Structured Products and Related Credit Derivatives

A Comprehensive Guide for Investors

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Structured Products and Related Credit Derivatives

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Foreword

Innovation has been the hallmark of the structured products market since its inception in the mid-1980s. Frank Fabozzi is an acknowledged expert in this space, having witnessed the growth, development, and reach of this market. Along the way, he has assembled some of the most talented analysts in the structured products market to contribute their insight and experience. His efforts over the years have produced the most prolific fixed income reference library in existence today.

Now, in cooperation with Frank Fabozzi, Brian Lancaster and Glenn Schultz and other members of the Structured Products Research team at Wachovia Capital Markets, LLC have produced *Structured Products and Related Credit Derivatives*. This book presents a comprehensive overview of both the assets and the structures used to finance these assets in the capital markets.

At Wachovia, our overall goal in research is to give investors the full 360 and a balanced perspective on the opportunities and risks embedded in each of our investment recommendations. To that end, we strongly encourage our analysts across the capital structure to collaborate with one another and to share information.

This book was written over a time frame that spans the pinnacle of the structured products market through to its most challenging period. Such roller coaster volatility has crystallized the interdependence of the markets and the benefits of Wachovia's holistic approach.

The use of structured products by consumer finance, banking, insurance, and manufacturing companies, as a part of their overall corporate financing strategies, makes this book an invaluable reference not only for fixed income analysts and portfolio managers, but also for their equity counterparts seeking to understand how this market can influence the revenue, capital structure, and financing costs of the companies within their coverage universe.

As the technology for securitizing and financing assets is exported across the globe, it is important to understand the state of the art as it exists today as well as the challenges that this unique market faces going forward. These instruments are highly complex, both from a financial and a legal perspective. Issues such as bankruptcy remoteness and perfection of interest become even more intricate when one considers the different cultures and legal frameworks under which securitization will evolve in the future.

Diane Schumaker–Krieg
Managing Director
Global Head of Research
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About the Editors

Brian P. Lancaster is a Managing Director at Wachovia Securities where he heads a 19-member Structured Products Research team. Before joining Wachovia Securities, Mr. Lancaster was a Managing Director (Principal) in Structured Products at Bear, Stearns & Co. Inc., Vice-President in New Financial Products and Engineering at Chemical Securities Inc., and Senior Capital Markets Economist at both the Federal Reserve Bank of New York and the Bank of England in London. From 1996 to 1999, he served as an Adjunct Professor of Finance in Columbia University's MBA program and periodically lectures at Harvard, Wharton, and New York University business schools. Mr. Lancaster was voted to Institutional Investor's All-America Fixed Income Research Team in 2001, 2000, and 1999, and was voted best CMBS Analyst of the Year in 2003 by *Real Estate Finance & Investment*, an Institutional Investor publication. In 2006, *National Real Estate Investor* magazine named him a "CMBS Pioneer" and one of "Ten to Watch" in real estate. Mr. Lancaster is on the Commercial Real Estate/Multifamily Finance Board of Governors of the Mortgage Bankers Association where he consults periodically with senior government policy makers. He has been a contributing author to numerous books and reports. He holds an MBA from New York University, a Masters in International Affairs from Columbia University (where he was selected as an International Fellow), and a BS from MIT.

Glenn M. Schultz is a Managing Director and the Head of ABS and Non-Agency Mortgage Research a Wachovia Capital Markets, LLC. Mr. Schultz has over 18 years of Capital Markets experience focused on structured finance and fixed income analytics, particularly focused in the ABS and MBS markets. Prior to joining Wachovia, he held positions at the Royal Bank of Canada Financial Group and JPMorgan/Banc One. He and his group have received several professionally recognized awards: including individually ranked in the top 10 Home Equity Loan Analysts 2003 Institutional All-Star Analyst Survey, ASR/IDD 2003 deal of the year for the Bullet Line of Credit structure created for the securitization of Home Equity Line of Creditloans, and Senior Home Equity Loan Analyst on JPMorgan's top ranked II All-Star team 2004, and 2005. Glenn completed his undergraduate degree in Business Administration and his MBA from the University of Louisville and has earned the designation of Chartered Financial Analyst.

