

VALUE MAPS

VALUATION TOOLS
THAT UNLOCK
BUSINESS
WEALTH

INCLUDES
A DISCUSSION
ON THE IMPACT
OF IFRS

WARREN D. MILLER

WWW.
LINK AVAILABLE

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Published by John Wiley & Sons, Inc., Hoboken, New Jersey.

Published simultaneously in Canada.

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Library of Congress Cataloging-in-Publication Data:

Miller, Warren D., 1943-

Value maps : valuation tools that unlock business wealth / Warren D. Miller.

p. cm.

Includes index.

ISBN 978-0-470-43756-8 (cloth)

1. Business enterprises--Valuation. 2. Corporations--Valuation. I. Title.

HG4028.V3.M55 2010

658.15'5--dc22

2010004696

Printed in the United States of America

10 9 8 7 6 5 4 3 2 1

To my bride and loving spouse, Dorothy Beckert

Preface

From conception to publication, this book had a gestation period of almost 17 years. Not until August 2005 did it finally begin to take on a life of its own. Even then, another three years of rethinking, reanalyzing, and reframing went by before I decided I was ready to commit to writing this. For me, book-writing includes, in roughly equal parts, aspects of writing valuation reports, giving birth, and mud-wrestling. (I can only imagine the giving-birth experience, of course.) Those who have written a book know that it is a nontrivial undertaking. It is harder and takes longer than the first-time author expects. So it was with me.

The Journey

Like some in this field, I came to valuation by accident. After a checkered career as an internal auditor (Union Pacific Corporation), staff accountant (Borg-Warner Corporation), and chief financial officer (United Video Satellite Group, then United Video Inc.), I did a five-year stint as an academic in strategic management at Oklahoma State University (OSU) and the University of Oklahoma. I completed all of my Ph.D. coursework at OSU. Like marriage and children, doctoral programs change participants' lives, and I was no exception. Among other changes in my perspective, I became a visceral opponent of the existence of undergraduate business education, despite the fact that my undergrad degree is in business. With rare exceptions—the McIntire School of Commerce at the University of Virginia is one—undergraduate business curricula have too little education and too much training.

The problem that creates is that training does not teach one how to think, only how to do. Done right, education teaches thinking skills. So, if the economic world changes and business no longer has a need for as many, say, accountants as it used to need, those who have been doing accounting for 10, 20, or 30 years and have never thought about anything else are up a creek. Think of the displaced auto workers in Michigan and former steelworkers in Pennsylvania.

The doctoral courses I took were game-changers for me. My dim view of economics changed when I was introduced to industrial organization (IO).

I also had an unwarranted and unrealistic perception of the value of accounting's contribution to enterprise, doubtless because I had done a lot of it. Graduate school taught me that strategy and economics mattered a whole lot more.

If I had to boil down my incomplete Ph.D. experience into two take-aways, they are:

1. After tens of thousands of published research papers from hardworking scholars doing difficult and demanding work, we still know very little about how companies do what they do. Evidence of this shows up in the low R^2 s from hypothesis-testing. After all, $1 - R^2$ is the percentage of variance *not* explained by the variables in the test. I have seen highly rated dissertations with R^2 s of .25. That means that three-quarters of the variance was unexplained.
2. For anyone doing complex or interdisciplinary work in the non-academic world, there is no substitute for good theory. Confirmation of this lies in the repeating question that few valuation reports can answer: **Why? Why** is the subject company's inventory turnover one-quarter (or twice) the industry average? **Why** does the client company assert that its employees are its most important asset, yet in its most recent year it issued 134 W-2s for jobs done by its full complement of 35 employees? At a company that's been in business for over 20 years, **why** is every payday an administrative train wreck?

The reports don't explain why because their authors don't know why. One reason they don't is that they rely on traditional valuation tools. Another is that some in our field confuse theory with a half-baked idea. "Well, that's thuh thee-ree," they snort, contempt dripping from every syllable. They seem not to understand that valuing a company for whose securities there are no active markets is a damnably difficult undertaking. Colleagues who have valued both public and private companies tell me that valuing private equity is several magnitudes more difficult. I believe them.

