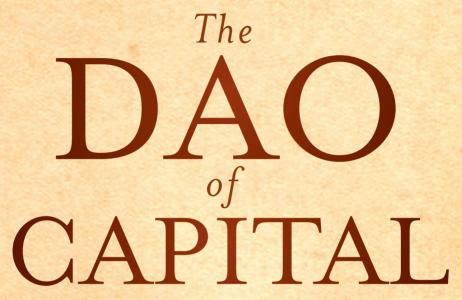
"At last, a real book by a real risk-taking practitioner. You cannot afford not to read this!"

-Nassim Nicholas Taleb, Author of The Black Swan

"Investors of all kinds will find immeasurable value in this convincing and thoroughly researched book where Mark champions the roundabout."

-Paul Tudor Jones II, Founder, Tudor Investment Corporation





Austrian Investing in a Distorted World

FOREWORD BY RON PAUL









## Contents

Foreword	xvii
Introduction	xxiii
Chapter One:	
THE DAOIST SAGE	
Klipp's Paradox	1
The Old Master	3
The Soft and Weak Vanquish the Hard and Strong	6
Into the Pit	9
The Privileges of a Trader	12
Robinson Crusoe in the Bond Pit	15
Fishing in "McElligot's Pool"	18
Enter the Austrians: A von Karajan Moment	18
A State of Rest	21
Guiding into Emptiness	23
Moving On	26
The Wisdom of the Sages	29
Chapter Two:	
THE FOREST IN THE PINECONE	
The Roundabout and the Logic of Growth	33
The Forest and the Tree	36
The Slow Seedling	39
Wildfire and Resource Reallocation	41
The Conifer Effect	43
A Logic of Growth	49







51
56
58
59
60
64
68
70
74
75
73
78
85
88
89
93
97
101
103
105
108
113
116
122
125
134







Contents	xiii
Chapter Six:	
ΓIME PREFERENCE	
Overcoming That Humanness About Us	139
"Radical" Böhm-Bawerk and the Psychology	
of Time Preference	145
The Curious Case of Phineas Gage	149
The Shi and Li Brain	151
The Subjectivity of Time	153
The Trade-Off of an Addict	158
No Zeal for Ziel on Wall Street	161
Adapting to the Intertemporal	164
Chapter Seven:	
"THE MARKET IS A PROCESS"	167
The Man Who Predicted the Great Depression	169
Fleeing the Nazis	173
Human Action	175
Unternehmer in the Land of the Nibelungen	179
Genuine Change Is Afoot in Nibelungenland—	
A Market-Induced Drop in Interest Rates	187
Distortion Comes to Nibelungenland—The	
Central Bank Lowers Rates	190
Time Inconsistency and the Term Structure	194
The Day of Reckoning Comes to Nibelungenland	198
The Austrian View	199
The Market Process Prevails	201
Chapter Eight:	
HOMEOSTASIS	
Seeking Balance in the Midst of Distortion	203
The Teleology of the Market	205
The Yellowstone Effect	207
Lessons from the Distorted Forest	209







xiv CONTENTS

Market Cybernetics	213
How Things "Go Right"	216
Spontaneous Order	217
Distortion	219
The Sand Pile Effect	220
Distortion's Message: "Do Nothing"	222
The Shi of Capital	223
Chapter Nine:	
AUSTRIAN INVESTING I: THE EAGLE AND THE SWAN	
Exploiting Distortion with Misesian Tools	227
Exploiting Distortion with Misesian 100is	221
Homeostasis en force	229
Witness to the Distortion	231
An Initial Misesian Investment Strategy	236
The Eagle and the Swan	240
Case Study: Prototypical Tail Hedging	244
The Ziel and the Zweck: Central Bank Hedging	248
The Roundabout Investor	251
Chapter Ten:	
AUSTRIAN INVESTING II: SIEGFRIED	
Exploiting the Böhm-Bawerkian Roundabout	253
Siegfried, the Dragon Slayer	255
Case Study: Buying the Siegfrieds	263
Value Investing: Austrian Investing's Estranged Heir	269
A Zweck Finally Attained	275