Frank J. Fabozzi is Professor in the Practice of Finance and Becton Fellow in the School of Management at Yale University. Prior to joining the Yale faculty, he was a Visiting Professor of Finance in the Sloan School at MIT. Professor Fabozzi is a Fellow of the International Center for Finance at Yale University and on the Advisory Council for the Department of Operations Research and Financial Engineering at Princeton University. He is the editor of the *Journal of Portfolio Management* and an associate editor of the *Journal of Fixed Income*. He earned a doctorate in economics from the City University of New York in 1972. In 2002, Professor Fabozzi was inducted into the Fixed Income Analysts Society's Hall of Fame and is the 2007 recipient of the C. Stewart Sheppard Award given by the CFA Institute. He earned the designation of Chartered Financial Analyst and Certified Public Accountant. He has authored and edited numerous books about finance.

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SECTION One

Background

CHAPTER 1

Introduction

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Since the summer of 2007 and as this book goes to press in late 2007, it has been difficult to ignore the news on television, in the print media, and online without one or more of the following financial instruments mentioned: "subprime ABS CDOs," "structured finance products," and "credit derivatives." Even the popular web site YouTube.com has seen the posting of numerous comedy skit videos and music videos about these financial instruments.

This greater awareness of the new media, comedians, and would-be musicians was obviously due to the 2007 subprime residential mortgage-backed security crisis. These terms have been referred to in some media reports as financial "toxic waste." While real credit issues have surfaced in subprime ABS and some CDOs, it is important to keep the current turmoil roiling the structured product markets in perspective. Securitized subprime mortgage backed securities represent 6% of the approximately $10 trillion structured products markets which consists of a wide variety of assets ranging from commercial real estate loans, to credit card debt to equipment leases, most of which have performed as well as if not better than equivalent rated corporate bonds. Put another way 94% or about $9.4 trillion of structured products have generally been money good, stable credit quality securities with upgrade downgrade ratios equal to or better than the corporate bond market.

Beyond the generally high quality of the investments, structured finance has played a critical role in improving the efficiency, liquidity, and availability of capital in the United States and abroad. At the simplest level through the transformative powers of statistical analysis and credit tranching, structured products efficiently connect pools of capital around the world to various financial markets and assets that heretofore only had access to localized specialty lenders. Borrowers are provided with the best possible borrowing rates and investors are provided with greater and more diverse investment opportunities to maximize their investment performance. Moreover, structured products allow for the distribution of risk to a wider variety of financial institutions both domestically and internationally than could otherwise be achieved through traditional balance sheet lending, a feature not lost on regulatory authorities.

The four obvious risks in the structured product endeavor are that (1) the rating agencies, the main arbiter of asset and bond credit quality get it wrong; (2) the originators of the original assets turn into "toll takers" not caring about credit quality but only fees; (3) the investors don't understand the risks and opportunities embedded in the securities they are acquiring; and (4) risk transfer and dispersion is not actually as clear cut as originally expected.

This book, written over a period spanning the greatest bull market in structured products history to arguably its most challenged period by some of Wall Street's top ranked and most seasoned analysts, offers the reader the unique insights that can only come from such a phenomenal roller coaster ride. With many structured finance spreads at or well beyond their historically widest spreads and defaults falling in some sectors and rising in others, there is more investment risk and opportunity in these markets than ever before. This comprehensive book is designed to help the reader identify the opportunities and mitigate the risks in what is perhaps the most fascinating and complex financial market in the world.

Section One of this book includes the forward, this introduction (Chapter 1) and Chapter 2 which provides an analysis of what is arguably one of the most critical and controversial topics in the entire structured products market: *structured finance operating companies* (SFOCs), which includes *structured investment vehicles* (SIVs) and *structured lending vehicles* (SLVs). SFOCs started in the late 1980s and have grown exponentially since 2002.

This chapter also analyzes vehicles of consumer asset backed securities (ABS), their role in the structured products markets as well as their trademark feature, *dynamic leverage*, which allows them to reduce or increase leverage in response to, or in anticipation of, market movements or col-