall risk exposure. In this approach the beta is essentially a weighted sum of the covariances between the returns of the business units, with the result that the degree of correlation of the returns of a particular business unit with the bank as a whole will reflect the economic capital assigned to this unit. The beta approach makes use of the constraint that the UL must be less than the economic capital held by the bank. The beta approach thus becomes a problem of constrained optimization, and the author outlines two algorithms for solving this. The author's discussion is enlightening, but obtaining a good estimate for outlier unexpected losses will be very challenging, due to limitations in historical data. To deal with this, he recommends the use of extrapolation or the so-called 'Delphi method.' Unfortunately, he does not elaborate on the success of these approaches or site real test cases. Indeed, because of the connection of the Delphi method with artificial intelligence, a detailed discussion of how to use it would be very valuable, especially to those who believe that expert systems and artificial intelligence should be used much more extensively in risk management. Another interesting topic discussed by the author is that of 'first-order' and 'second-order' risks, since it attempts to define what risk really is in the first place. There are risk management groups that speak of investments or strategies as being "risky" without a quantitative or even qualitative notion of risk being in place. The notion that the author has in mind is a risk classification with respect to priorities, wherein a 'first-order' risk can be that due to interest or currency rates, or credit spreads, and a 'second-order' risk encapsulates the risk arising from practices and concepts from financial engineering, such as yield curves, interest rate risk, and the option "Greeks." This discussion leads the author into another methodology for the calculation of unexpected losses. The Best Capital Adequacy Ratio (BCAR) is also discussed in some detail in the book, and this discussion serves as another example of how to deal with unexpected losses. As part of its definition, BCAR involves the 'adjusted surplus', which for Basel II is the 'total economic equity' (the sum of the regulatory capital and economic capital). This concept is the more useful one in the book since it can be mapped onto the adjusted surplus concept, which originated in the insurance industry, where there is much more historical data for validation purposes. This brings up the question as to whether newer strategies for risk management, such as Basel II, can be mapped at least partially to strategies that have a larger amount of historical data. This would give the analyst a better data sample to work with, thus making somewhat easier the validation of the newer strategy. The current liquidity crisis in the credit markets is definitely a sign of poor risk management strategies, especially that concerning capital reserves. Basel II of course is not yet implemented, and so if strategies were in place that were close to it, one can conclude with fairness that the Basel II approach may not be sufficient. Some other approaches may therefore have to be used, possibly leading to a "Basel III". The author realizes this implicitly, for he argues that a blind allegiance to Basel II may not be of any value to the risk management organization. What is needed is a system that will manage risk through time, wherein a database is created and maintained, and where risk models are calibrated, updated, benchmarked, and stress tested through time. Such a system would be one that can adapt to new information, build models on the fly, validate such models, and then present the information to senior management in a form that is concise and readable. It would replace the cumbersome, time-consuming EXCEL-SAS driven culture existing in some risk management departments today.

0 of 0 people found the following review helpful. Five Stars  
By Toan Nguyenthanks3 of 4 people found the following review helpful. no substance, a very quick read  
By James Dongi borrowed this book from a local library and is very disappointed after reading it. this book is mostly big words and no substance. there is no detailed real life or even theoretical solution to any of the problems he proposed. for example, section 7.4 is captial allocation at Deutsche Bank, sounds very intriguing, but when I actually went to page 160, author only used less them half page to sum up Deutsche's strategy as Captial and Liquidy, no substance or detail whatsoever. I finished this book in less than 3 hours and learned nothing except a few buzz words, and that is about it. The previous commenter gave this book 5 star. take that 5 star with a huge grain of salt.

This book is a complimentary follow-on book to Operational Risk Control with Basel II. While the previous book focuses on operational risk, Economic Capital Allocation provides an overview of credit risk within the context of the Basel II accords. The book provides:

- \* comprehensive coverage of the evolution of the banking industry with Basel II in mind
- \* extensive information on the capital requirements for bank liquidity and solvency
- \* coverage of the new rules as laid down by the supervisory authorities of the Group of Ten industrialized nations
- \* key information on the technical requirements for credit institutions such as: new credit rating scales, modeling of credit risk, control of

operational risks, and, novel ways and means for the management of exposure to Credit Risk\* Basel II accords must be implemented by 2006 and require 2 years preparation for proper implementation\* Author at the forefront in the development of the Basel II Capital Adequacy Accord \* Based on intensive research in the US, UK and continental Europe

...not only provides a good introduction to the regulatory background, but also shows how economic capital and regulatory capital are concepts that should co-exist and gives good explanations to the background of each. One of the Top Ten financial engineering titles published in 2003-2004 - Richard Norgate, Ph.D., Financial Engineering NewsAbout the AuthorSince 1961, Dr Dimitris N. Chorafas has advised financial institutions and industrial corporations in strategic planning, risk management, computers and communications systems, and internal controls. A graduate of the University of California, Los Angeles, the University of Paris, and the Technical University of Athens, Dr Chorafas has been a Fulbright scholar. Financial institutions which have sought his assistance include the Union Bank of Switzerland, Bank Vontobel, CEDEL, the Bank of Scotland, Credit Agricole, Ouml;sterreichische Lauml;nderbank (Bank Austria), First Austrian Bank, Commerzbank, Dresdner Bank, Mid-Med Bank, Demir Bank, Banca Nazionale dell'Agricoltura, Istituto Bancario Italiano, Credito Commerciale and Banca Provinciale Lombarda. Among multinational corporations Dr Chorafas has worked as consultant to top management, are: General Electric-Bull, Univac, Honeywell, Digital Equipment Corp, Olivetti, Nestleacute;, Omega, Italcementi, Italmobiliare, AEG-Telefunken, Olympia, Osram, Antar, Pechiney, the American Management Association and host of other client firms in Europe and the United States. Dr Chorafas has served on the faculty of the Catholic University of America and as visiting professor at Washington State University, George Washington University, University of Vermont, University of Florida, and Georgia Institute of Technology. Also, the University of Alberta, Ecole d'Etudes Industrielles de l'Universiteacute; de Genegrave;ve, and Technical University of Karlsruhe. More than 6,000 banking, industrial and government executives have participated in his seminars in the United States, England, Germany, other European countries, Asia and Latin America.Excerpt. copy; Reprinted by permission. All rights reserved.An overview of Credit Risk within Basel II Banking Accords