# Preface

THIS BOOK PUTS A theory forward of how and why economic value works, starting with the first principles of tiny innovation sparks and scaling all the way up to the full scope of the economy. This story of value borrows from many other disciplines, including anthropology, ecology, psychology, math, physics, biology, and sociology. Most of all, it examines how evolution's processes help us understand the economy, and how we can take this new understanding to invest in the economy for growth. Examining value creation through behavioral and systems-thinking models will explain the ebb and flow of capital, energy, resources, knowledge, and value over time. After finishing *The Nature of Value*, I hope you'll have a fresh view—or thoughtful criticism—of how value creation works. This won't make market prices predictable, but it hopefully makes one more effective at investing or allocating capital as a manager. And although I don't provide a list of 50 hot stocks to buy, I do aim to show how to spot patterns and processes found in the rare firms that provide long-term, sustainable value

creation. Together, this theory and the practical applications are a philosophy that I call—no surprise here!—the nature of value approach.

Throughout the book, I favor the term "allocator" over "investor." They are very similar terms; after all, investing is the allocation of resources in the hope of growing value. However, the typical representation of an investor is someone who mostly looks at prices when planning his or her actions; price-only investors tend to underperform value investors. Effective investors, on the other hand, think like businesspeople, allocating capital within the firm to projects with high expected returns. Allocators—individuals making calculated capital allocations to projects or firms—play a vital role in growing the economy for us all by directing resources to the most effective value-creating organizations. We would all be better off if more investors thought like allocators.

So how did I come to start thinking and writing about value? My past includes adventures in software start-ups, founding roles at strategic risk firms, and time as the chief analyst for a European multidisciplinary science research institute focused on bits, atoms, neurons, and genes. In finance, I performed value research and portfolio management for a small New York–based long/short hedge fund, building risk and foreign exchange models for the world's largest banks, and I have also run in the pits on the floor of the Chicago Board of Trade. Most recently, I worked with the world's largest hedge fund, Bridgewater Associates. My lifelong interests have been in understanding sustainable economic development for poverty reduction and fighting corruption to improve governance procedures.

My hope is that after completing *The Nature of Value*, readers may pose fresh and interesting questions about the value all around them. My second hope is that in understanding the value process better, human, material, and energy resources may be allocated more effectively and efficiently to enhance the collectively linked human condition.

## The Organization of the Book

Value is a contextually subjective part of an adaptive economic process. In order to introduce these ideas, I start with first principles and then build up to recognizable models and systems. Many diagrams, metaphors, and real-world examples are used to show patterns and help readers understand what value looks like and how to find it. At each step of the way, I emphasize how these new ideas can inform allocation and investing strategies. The following is a brief overview of the topics covered in the book, to serve as a roadmap of what is to come.

Chapter 1 starts by answering a question that's fundamental to the nature of value theory, that is, why is value important? I show how value differs from price—a close cousin with which it is easily confused—and explain the dangers this confusion presents to both an investor's portfolio and the health of the economic system as a whole. Chapter 2 examines value more closely, showing how a better understanding of value can lead to a better understanding of the economy's behavior. The economy is presented as an evolutionary system, with comparisons made between the economy and the ecology—a theme present throughout the book. Since many readers are already familiar to some degree with how evolution works in the biological realm, this comparison should help shed light on what it means for the economy to "evolve." Chapter 3 presents the theoretical underpinnings of this ecology/economy comparison.

Chapter 4 introduces the fundamental building block of the adaptive economy—the ino, short for an informational unit of innovation. Just as a gene is the unit of information that determines the possible traits an organism can express, an ino is the information that determines the possible capabilities an organization can express. If a company has inos that give it a competitive edge, these inos will start to spread throughout the economy. The chapter examines the various types of innovation that can help

companies succeed, and points out what allocators can look for when assessing sustainability in innovative firms.

Chapter 7 introduces the next level of the economic process—clusters, which are the competitive spaces in which firms fight for survival. Like the niches within ecosystems, firms within clusters compete with each other for resources and dominance. Chapter 8 explores the life cycle of clusters, showing how they're born, how they mature, how they die, and what happens to the firms within them throughout these stages. Chapter 9 looks at how value flows within and through the cluster to a downstream consumer. Some clusters are inherently stable and promising for allocators, whereas others may look promising and lucrative on the surface but are actually unstable and should be avoided.

Chapter 10 looks at moats—the combination of capabilities that can help firms achieve long-term positive returns. Chapter 11 explains how these advantageous moats can be measured, and how they can expand or erode over time. It also looks at the various types of moats and at the competitive advantages—such as a strong brand or a geographic edge—that can help firms stay on top. Since moats can be such a lucrative source of value to investors, chapter 12 describes how to evaluate the management of moated firms and how to allocate capital to promote moat health and longevity.

Chapter 13 provides some final tips for the allocator and makes closing points about the differences between the nature of value approach and other investing strategies, such as index buy and hold strategies.

Chapter 15 puts all the pieces together to show the economy as a whole networked system. It shows how a nature of value understanding of the economy aids in predicting what's about to come—and it explores the things that still make the economic system so unpredictable. Going back full circle to chapter 1, I use the nature of value approach to further explore the relationship between money, value, and price in chapter 15, and show what

this means in the face of large-scale economic shocks, like debt or fiscal policy–driven inflation and deflation.

Chapter 16 offers some bigger picture, closing thoughts.

The book is best read as an open-ended theory of adaptation, innovation, and economic value creation. You don't have to agree or fully grasp all of the book's concepts to receive a fresh way of thinking. There may be as many "a-ha!" moments in the book as "huh?" moments, depending on your interest in the various roles of value across evolution's economic domains.

A website with extra materials is available at www.thenature-ofvalue.com.

## Acknowledgments

This book started as a collection of ideas for a blog post; it became a four-year journey spanning multiple disciplines with each question chased by an even deeper question of "why?" My original thesis about value at the company level (based on my hedge fund research) led me to information theory at the micro level and (surprisingly!) thermodynamics at the macro level, with evolution's selective adaptive processes as the ultimate theme. I would like to express a special thank you to my polymath friend Dr. Ed Reitman for listening to my ideas and introducing me to *Into the Cool: Energy Flow, Thermodynamics, and Life* by Eric D. Schneider and Dorion Sagan, and to *Cosmic Evolution: The Rise of Complexity in Nature* by Eric J. Chaisson. Both books provided a useful way of framing the "why" of adaptive economic complexity as a process of thermodynamic and information flows.

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*The Nature of Value*