Contents x v

Epilogue:	
THE SISU OF THE BOREAL FOREST	277
The World Learns Sisu from the Victorious Finns	278
Sisu—Of Character and Character-Building	284
Notes	293
Acknowledgments	309
About the Author	311
Index	313

















The Sage and the Apprentice—at the Chicago Board of Trade with Everett Klipp (c. 1994)







# Chapter One

## The Daoist Sage Klipp's Paradox

"You've got to love to lose money, hate to make money, love to lose money, hate to make money. . . . But we are human beings, we love to make money, hate to lose money. So we must overcome that humanness about us."

This is "Klipp's Paradox"—repeated countless times by a sage old Chicago grain trader named Everett Klipp, and through which I first happened upon an archetypal investment approach, one that I would quickly make my own. This is the *roundabout* approach (what we will later call *shi* and *Umweg*, and ultimately *Austrian Investing*), indeed central to the very message of this book: Rather than pursue the direct route of immediate gain, we will seek the difficult and *roundabout* route of immediate loss, an intermediate step which begets an advantage for greater potential gain.

This is the age-old strategy of the military general and of the entrepreneur—of the destroyer and of the very creator of civilizations. It is, in fact, the logic of organic efficacious growth in our world. But when it is hastened or forced, it is ruined.

Because of its difficulty it will remain the circuitous road least traveled, so contrary to our wiring, to our perception of time (and virtually impossible on Wall Street). And this is why it is ultimately so







effective. Yet, it is well within the capability of investors who are willing to change their thinking, to overcome that humanness about them, and follow *The Dao of Capital*.

How do we resolve this paradox? How is it that the detour could be somehow more effective than the direct route, that going right could be somehow the most effective way to go left? Is this merely meant to confuse; empty words meant to sound wise? Or does it conceal some universal truth?

The answers demand a deep reconsideration of time and how we perceive it. We must change dimensions, from the *immediate* to the *intermediate*, from the *atemporal* to the *intertemporal*. It requires a resolute, forward-looking orientation away from what is happening now, what can be seen, to what is to come, what cannot yet be seen. I will call this new perspective our *depth of field* (using the optics term in the temporal rather than the spatial), our ability to sharply perceive a long span of forward moments.

This is not about a shift in thinking from the short term to the long term, as some might suppose. Long term is something of a cliché, and often even internally inconsistent: Acting for the long term generally entails an immediate commitment, based on an immediate view of the available opportunity set, and waiting an extended period of time for the result—often without due consideration to or differentiation between intertemporal opportunities that may emerge during that extended period of time. (Moreover, saying that one is acting long term is very often a rationalization used to justify something that is currently not working out as planned.) Long term is telescopic, short term is myopic; depth of field retains focus between the two. So let's not think long term or short term. As Klipp's Paradox requires, let's think of time entirely differently, as *intertemporal*, comprised of a series of coordinated "now" moments, each providing for the next, one after the other, like a great piece of music, or beads on a string.

We can further peel away Klipp's Paradox to reveal a deeper paradox, at the very core of much of humanity's most seminal thought. Although Klipp did not know it, his paradox reached back in time more than two and a half millennia to a far distant age and culture, as the essential theme of the *Laozi* (known later as the *Daodejing*, but I will refer to it by its original title, after its purported author), an







ancient political and military treatise, and the original text and summa of the Chinese philosophy of Daoism.

To the *Laozi*, the best path to anything lay through its opposite: One gains by losing and loses by gaining; victory comes not from waging the one decisive battle, but from the roundabout approach of waiting and preparing now in order to gain a greater advantage later. The *Laozi* professes a fundamental and universal process of succession and alternation between poles, between imbalance and balance; within every condition lies its opposite. "This is what is called the subtle within what is evident. The soft and weak vanquish the hard and strong."

