

The Reading Room

Reviewed by
**Cindy Eddins
Collier**
MHA, MSA,
CPA/ABV, CVA



2002 Stocks, Bonds, Bills and Inflation Yearbook: Valuation Edition By Ibbotson Associates

Mastering the concept of the relationship between risk and return is the most important and, for many, the most difficult challenge in business valuation. In my opinion, the most important resource in this quest is the annual publication, **Stocks, Bonds, Bills, and Inflation Valuation Edition Yearbook** by Ibbotson Associates (SBBI). This publication provides essential data critical to every valuation, and the ever-evolving nature of this information makes this annual publication a mandatory cornerstone in every business valuation library. Not only do you need to own this book as an essential reference, but you must read it each year, cover to cover, to be knowledgeable about developments in the markets and the economy as well as breakthroughs in research in areas related to the cost of capital.

The SBBI series of publications has been produced by Ibbotson Associates for over 25 years. The original **SBBI "Classic" Yearbook** is based on the original work of Roger Ibbotson and Rex Sinquefeld. The **SBBI Valuation Edition Yearbook** debuted in 1999 authored by Michael Annin and Dominic Falaschetti. Over the years many others have contributed to the evolution of both books. Michael Barad is the Senior Editor of the SBBI Valuation Edition 2002 Yearbook.

The Stocks, Bonds, Bills, and Inflation Valuation Edition 2002 Yearbook

by Ibbotson Associates was released in April 2002, and I am delighted to have the opportunity to share my thoughts about this new edition with you. The editorial team, led by Michael Barad, selected topics for this edition which they feel are relevant for people performing discounted cash flow analysis. Wherever possible, they support their conclusions with real data and provide examples for clarification. And the content continues to evolve based on the needs of the readers and information available regarding the markets. For example, there is extensive discussion in this edition on the size premium. Ibbotson points out that with the incredible performance of the S&P 500 over the recent past, some parties are questioning the existence of the size premium. Ibbotson disagrees and explains this position in the book.

Overview of Business Valuation

Ibbotson Associates has added a new chapter in this edition providing an overview of business valuation as a whole, and a brief discussion of how the cost of capital fits into the business valuation process. The first chapter deals with the income, market, and asset-based approaches to valuing a business. However, the focus of the SBBI continues to be on the development and application of discount rates under the income approach to valuation.

Introduction to the Cost of Capital

The introduction to the cost of capital is excellent and includes an interesting look at historical returns for the major asset classes. Ibbotson points out that there are many methods for the equity cost of capital.

The Buildup Method

Ibbotson discusses the buildup method for estimating the equity cost of capital. Ibbotson also discusses the CAPM method, the discounted cash flow (DCF) method, arbitrage pricing theory (APT) method, and the Fama-French three-factor model method to determining cost of equity capital. The discounted cash flow model discussion includes a discussion of the single-stage growth model (Gordon Growth Model) as well as multi-stage growth models. An approach to estimating growth rates is explained as well.

Industry risk premia estimates through year-end 2001 are included for your consideration by SIC code (two or three digits). The number of companies is included for the industry premia estimates by SIC code. However, it is important that you investigate the underlying data in more detail before using these estimates in your valuation models. In my opinion, this enhancement is in the very early stages, and many questions remain unanswered at this time. Ibbotson has plans to publish the list of companies included in the industry premia estimates in the future, so we should watch for that list.

The Equity Risk Premium

The chapter on Equity Risk Premia incorporates the discussion of historical market returns into a lively and exciting discussion on equity risk premia. Market benchmarks and risk-free rates are explained, as well as arithmetic versus geometric mean returns. Understanding these concepts is fundamental to business valuation. Ibbotson explains difficult concepts in a basic and concise manner.

Beta Estimation Methodologies

The concept of beta is introduced through a simple and easy-to-follow description of regression statistics and beta as well as beta adjustment methodologies. Levered and unlevered betas are discussed. Commercial beta sources are compared.

Firm Size and Return

The **Stocks, Bonds, Bills, and Inflation Valuation Edition 2002 Yearbook** by Ibbotson Associates is the premier source for size premium data. In the extensive discussion of this topic, the authors introduce appropriate calculation techniques and address criticisms head on. In this chapter, the returns across the entire range of firm size are examined.

The construction of the decile portfolios is outlined to provide a basic understanding of underlying data. The data is presented in a variety of formats to facilitate understanding. Various aspects of firm size effect are discussed. Tables and charts emphasize important concepts. Extensive analysis of the 10th decile is presented.

The new edition adds to the robust data covered in earlier editions of the SBBI on the issue of firm size. A new section

addresses the issue of a “delisting bias” in the construction of size premia. The chapter on firm size has an expanded discussion on the delisting bias referred to by Tyler Shumway. New data from the Center for Research in Security Prices (CRSP) seem to deflate the claim of a delisting bias in the data constructed by Ibbotson Associates.

In addition, increased detail of the 10a and 10b size premia data is included in this edition. For example, for Size Deciles 10a and 10b of the NYSE/AMEX/NASDAQ, a table in the book details the largest company’s name and recent company market capitalization, as well as the total number of companies and total market capitalization for all companies in deciles 10a and 10b. For reference purposes, historical information on the number of companies for the NYSE/AMEX/NASDAQ Decile 10 is provided for various points in time from 1926 through 2001. Long-term returns in excess of CAPM estimation for decile portfolios of the NYSE/AMEX/NASDAQ, with the 10th decile split into 10a and 10b for the period 1926–2001, are also provided.

The question of whether size premia exist for a specific industry is

explored. The discussion of the size phenomena across industries by SIC code has been updated and expanded. In my opinion, this enhancement is in the very early stages, and many questions remain unanswered at this time. However, the analysis presented is interesting and provides a basis for discussion of these issues.

International Cost of Capital

This chapter explores the challenges and potential solutions for determining international market cost of capital. A variety of models are presented. Ibbotson concludes that though all models explored have some flaws, for most countries there is at least one model that produces a reasonable cost of equity estimate.

Conclusion

The **Stocks, Bonds, Bills, and Inflation Valuation Edition 2002 Yearbook** by Ibbotson Associates is a required resource in every business valuator’s library. It not only provides data necessary for every valuation but provides an annual update to essential information. In addition, it is clear, concise, and well-referenced. 