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To our many close friends in the business valuation profession

Your leadership and efforts have contributed immensely to developing a body of knowledge and generally accepted business valuation methodology

> We sincerely hope that this work adequately reflects that collective effort

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Preface

The state of the art in small business and professional practice valuation has seen exceptional advancement in the last five years. We have made every attempt to bring readers of this edition to the leading edge of that state of the art.

It is noteworthy that there has been an increased demand for highquality valuation analyses for small businesses and professional practices in recent years. There is no sign of abatement in this demand.

However, at the same time, valuation analyses that may have been acceptable a few years ago would not stand up under challenge today. We have tried to provide a basic reference both for performing and evaluating business valuation analyses that *will* stand up under challenge.

Data Availability Encourages Market Approach

Perhaps the greatest advancement in the valuation profession has been the recent availability of empirical data for valuing small businesses and professional practices. These empirical data, although still limited, are especially useful in the application of market approach valuation methods. The following are some of the new and expanded empirical data sources that have become available since the last edition:

- *EDGAR* (Electronic Data Gathering and Retrieval System). Over 15,000 publicly traded companies with data available *free* through the Internet; many of these companies have market capitalizations under \$5 million.
- *Done Deals*. Over 1,500 transactions between \$1 million and \$100 million are available on disk.
- *Pratt's Stats.* The official database of the International Business Brokers Association, providing more detail than ever before available regarding small businesses and professional practice transactions.
- *Bizcomps* and *IBA Database*. Both sources have been significantly expanded.
- New *trade association* and *industry comparative* data.

With the emergence of these easily accessible and inexpensive databases on small business and professional practice transactions, there is much more emphasis in this edition on the market approach to valuation. For example, this edition includes the following:

- A new chapter on the comparative transaction method.
- A new chapter on the multiple of discretionary earnings (owner's discretionary cash flow) method.
- Two new chapters on using small public company data.
- A greatly expanded chapter on transaction databases, placed earlier in the book in conjunction with the market approach chapters.

References to scores of new comparative data sources are included as appropriate throughout the book.

Many Advances in Business Valuation Education

Another area of professional advancement has been in business valuation education. This includes courses, seminars, books, articles, unpublished (but available) papers, videotapes, and audiotapes. These greatly expanded general sources of education and information are summarized in Chapter 1. We have placed hundreds of other sources within the various subject chapters and at the ends of chapters.

More Emphasis on Legal Context, Including Divorce

One of the most valuable changes from the second edition is the emphasis throughout the book on the effect of the legal context in which the valuation is being performed. For example, valuation rules and conclusions may be very different for gift and estate taxes than for a marital dissolution or for a dissenting stockholder action.

The chapter on defining the valuation assignment has been completely rewritten and expanded to provide a more valuable road map for the analyst, attorney, or client, in order to address all the critical categories of issues at the outset of an engagement. Throughout the book, citations of judicial precedent document what the courts have found both acceptable and unacceptable in various legal contexts.

In particular, this edition has much more emphasis on valuation for marital dissolution purposes, recognizing that marital dissolution property settlements represent a common reason for valuing small businesses and professional practices. The chapter on valuations for divorce is completely rewritten and updated.

In addition, throughout the chapters, discussion has been added about using the material in the marital dissolution context. Finally, marital dissolution court case citations have been added to illustrate the courts' positions on various issues.

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Preface

Other New Material in This Edition

- A new chapter on value drivers and their impact on valuation methods.
- A new chapter on discounts for lack of marketability.
- A new sample case and new sample professional practice reports.
- A broadened chapter on alternative dispute resolution, which includes mediation as well as arbitration, and has been retitled Arbitrating or Mediating Disputed Valuations.
- An updated chapter on small company ESOPs.

Keeping Up

Even with all the professional advancement in the last five years, developments in business valuation practice continue to evolve at a rapid pace. Accordingly, we encourage practitioner involvement in the professional associations discussed in this book.

Finally, preparers and users of business appraisals now have a monthly newsletter available to keep up to date: *Shannon Pratt's Business Valuation Update*. Readers may obtain a complimentary sample copy of this newsletter by calling Business Valuation Resources, 888-BUS-VALU (888-287-8268).

