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A Systems Mindset for Building and Investing in Businesses for the Long Term

WEALTH CREATION

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John Wiley & Sons, Inc.

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

Published simultaneously in Canada.

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Library of Congress Cataloging-in-Publication Data:

Madden, Bartley J.
Wealth creation : a systems mindset for building and investing in businesses for the long term / Bartley J. Madden.
p. cm.—(Wiley finance series)
Includes bibliographical references and index.
ISBN 978-0-470-48868-3 (cloth)
1. Profit. 2. Corporate profits. 3. Corporations—Valuation. 4. Business enterprises—Valuation. 5. Investments. I. Title.
HG4028.P7M33 2010
658.15'2—dc22

2009035136

Printed in the United States of America

10 9 8 7 6 5 4 3 2 1

In celebration of my wife, Maricela, and children, Gregory, Jeffrey, Miranda, and Lucinda.

Preface

Investors searching for companies whose future profitability will far exceed that implied in current stock prices, business owners and managers seeking to improve their companies' performance, and politicians crafting legislation to advance economic growth—all use a *wealth-creation* conceptual framework, whether they realize it or not.

This book deals with ways of thinking about the complex dynamics of wealth generation and demonstrates the practical benefits to be gained from upgrading one's wealth-creation conceptual framework. There are six core ideas:

1. A systems mindset focuses not on pieces of a system, but on how the pieces work together to achieve the system's purpose. The systems way of thinking helps one to avoid taking actions that bring unintended bad consequences, and instead encourages taking actions that produce favorable results.
2. Economic systems—the rules and relationships that exist to create wealth by delivering value to customers—are devilishly complex, and therefore solving economic problems requires extensive knowledge. Seen in this light, knowledge growth and wealth creation are two sides of the same coin.
3. A prerequisite to making better investment decisions and business judgments is an improved understanding of how wealth is created. The competitive life-cycle framework is an effective way to better understand the relationship between business firms' performance and stock prices.
4. A deeper understanding of business firms makes it plain that customers, employees, and shareholders have mutual, long-term interests. In other words, a free-market system geared to serving customers through competition is a system in which participants ("society") benefit from the wealth that is jointly created.
5. There is a huge opportunity for sustained, higher economic growth through voluntary initiatives by the private sector. One initiative is to

accelerate implementation of lean management, which was pioneered by Toyota. This is a systems approach that continually purges waste and optimizes the use of resources in delivering value to customers.

6. The other initiative is to improve corporate governance. The wealth-creation principles discussed in this book offer a blueprint for boards of directors to improve firms' long-term performance and the public's trust in, and support for, free-market capitalism.

These ideas have taken shape as a natural outgrowth of the two areas that occupied my professional career. First, my research on valuing business firms, which began in 1969 at Callard, Madden & Associates, was instrumental in producing the CFROI (cash-flow-return-on-investment) metric and its related life-cycle valuation model.

The work was further advanced at HOLT Value Associates, which was later acquired by Credit Suisse in 2002. Credit Suisse HOLT continues the research to improve the valuation tools and the related global database for analyzing 20,000 companies in over 60 countries. This system is used by a large number of institutional money management firms worldwide in order to make better investment decisions.

My second main area of interest was basic issues in research methodology and the even deeper issue of how one builds a knowledge base in the first place. For a long time, I have believed that inquiry into the knowing process offers promise for improving how to frame problems, select and analyze data, and formulate conclusions for taking more successful action.

I thought it useful to craft this book so that others might quickly learn about important ideas that have taken me a very long time to develop. These ideas may seem eclectic. A focus on any one chapter in this book might suggest that the book should be classified as human behavior/psychology, business management, economics, or investments. Note that books in these various disciplines invariably promote widely different ways of thinking. In contrast, I explain a knowing process and a systems mindset in a highly practical way that provides a core thinking template with universal application.

Chapter 1 focuses on cause and effect—within the context of individuals intent on achieving their purposes, perceiving the world, encountering problems, attempting to make sense of situations, making mistakes, learning, and improving their knowledge base. Such study of cause and effect leads one from a simplistic, linear view to a concern for the interconnections among multiple variables and to a systems mindset.

Chapter 2 lays out the key reasons why some people conclude that free-market capitalism needs to be supervised by a strong dose of government regulation. This is counterbalanced by a discussion of the enormous benefits provided by a market-based economy.