While some knowledge of finance and accounting is essential, I quickly concluded that even an encyclopedic grasp of those topics was inadequate. I also saw that in valuing small and medium-sized enterprises (SMEs), getting my arms around unsystematic risk was going to consume the lion's share of my time. We had some size-premium data from Ibbotson, but that was all. The valuation community had no other data because we had no framework around which to gather it. Without data, there can be no hypothesis-testing. Without such testing, we lack for good theory.

Recognizing the need for a framework that gave me a baseline series of questions to ask about unsystematic risk, I immediately combined the

General Electric four-sided model (see Chapter 8) with Porter's five-forces framework (see Chapter 9). That gave me a way to organize my thinking about external influences on a company's performance. These constituted my first iteration of the "OT" of SWOT (strengths, weaknesses, opportunities, threats) analysis. The challenge was to find (or create) the "SW" piece for the framework.

About 90 minutes into the first day of my first valuation course from the American Society of Appraisers, an instructor put up an overhead transparency (not much PowerPoint in use then)—the Porter framework. I almost fell out of my chair. Five long, stressful, miserable, poverty-stricken years as a Ph.D. student flashed before me. That moment confirmed that I was on the right track: There was a place for strategic management, IO, and organization theory in valuation. I later found that two other disciplines within economics also offered useful tools for valuation professionals: evolutionary economics and Austrian economics.

Valuing private equity offered ample opportunity to use much of the nonvaluation knowledge I already had in order to get at underlying causes of why a company did some things really well or really badly. I believed from the beginning that, if I couldn't explain why, then I was unlikely to get a reasonable valuation estimate, except through dumb luck. Even then, my report would lack the credibility essential for a valuation craftsman.

Later in my search for the "SW" component, I immersed myself in evolutionary economics with Nelson and Winter's classic, *An Evolutionary Theory of Economic Change*. I had had some exposure to it in one of my doctoral courses, but I had not given the book the time and energy it deserved. A few years later I read "The 'Austrian' School of Strategy."¹ That paper led me to Austrian economics, which connected most of the random dots that traditional economics had left floating around in my head.²

I still did not have the "SW" piece, though. I reviewed each of my own valuation reports and those I had done in collaboration with others. I made a list of the various causes that I had found that underpinned the effects (metrics and ratios) of financial performance. I looked for patterns in the causes and saw a few. I stayed after it and, in summer 2005, was able to classify the causes into a five-part framework that, after some what-iffing, became SPARC (strategy, people, architecture, routines, culture). In the meantime, the four-sided GE model of the macroenvironment had become hexagonal, as had the framework for domain analysis. On September 26, 2005, on the back of a cocktail napkin at Mr. K's, a first-rate Chinese

¹ Jacobson, "The 'Austrian' School of Strategy."

² I will have much more to say about the deficiencies of equilibrium-based economics in Chapter 3.

restaurant at 51st and Lexington Avenue in midtown Manhattan, I drew two concentric hexagons with a triangle inside circumscribing five SPARC blocks, labeled them, and handed the napkin to Jim Travis, a colleague from Chicago.

“How’s that look?” I asked.

“Cool. What is it?” he said.

As I explained, he nodded. What I drew that night has changed only slightly since then. It is a robust framework that we use in every engagement. It is no exaggeration to say that we would be lost without it. It would probably take me two or three times as long to do a valuation half as good if I did not have that framework.

About This Book

If you are a valuation professional or consultant with an interest in helping SMEs increase their value, this book is for you. If you are anyone else, welcome. The book might be for you, too, but you can make that call.

The 21 chapters contained herein are divided into four parts. Part One, *Cornerstones*, leads off with a chapter that makes the case for why a new approach to valuation is needed. Chapters 2 through 6 are devoted to discussing tools from the five disciplines that undergird the new approach: strategic management, industrial organization, organization theory, evolutionary economics, and Austrian economics.

In Part Two, *Pouring the Foundation*, we begin the move from theory to practice. The part leads with a chapter on valuation drivers, a much-misunderstood topic in the valuation community. Chapters on assessing risk in the macroenvironment and the domain follow. Chapter 10, “Getting to Why,” covers analyses, composites, and on-site interviews. Chapter 11 is, in my view, the most important chapter in the book because its focus is the company. The part closes with a short chapter about SPARC archetypes. These chapters are the how-tos.