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Acknowledgments

This third edition has benefited from the careful review of all (or parts) of the manuscript by a broad representation of practitioners of the business valuation and business intermediary professions.

Thanks to the unstinting service of the following individuals, we believe this volume truly represents the consensus positions of a broad cross-section of the practitioners from all facets of the business valuation community:

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Several chapters were prepared or updated by members of the professional staff of Willamette Management Associates. Chapter 25, Discount for Lack of Marketability, and Chapter 39, Employee Stock Ownership Plans in Small Companies, were prepared by Jeffrey S. Tarbell, a senior associate in the Willamette Management Associates San Francisco office. The Sample Case and Solution to the Sample Case (Chapters 30 and 31) were prepared by Andrew S. Ward, an associate in the firm's Chicago office. The chapter on Public Company Data (Chapter 17) was drafted by Jan D. Tudor, a former member of the firm's Portland office. Chapter 36, Sample Professional Practice Valuation Report, was prepared by Michelle M. Hartstrom, senior associate, and Charles A. Wilhoite, principal and co-director, of the firm's Portland office. James G. Rabe, a principal of the firm and co-director of the Portland office, prepared Chapter 37, Examples of Professional Practice Valuation Methods. Chapter 38, Buy-Sell Agreements and Estate Planning, was prepared by Curtis R. Kimball, the national director of estate and gift tax services and director of the Atlanta, Georgia, office. The chapter on Marital Dissolutions (Chapter 41) was drafted by Sharon K. Moore, a former member of the firm's Chicago office. Daniel R. Van Vleet, a principal in the Chicago office, prepared the chapter on Litigation (Chapter 46). And, Charles A. Wilhoite, a principal and co-director of the Portland office, prepared the chapter on Damages (Chapter 47).

Daniel P. Callanan, a former senior associate in our Chicago office, checked the accuracy of the mathematical formulas and calculations. Jan D. Tudor, Cynthia K. Stewart-Rinier, and Charlene Blalock prepared the chapter bibliographies. Other members of the Willamette Management Associates staff reviewed or prepared portions of chapters. In particular, we would like to thank Portland office associate Terry G. Whitehead and Portland office research associate Irene Moore.

The authors have reviewed and edited all of the chapters written and updated by others and take final responsibility for their content.

Charlene M. Blalock, a research associate in the Portland office, served as the project manager for this undertaking. This included acting as a liaison and coordinating with the authors, the publisher, and the outside reviewers. She was responsible for obtaining permission to use material reprinted in this book from other sources. Charlene also prepared the index and edited and proofread the manuscript. This book would simply not have been completed without Charlene's dedication and project management.

Mary McAllister and Charlene Blalock were responsible for typing the entire manuscript. This was a monumental task that they performed well under very tight time schedules. Sally Martin provided additional proofreading. Acknowledgments

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We express our gratitude to all of the people singled out above as well as all those unnamed (but not forgotten) people who wrote letters and had discussions with us about many conceptual and technical points since the last edition. As always, final responsibility for all content and judgments rests with the authors.

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About the Authors

Dr. Shannon P. Pratt is a managing director and one of the founders of Willamette Management Associates. Founded in the 1960s, Willamette Management Associates is one of the oldest and largest independent valuation consulting, economic analysis, and financial advisory firms in the country. It has regional offices in Atlanta; McLean, Virginia; Chicago; San Francisco; and Portland, Oregon. Willamette Manage-ment Associates is well known for its extensive research library, which has a constantly updated collection of books, articles, transactional data sources, and court cases involving valuation and economic analysis issues. This book draws heavily on that resource.

In addition to this book, Dr. Pratt is a co-author of Valuing a Business: The Analysis and Appraisal of Closely Held Companies, Third Edition (McGraw-Hill, 1996) and a co-author of Guide to Business Valuations, Seventh Edition (Practitioners Publishing Company, 1997). He is also editor in chief of Shannon Pratt's Business Valuation Update, a monthly newsletter covering current developments in the field of business valuation.