The ideal free-market system does not favor large corporations, as is often depicted by the media. On the contrary, such a system has a variety of functions, detailed in Chapter 3, that support competition in achieving its main objective—value to consumers.

Chapter 4 deals with the real action in wealth creation, which takes place at the level of business firms. A competitive life-cycle framework connects an individual firm's financial performance to its historical stock prices in an insightful and intuitive way. The long-term histories of 10 sample companies are presented with highlights of key issues from the perspective of this framework. Track records for IBM, Digital Equipment, Apple, and other companies illustrate that financial performance translated into life-cycle variables greatly helps to explain levels and changes in stock prices over the long term.

Chapter 5 provides an overview of the 40-year development of the life-cycle valuation model and related data displays, and contrasts this with mainstream finance research and thought. Chapter 5 is not for you if you are unfamiliar with discounted cash flow valuation issues. If so, it can be skipped because it is not essential for understanding the other chapters.

The life-cycle model uses a systems approach wherein all variables are expressed as inflation-adjusted (real) numbers. The assignment of a cost of capital, or discount rate, is dependent on the procedures used to forecast a firm's long-term, net cash receipt stream. Of paramount importance is the continual improvement of calculations used to construct life-cycle track records, including an estimate of firms' economic returns, which leads to improved estimates of the rate at which firms' financial performance "fades" toward the average level. One measure of progress is closer tracking of "warranted" values versus actual stock prices, over time, for a large universe of global companies.

Chapter 6 is certainly for the general reader, and here is why. The Toyota production system started the "lean" revolution, the objective of which is the elimination of all waste in providing greater value to the end customer.

Many firms claim to be lean, but few have made a full commitment to lean principles at all levels of the firm—from frontline employees to top management and the board of directors. A deep probing of lean management shows not only the difficulty in sustaining a lean organization but also the competitive advantage of being lean. A knowledge-building perspective is used in Chapter 6 to explain lean concepts, including an overview of the remarkable performance of Danaher, a preeminent lean company.

Clearly, boards of directors have been asleep at the wheel in many high-profile bankruptcies—Enron, WorldCom, and Lehman Brothers, to name just three. In my opinion, boards in general lack an insightful wealth-creation framework for orchestrating the fulfillment of their oversight responsibilities. Chapter 7 shows how the life-cycle framework is ideally suited to be the foundation for a proposed Shareholder Value Review that boards would provide to shareholders in firms' annual reports. This has the potential to substantially improve corporate governance, thereby reducing the clamor for government to further extend its regulatory reach and grip on the private sector.

Chapter 8 contains summarizing and concluding thoughts on how a systems mindset can benefit public policymakers, business managers, and investors. Included are some predictions of what corporations could expect from implementation of the Shareholder Value Review.

The overarching lesson in these chapters is that a systems mindset helps produce insightful answers to important questions. Here are just a few of the questions answered in this book:

- Why are institutions and the cultures that create them important to wealth creation?
- In analyzing business firm performance, what are the unique advantages of using the competitive life-cycle view?
- Why has a 40-year commercial research program led to widely accepted valuation practices (including cost of capital estimates) that differ sharply from mainstream finance procedures?
- Lean thinking, epitomized by the Toyota Production System, has demonstrated extraordinary productivity. Why is it so effective, and why has this process proven so difficult to duplicate?
- How might boards, managements, and investors participate in the evolution of a new accounting system that incorporates intangible assets, including human capital?

Readers who quickly skim the following eight chapters might well conclude that an especially diverse group of topics is presented. To clarify, the common thread is a systems mindset for understanding the complexities of market systems and the role of business firms in creating wealth. Such a mindset focuses one's attention on the underlying processes and related incentives that drive the overall system results, and most especially, on the importance of continual firm-wide learning to improve those processes.

Acknowledgments

I had many productive arguments and enjoyable times with my early partner, Chuck Callard. His enthusiasm for research was a magnet that attracted very smart people to work at Callard, Madden & Associates, as well as money manager clients willing to support basic research on valuation. Bob Hendricks played a vital role at Callard, Madden & Associates and later as managing partner of HOLT Value Associates. Bob kept everyone's eyes on delivering research insights and developing practical tools for our institutional money manager clients. Marvin Lipson made significant contributions in the area of computer programming and database management. Rawley Thomas was a key researcher at HOLT and now leads PDDARI (Practitioner Demand Driven Academic Research Initiative), which is a unique research network sponsored by the Financial Management Association. Today, Tim Bixler of Credit Suisse HOLT ably orchestrates the continued development and marketing of the CFROI life-cycle framework.