To both Klipp and the *Laozi*, time is not exogenous, but is an endogenous, primary factor of things—and patience the most precious treasure. Indeed, Klipp was the Daoist sage, with a simple archetypal message that encapsulated how he survived and thrived for more than five decades in the perilous futures markets of the Chicago Board of Trade.

#### THE OLD MASTER

Daoism emerged in ancient China during a time of heavy conflict and upheaval, nearly two centuries of warfare, from 403 to 221 BCE, known as the Warring States Period, when the central Chinese plains became killing fields awash in blood and tears. This was also a time of advancement in military techniques, strategy, and technology, such as efficient troop formations and the introduction of the cavalry and the standardissue crossbow. With these new tools, armies breached walled cities and stormed over borders. War and death became a way of life; entire cities were often wiped out even after surrender, and mothers who gave birth to sons never expected them to reach adulthood.

The Warring States Period was also a formative phase in ancient Chinese civilization, when philosophical diversity flourished, what the Daoist scholar Zhuangzi termed "the doctrines of the hundred schools"; from this fertile age sprung illustrious Daoist texts such as the *Laozi* and the *Sunzi*, the former the most recognized from ancient China and one of the best known throughout the world today. Its attributed author, translated as "Master Lao" or "The Old Master," may or may not have







even existed, and may have been one person or even a succession of contributors over time.

According to tradition, Laozi was the keeper of archival records for the ruling dynasty in the sixth century BCE, although some scholars and sinologists maintain that the Old Master emanated from the fourth century BCE. We know from legend that he was considered to have been a senior contemporary of Kongzi (Confucius), who lived from 551 to 479 BCE, and who was said to have consulted Laozi and (despite being ridiculed by Laozi as arrogant) praised him as "a dragon riding on the winds and clouds." Furthermore, written forms of the *Laozi*, which scribes put down on bamboo scrolls (mostly for military strategists who advised feuding warlords), are likely to have been derivatives of an earlier oral tradition (as most of it is rhymed). Whether truth or legend, flesh and bones or quintessential myth, one person or many over time, the Old Master relinquished an enduring, timeless, and universal wisdom.

To most people, it seems, the *Laozi* is an overwhelmingly religious and even mystical text, and this interpretive bias has perhaps done it a disservice; in fact, the term "Laoism" has been used historically to distinguish the philosophical *Laozi* from the later religious Daoism. Recently, new and important translations have emerged, following the unearthing of archeological finds at *Mawangdui* in 1973 and *Guodian* in 1993 (which amounted to strips of silk and fragments of bamboo scrolls), providing evidence of its origins as a philosophical text<sup>5</sup>—not mystical, but imminently practical. And this practicality relates particularly to strategies of conflict (specifically political and military, the themes of its day), a way of gaining advantage without coercion or the always decisive head-on clash of opposing forces. *The Dao of Capital* stays true to these roots.

The *Laozi*, composed of only 5,000 Chinese characters and 81 chapters as short as verses, outlines the *Dao*—the way, path, method or "mode of doing a thing," or process toward harmony with the nature of things, with awareness of every step along the way. Sinologists Roger Ames and David Hall describe the *Dao* as "way-making," "processional" (what they call the "gerundive"), an intertemporal "focal awareness and field awareness"—a depth of field—by which we exploit the potential that lies within configurations, circumstances, and systems.







The central concept permeating the Laozi is referred therein as wuwei, which translates literally as "not doing," but means so much more; rather than passivity, a common misperception, wuwei means noncoercive action—and here we see the overwhelming laissez-faire, libertarian, even anarchistic origins in the Laozi, thought by some to be the very first in world history8 (as in "One should govern a country as one would fry a small fish; leave them alone and do not meddle with their affairs"9—a cardinal Laozi political credo most notably invoked in a State of the Union address by President Ronald Reagan). The Laozi also has been deemed a distinctive form of teleology, one that emphasizes the individual's self-development free from the intervention of any external force. This leads to the paradox of what has come to be known as wei wuwei (literally "doing/not doing," or better yet "doing by not doing," or "do without ado" 10). "One loses and again loses / To the point that one does everything noncoercively (wuwei). / One does things noncoercively / And yet nothing goes undone."11