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As an appraiser and economist, he has testified both in domestic and international courts on well over 150 occasions regarding the valuation of intangible assets, businesses, and business interests, and regarding various economic damages issues.

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Mr. Schweihs frequently speaks to professional societies and is a prolific author of journal articles regarding various valuation issues. He is often called upon to testify as an expert witness with regard to contested valuation and economic analysis matters.

Notation System Used in This Book

A source of confusion for those trying to understand financial theory and methods is the fact that financial writers have not adopted a standard system of notation. For this edition, we have studied dozens of financial texts and have developed a system of notation that reflects either the most commonly used conventions or ones that seem intuitively easy to understand. If other financial writers adopt this standardized system of notation, we believe it will go a long way toward removing ambiguity, clarifying communication, and making it easier for readers to absorb financial articles and texts.

Value at a Point in Time

\mathbf{PV}	=	Present value
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- Future value \mathbf{FV} =
- MVIC Market value of invested capital =
 - Т = Terminal value (the expected value at the end of some discrete projection period, used in the discounted economic income method)

Cost of Capital and Rate of Return Variables

- k = Discount rate (generalized)
- k_{e} Discount rate for common equity capital (cost of common = equity capital). Unless otherwise stated, it generally is assumed that this discount rate is applicable to net cash flow available to common equity.
- Discount rate for preferred equity capital
- $egin{array}{ccc} k_p &= \ k_d &= \end{array}$ Discount rate for debt (Note: for complex capital structures, there could be more than one class of capital in any of the above categories, requiring expanded subscripts.)
- Cost of debt prior to tax effect $k_{d(pt)}$ =
 - Discount rate for equity capital when net income rather k_{ni} than net cash flow is the measure of economic income being discounted
 - Capitalization rate С =
 - Capitalization rate for common equity capital (cost of = C_{ρ} common equity capital). Unless otherwise stated, it generally is assumed that this capitalization rate is applicable to net cash flow available to common equity.
 - Capitalization rate for net income = c_{ni}
 - Capitalization rate for preferred equity capital c_p

c_d	=	Capitalization rate for debt (Note: for complex capital struc-
		tures, there could be more than one class of capital in any of
		the above categories, requiring expanded subscripts.)

- t = Tax rate (expressed as a percentage of pretax income)
- R = Rate of return
- R_f = Rate of return on a risk-free security
- E(R) = Expected rate of return
- $E(R_m)$ = Expected rate of return on the "market" (usually used in the context of a market for equity securities, such as the NYSE or S&P 500)
- $E(R_i)$ = Expected rate of return on security *i*
 - *B* = Beta (a coefficient, usually used to modify a rate of return variable)
- B_L = Levered beta
- B_U = Unlevered beta
- RP =Risk premium
- RP_m = Risk premium for the "market" (usually used in the context of a market for equity securities, such as the NYSE or S&P 500)
- RP_s = Risk premium for "small" stocks (average size of lowest quartile of NYSE as measured by market value of common equity) over and above RPm
- RP_u = Risk premium for unsystematic risk attributable to the specific company
- RP_i = Risk premium for the *i*th security
- $K_1 \dots K_n$ = Risk premium associated with risk factor 1 through *n* for the average asset in the market (used in conjunction with Arbitrage Pricing Theory)
- WACC = Weighted average cost of capital

Income Variables

- E = Expected economic income (in a generalized sense—i.e., could be dividends, any of several possible definitions of cash flows, net income, and so on)
- NI = Net income (after entity-level taxes)
- NCF_e = Net cash flow to equity
- NCF_{f} = Net cash flow to the firm (to overall invested capital, or entire capital structure, including all equity and longterm debt)
- *PMT* = Payment (interest and principal payment on debt security)
 - D = Dividends
- GCF = Gross cash flow (usually net income plus noncash charges)

EBIT = Earnings before interest and taxes

EBDIT = Earnings before depreciation, interest, and taxes ("Depreciation" in this context usually includes amortization. Some writers use EBDITA to specifically indicate that amortization is included.) Notation System Used in This Book

Periods or Variables in a Series

- *i* = The *i*th period or the *i*th variable in a series (may be extended to the *j*th variable, the *k*th variable, and so on)
- n = The number of periods or variables in the series, or the last number in the series
- ∞ = Infinity
- *o* = Period_{*o*}, the base period, usually the latest year immediately preceding the valuation date

Weightings

- W = Weight
- W_e = Weight of common equity in capital structure
- W_p = Weight of preferred equity in capital structure
- $\dot{W_d}$ = Weight of debt in capital structure
 - Note: For purposes of computing a weighted average cost of capital (WACC), it is assumed that above weightings are at market value.