Part Three is entitled *Tales from the Firing Line*. The five chapters here comprise 22 vignettes taken from actual valuation and consulting engagements. These are disguised stories, of course. But they are real, and they happened. Any seasoned valuation professional will swear that Hollywood script-writers could never make up the stuff we see and hear, and these vignettes are further proof of that if any were needed.

Part Four is called *Practice Management*. In my view, this area is an understudied, underexplicated topic. The chapters here deal with the engagement process, working with clients in value-mapping engagements, and an international perspective on value maps. The part and the book end with a chapter that examines the future of value enhancement services.

Software and Web Site

John Wiley & Sons provides a Web site on which purchasers of this book can access the proprietary Excel templates that take you through the value-mapping process. These templates have some set (i.e., unchangeable) features, but they have some flexibility, too. After all, valuation is about “facts and circumstances,” so a degree of customization capability is essential. See the About the Web Site section for more information.

Acknowledgements

The debt I owe to colleagues, mentors, friends, and family is enormous. The support and encouragement of one's colleagues is high praise, as any recipient will attest. Gary M. Karlitz, ASA, and Mandeep Sihota, CFA (both of Citrin Cooperman & Company, LLP), Don M. Drysdale (Drysdale Valuation, LLC), Ed Moran (now retired from Horne, LLP), and Sarah von Helfenstein, AVA (Braver and Company, LLP), have been especially helpful, upbeat, and supportive. The many professionals who have attended classes I've taught, listened to presentations I've made at conferences, and responded to articles I've written are too numerous to mention, but each is appreciated and saluted here.

One does not learn about good theory without good scholars as mentors. I am especially blessed to be a student and friend of Professor Ben Oviatt, now retired from Georgia State University. Ben and I go back 26 years. He and his spouse, Judy, have put Dorothy and me up in their home. Ben was my first strategy professor. He is a wonderful teacher and sterling human being. He has also listened to my ideas and raised substantive questions that forced me to improve on them. Without Ben's patient guidance and friendship, I doubt this book would have ever seen the light of day.

Professor Joe Mahoney of the University of Illinois, Urbana-Champaign, is a model for many young scholars and at least one old one. He is a man whose work I have admired for almost two decades. If there is a book that Joe has not read, I have never discovered it. And I don't mean just books on strategy and economics. I mean *books*. The man is a mobile branch of the Library of Congress and a source of bountiful insights, thoughtful perspectives, understated humor, and infinite patience. He and I have spent many hours on the telephone discussing papers, constructs, and the craft of research. Joe and his bride, Professor Jeanne Connell, are the loveliest and most generous of people. Dorothy and I are fortunate to have them as friends.

Professor Peter Klein, blogger without peer¹ and associate director of the Contracting and Organizations Research Institute at the University of

¹ Don't miss <http://organizationsandmarkets.com>, *the* best blog for strategy and economics anywhere on the Net.

Missouri, Columbia, is a dear friend, stunning intellect, and unbelievable reservoir of erudition and good sense. I “met” Peter by sending him an e-mail when I became a serious student of Austrian economics. He has been unfailingly generous with his time and ideas. Peter has read and commented on my abstracts and other writing. I am also fortunate that he has signed on as an occasional subcontractor for Beckmill Research, LLC. Who else among us can claim a subcontractor with a Nobel laureate as the chair of his dissertation committee? (Oliver Williamson, 2009 co-winner, chaired Peter’s.) What I most admire about Peter is his commitment to Austrian economics, despite the toll taken on his career at the hands of “traditional” microeconomists who couldn’t tell a production function from a real company. Come to think of it, *of course* they can’t: They think they’re synonymous.

Last, but certainly not least, is Professor Tom Box of Pittsburg State University. Tom and I are Marines.² Tom is also a former union steward and construction foreman. He got his undergraduate degree in math when he was almost 40, his MBA in operations research after that, and his Ph.D. in strategic management in his fifties. He is a great colleague, close friend, and sometime consulting and literary collaborator. Tom and I are gruff, serious men devoted to country and family. We met when Oklahoma State offered its first MBA classes in Tulsa in January 1983. We have been fast friends ever since.