In 1999, Chris Faber started up a money management subsidiary at HOLT that later became Ironbridge Capital Management, LP. Under Chris's leadership, Ironbridge has developed a unique, disciplined process to implement the CFROI framework. The stellar long-term investment returns of Ironbridge funds demonstrate the practical value to investors of the concepts explained in Chapters 4 and 5. My younger son, Jeff, a fund manager at Ironbridge, and I have had many useful debates about the application of the CFROI framework. Sam Eddins, Director of Research at Ironbridge, made major contributions to the CFROI framework while a partner at HOLT.

My economist friends at George Mason University, Tyler Cowen, Dan Houser, and Alex Tabarrok, provided helpful criticism, as did Jack Cohen, Alexander McCobin, and Elliott Rubenstein. In addition, I made substantial improvements to every chapter due to detailed and insightful comments from Joe Bast, Tom Hillman, and Mike McConnell.

Sara Benson crafted the figures in the book and kept her sense of humor as I made endless revisions. Kevin Reher compiled historical company data. Donn DeMuro programmed the company track record displays and has assisted my research efforts for many years. Marie Murray, formerly a journalism professor, is a superb editor and significantly improved the writing in every chapter, plus in many other articles of mine over the past two decades.

Since the mid-1980s, Ernie Welker, formerly Director of Research and Education at the American Institute for Economic Research, has been my primary research colleague and critic. This book has benefited enormously from his expertise in economics, scientific writing, and the deeper issues of the knowing process discussed in Chapter 1.

Wealth Creation

Contents

CHAPTER 1

A Systems Mindset

Like all systems, the complex system is an interlocking structure of feedback loops . . . . This loop structure surrounds all decisions public or private, conscious or unconscious. The processes of man and nature, of psychology and physics, of medicine and engineering all fall within this structure.

—Jay W. Forrester, *Urban Dynamics*

Each transaction of living involves numerous capacities and aspects of man's nature which operate together. Each occasion of life can occur only through an environment, is imbued with some purpose, requires action of some kind, and the registration of the consequences of action. Every action is based upon some awareness or perception which in turn is determined by the assumptions brought to the occasion. These assumptions are in turn determined by past experience. All of these processes are interdependent. No *one process could function without the others.*

—Hadley Cantril, *The "Why" of Man's Experience*

A *systems mindset* is the connecting thread for the wealth-creation issues covered in this book. This chapter briefly covers the intellectual foundation underlying the systems mindset. We begin with an examination of the knowing process, the foundation for the systems mindset. Normally, we give no thought to how we know what we think we know. That is because in much of everyday life we take for granted the knowledge we use to guide our actions in order to achieve our purposes. A lot of the time we work on autopilot, as when we drive to work or tie our shoes. We don't have to think it through each time. So why invest time in exploring the esoteric topic of how we know what we think we know? Because there can be a big payoff from learning how a systems mindset helps one to develop better solutions to important complex problems (Sterman, 2000).

HOW WE KNOW WHAT WE THINK WE KNOW

To a large extent, life consists of overcoming the problems we encounter in our attempts to achieve our purposes. Along with the easy problems in life are many enormously complex and difficult ones. These would be considerably less difficult if our notions about how the world works were more reliable.

It is comforting to have reliable knowledge to deal with problem situations that have straightforward, linear cause-and-effect relationships. For example, fixing a flashlight that no longer works by replacing the batteries poses little challenge to our knowledge of cause and effect. But, approaching complex problems with an overly simplistic linear mindset often makes matters worse instead of better.

Based on an analysis of the work of people, especially scientists, who have been extremely successful in solving complex problems, I have learned three lessons that are important to a better understanding of knowing:

1. Reality as we know it is just our perception of it—a kind of map of reality, not the true territory of reality.
2. Action is an integral part of cause-and-effect loops, with purpose playing a critical and often-overlooked role.
3. Identifying the strongly held assumptions (beliefs) that influence what we perceive and how we determine our actions in the world is vitally important to opening us up to perceiving new feedback information and to faster knowledge improvement.

Putting these lessons into practice takes conscious effort, because much of our life experience has been dealing with the outside world as independent components of reality for which one-way, or linear, cause-and-effect thinking is adequate.