Growth

g = Rate of growth

Mathematical Functions

- Σ = Sum of (add up all the variables that follow)
- Π = Product of (multiply together all the variables that follow)
- × = Mean average (the sum of the values of the variables divided by the number of variables)
- G = Geometric mean (the product of the values of the variables taken to the root of the number of variables)

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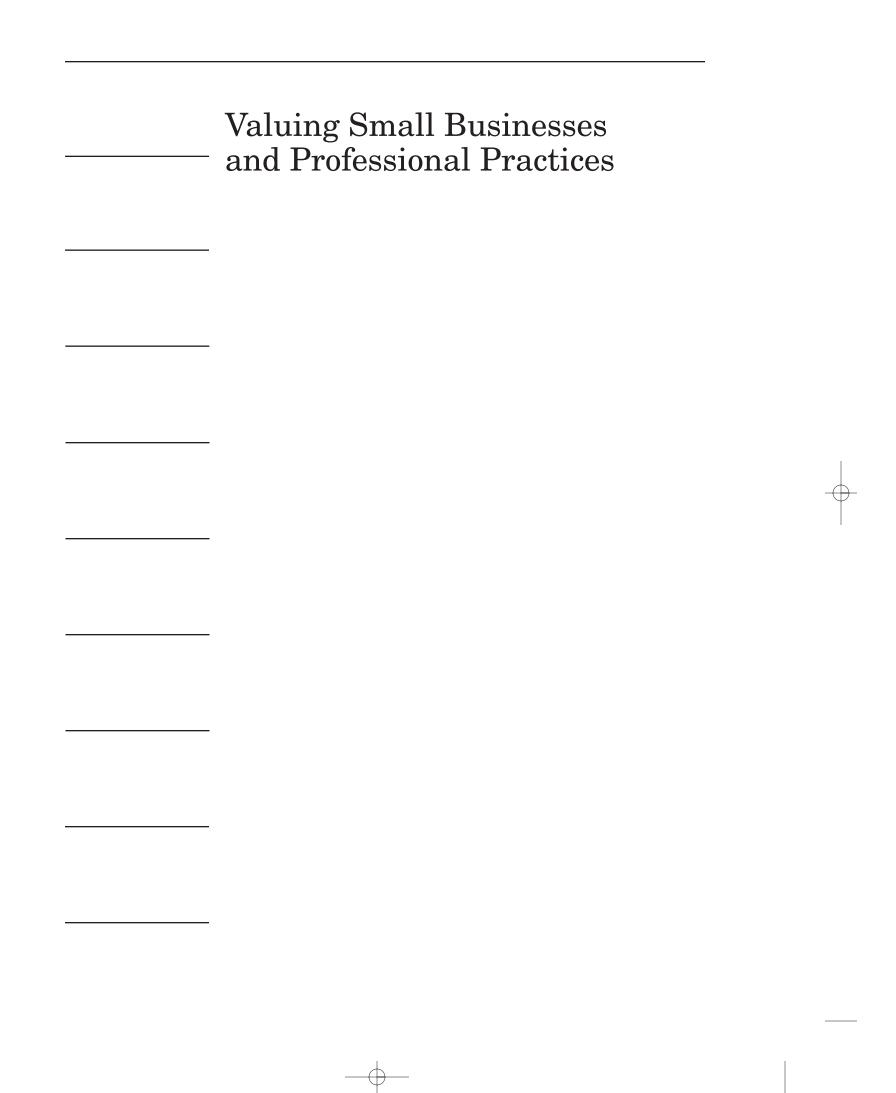
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