And then there are the friends I am so lucky to have. First among equals is Bob Kimmel, semiretired CEO of the Elliot Companies, Roanoke, Virginia. I first met Bob in 1976 when I was a junior auditor at Union Pacific and he was director of accounting operations at its Champlin Petroleum subsidiary. Not quite eight years later he and his lovely bride, Fran, moved in next door to some good friends of mine in Tulsa. Bob and I have been thick as thieves ever since. The four of us have spent many wonderful hours together solving the world’s problems (several times, at least). Bob is also the wisest man I know. I would never play poker with him. It would be far more fun to just write him a check and forgo the humiliation.

Right alongside Bob is Alfred M. King, vice chairman of valuation firm Marshall & Stevens Inc. Al is a friend, colleague, collaborator, coauthor, sounding board, encyclopedia of institutional knowledge, and like-minded troublemaker. He and I see politics, ethics, and valuation almost identically. He is a relentlessly upbeat, high-energy man who, at an age when many guys are playing too much golf and drinking too much whiskey, continues to pursue with passion the work he loves.

² There is no such thing as an ex-Marine.

I have also received encouragement from Jay B. Abrams, Dorothy Alford, Parnell Black, Vicki and James Breech, Byrlan Cass-Shively, Professor Russ Coff, Don and Maggie Cunningham, Tony Eastmond, Jim Edge, David Foster, James A. Hale Jr., Professor Emeritus John Harris, John B. Hennis, Brien Jones, Michael Kalashian, Chris Kean, Professor Michael Leiblein, Tom Lincoln, Lucretia Lyons, Professor Rich Makadok, John Markel, Professor Cathy Maritan, Michael J. Mattson, Maureen McNamee, Professor Tom Moliterno, Bill Rister, Susan M. Saidens, Margaret Schlachter, Dale Shepherd, and Dan Vance. Thanks to all of you. Any omissions are inadvertent and unintended.

My editor at John Wiley & Sons, Sheck Cho, is the best. He is a gentle man with a wonderful sense of humor who understands writers and our demons. Al King recommended Sheck to me early. Without him, a wonderful mix of carrot and stick, the book would be yet unfinished.

My go-to software guy, Russell Hudson of StrategeMetrix, LLC, is a talented and hardworking professional whom I met at the annual Strategic Management Society conference in San Diego in 2007. He congratulated me after a session in which I had asked some especially difficult questions. We talked for a while and agreed to follow up by phone after the conference. During one of those conversations, I suggested to Russ that he consider enrolling in the curriculum leading to the Chartered Financial Analyst designation. With his DBA in strategic management, I thought that having the CFA charter would open a world of valuation and consulting to him. He said that he would look into it.

I got an e-mail from him 19 months later in June 2009. He wrote to say he had sat for Level 2 of the CFA exam two days before. I picked up the phone and called him. I was looking for an Excel expert with some strategy knowledge. I asked him to rank his Excel skills on a scale of 1 to 7. I'll never forget his response: "I'm about a 5.5, but I'm surrounded by 9s." He undersold himself. He is a first-rate colleague who will make a world-class valuation professional. He did a great job asking me tough follow-up questions that produced a terrific and easy-to-understand Excel tool to go with this book.

Last, but certainly not least, is my family. My daughter, Seana Roubinek, and my grandson, Jordan T. Roubinek, have been inspirations to me when they didn't know it. My stepsons, Jim and Paul Beckert, give their mom the respect and affirmation she richly deserves. Paul's wife, Janie, is a continuing source of good humor, hilarious e-mails, great photographs, and insightful commentary on life's events.

A key member of my family is no longer with us: Grandmother Miller. She was a third-generation college graduate, Cal/Berkeley, Class of 1912. She worked until she was 99 and lived to be 106. She was upbeat, positive,

and forward-looking. She is my model for aging with grace. I know that she would be delighted with the publication of her only grandson's first book.

My bride and loving spouse, Dorothy Beckert, to whom this book is dedicated, is the source of all things good in my life. She has taught me everything I know about love, respect, and family. There is not a kinder, sweeter, dearer, more steadfast, more patient, or tougher woman on this earth, and I am the beneficiary of all of that. She knows I love her with all my heart and soul because I tell her at least a dozen times every day.

I have received insightful comments, wonderful advice, and recommended changes from many I have named here. They are far smarter than I, which is one of many ways that I benefit from knowing them. In most cases, I took their advice. In some cases, I did not. In those instances and others, no doubt, I have erred. Those mistakes are mine and mine alone.

