



SECOND EDITION

UNDERSTANDING CREDIT DERIVATIVES AND RELATED INSTRUMENTS

ANTULIO N. BOMFIM



Understanding Credit Derivatives and Related Instruments

Second Edition

Antulio N. Bomfim



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Understanding Credit Derivatives and Related Instruments

Dedication

**To Kimberly, Sarah, Emma, and
Eric.**

Author's Disclaimer

The analysis and conclusions set forth herein are my own, and I am solely responsible for its content.

Preface to the Second Edition

Much has changed in the global credit derivatives market since the publication of the first edition of this book. For one, we have lived through the 2008 financial crisis, the most significant period of financial market turmoil since the Great Depression. In addition, the credit derivatives market itself—which was still quite young when the first edition was published—has since evolved in ways that are not necessarily linked to the crisis.

Some of the new topics discussed in this new edition reflect (directly or indirectly) developments precipitated by the 2008 crisis. For instance, in a substantially rewritten Chapter 2, I discuss the evolution of the market in recent years, documenting stark differences in key market characteristics in the pre- and post-crisis periods, such as the much reduced prevalence of synthetic collateralized debt obligations since the crisis and the growing role of central counterparties. The crisis has also brought about important changes in the regulatory framework facing market participants. I highlight some of these changes in a revised chapter on regulatory issues.

But this is not a book about the financial crisis. My goal remains to offer a comprehensive introduction to credit derivatives and related instruments. The book's focus still is to provide intuitive and rigorous summaries of major topics, including a discussion of different valuation tools and their relation to various credit modeling approaches. With that in mind, I have updated the discussion in most chapters to keep it consistent with current market trends. For instance, since the publication of the first edition, standardized coupons and upfront payments have become the norm in the global credit derivatives market. This topic is addressed throughout the book, which now includes a mathematical framework for valuing upfront payments.

Lastly, this second edition includes five brand new chapters. Chapters 15 and 16 address credit default swap (CDS) indexes and CDS written on commercial mortgages (CDS/CMBS) and subprime residential mortgages (CDS/ABS). These structures barely existed when I was writing the first edition of this book. Yet, CDS indexes have since become a key part of the global credit derivatives market. While the same cannot be said about CDS/CMBS and CDS/ABS, they were an important part of the market at the time of the 2008 financial crisis and were the focus of much attention back then.

The remaining three brand new chapters included in this second edition are all in Part VI of this book, where I address issues related to the hedging and trading of CDS positions. To provide additional intuition and make the discussion in that part of the book more concrete, the discussion is enriched with several detailed numerical examples.

Antulio N. Bomfim

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