About The Web Site

Congratulations! With your purchase of this book, you also gain access to a special Web site: www.wiley.com/go/valuemaps. There you will find sample questions for on-site interviews (Chapter 10) and Excel templates to help you quantify non-size unsystematic risk: macroenvironment (Chapter 8), domain (Chapter 9), and company (Chapter 11). There is also another Excel sheet, which gives you a graphical representation of the archetype to which your client company is closest, based on how you responded to scaled questions related to Chapter 11. Inconsistencies in a client's SPARC profile present opportunities for value enhancement.

In addition to these goodies, we have included graphics of the trilevel unsystematic risk framework and its three components. You are welcome to use these in your reports so long as you agree to attribute them to Beckmill Research, LLC. We include suggested wording for a footnote or end note.

Please revisit the site on occasion. From time to time, we will add materials to support your work in helping client companies enhance value.

The password for the Web site is: value

Don't hesitate to contact us via SPARC@beckmill.com with ideas and suggestions for what we can do better. We also encourage you to syndicate our blog. It is on our Web site, www.beckmill.com. While you're there, please register at www.beckmill.com/register.asp.

List of Acronyms

| | |
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| CAPM | Capital asset pricing model; the modified version that includes elements of unsystematic risk is used here. |
| CEO | Chief executive officer. |
| CFO | Chief financial officer. |
| CPA | Certified public accountant; similar to the CA (chartered accountant) designation used outside the United States. |
| DCF | Discounted cash flow. Unlike net income, DCF measures changes in cash from the perspective of either the company or the shareholders. These are often labeled FCFF (free cash flow to the firm) and FCFE (free cash flow to equity). |
| FTC | Federal Trade Commission. In the United States, a federal agency charged with consumer protection and with encouraging greater competition. |
| FTEs | Full-time-equivalent employees. |
| GM | General manager. |
| GE | General Electric Company. |
| HR | Human relations (a.k.a., personnel). The department or the professionals that oversee that function within a company. |
| IO | Industrial organization. Within economics, a field that is concerned with the structure, conduct, and performance of industries and also with antitrust policy and enforcement. |
| IRS | Internal Revenue Service. In the United States, the federal agency responsible for collecting taxes and administering the Internal Revenue Code (IRC), now over 65,000 pages long. |
| LBO | Leveraged buy-out. Entity-level financing technique that favors debt over equity. |
| NAICS | North American Industry Classification System. Governmental numerical scheme for classifying business activities in the United States, Canada, and Mexico; in the United States, it replaces SIC codes (see entry). |

| | |
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| OT | Organization theory. Within management, an academic discipline concerned with the structure, processes, and culture of an organization and its relationship with its external environment. |
| PDPs | Personal development programs. These are goals, usually annual, to which employees commit to increase their knowledge and skill-sets. Such programs are essential in high-growth companies, or else the scope of the company will quickly outstrip the management ability of those running it. Tell-tale sign: rising revenues and falling profits. |
| R&D | Research and development. Sometimes called R&E (research and experimentation) outside the United States. |
| RBV | Resource-based view of the firm. This theory has two key assumptions: (1) the resource endowment of a company is unique, and (2) resources are nonportable. |
| S-C-P | Structure-conduct-performance paradigm that is widely used by IO scholars. |
| SIC | Standard Industrial Classification. A numerical scheme devised by the United States Bureau of the Census in the 1930s to classify business activities; it is being replaced by NAICS (see entry). |
| SKU | Stock-keeping unit (unique item of inventory). More SKUs mean greater complexity, which requires more investment in infrastructure and increases the likelihood of error and rework. |
| SME | Small and medium-sized enterprises. There is no consensus on what the upper and lower limits of SMEs are, but, in this book, we use SME to describe an organization that is bigger than one-person or “mom-and-pop” business and has annual revenues below \$250 million. |
| SPARC | Strategy, People, Architecture, Routines, Culture. The central analytical framework of this book; it contains the universe of company-level causes of aberrant metrics (those that are well above or well below industry or domain norms). |
| VRIO | A framework devised by Ohio State’s Jay Barney to gain insight into the durability of a capability; VRIO asks four questions: (1) Is the capability valuable? (2) Is it rare? (3) Is it inimitable? (4) Is it organizationally aligned? |

Value Maps

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