In wuwei is the importance of waiting on an objective process, of suffering through loss for intertemporal opportunities. From the Laozi, "Who can wait quietly while the mud settles? Who can remain still until the moment of action?"12 It appears as a lesson in humility and tolerance, but, as we wait, we willingly sacrifice the first step for a greater later step. In its highest form, the whole point of waiting is to gain an advantage. Therefore, the apparent humility implied in the process is really a false humility that cloaks the art of manipulation; as French sinologist François Jullien noted, "the sage merges with the manipulator," who, in Daoist terms, "humbles himself to be in a better position to rise; if he withdraws, he does so to be all the more certainly pulled forward; if he ostensibly drains away his 'self,' he does so to impose that 'self' all the more imperiously in the future." This is the efficacy of circumvention camouflaged as suppleness. And in this temporal configuration is, in the words of Ames and Hall, the Laozi's "correlative relationship among antinomies":14 With false humility we deliberately become soft and weak now in order to be hard and strong later—the very reason that, in the Laozi, "Those who are good at vanquishing their enemies do not join issue."15

In this sense, the *Laozi* can simply be seen as a manual on gaining advantage through indirection, or turning the force of an opponent against him, through "excess leading to its opposite." <sup>16</sup>







## THE SOFT AND WEAK VANQUISH THE HARD AND STRONG

Perhaps the most tangible representation of wuwei can be seen in the interplay of softness and hardness in the Chinese martial art taijiquan—not surprising as it is a direct derivative of the Laozi. According to legend, taijiquan was created by a thirteenth-century Daoist priest, Zhangsanfeng. Cloistered on Wudang Mountain, he observed a clash between a magpie and a serpent, and suddenly fully grasped the Daoist truth of softness overcoming hardness. The serpent moved with—indeed, complemented—the magpie, and thus avoided its repeated decisive attacks, allowing the snake to wait for and finally exploit an opening, an imbalance, with a lethal bite to the bird. In this sequential patience, retreating in order to eventually strike, was the Laozi's profound and unconventional military art:

There is a saying among soldiers: I dare not make the first move but would rather play the guest; I dare not advance an inch but would rather withdraw a foot.

This is called marching without appearing to move, Rolling up your sleeves without showing your arm, Capturing the enemy without attacking, Being armed without weapons.<sup>18</sup>

Like Daoism itself, *taijiquan* has drifted into the more mystical and new age, but its roots remain in its martial application; this is clear today in the powerful blows of the original *Chen style taijiquan* form, as still practiced in Chen Village (located in Henan province in central China). According to Chen Xin (among the lineage of the eponymous Chen clan) in his seminal *Canon of Chen Family Taijiquan*, a deceptive rotational and circular force—known as "silk reeling"—is "the main objective of Taijiquan moves, which work on the centrifugal principles of a 'roundabout'." The rotation is between retreating and advancing, between soft and hard. (When performed by a master, such as my teachers Qichen Guo and Jwing-Ming Yang, of whose *qinna* maneuvers I have oft found myself on the wrong end, it is most unsettling, almost deplorable in its artful deceitfulness.)







Taijiquan is a physical manifestation of the importance of waiting and exploiting another's urgency through softness in a clash. This is most apparent in the two-person taijiquan competitive exercise known as tuishou, or "push hands," in which two opponents engage in what looks to the casual observer like a choreographed series of synchronized movements. In actuality tuishou is a cunning contest with highly constrained rules, in which each tries to throw the other to the ground (or outside a boundary) during a sequence of subtle alternating feints and attacks. The real force is not in the pushing, but in the yielding. (In tuishou is an ideal roundabout and investing metaphor, one that I will return to again and again.)

The "Song of Push Hands," in its oral transfer of the art over centuries in ChenVillage, instructs the competitor to "guide [the opponent's] power into emptiness, then immediately attack." To guide or lure the opponent into emptiness and thus destroy his balance is the very



Tuishou: Zouhua and Niansui







indirect objective—to gain the position of advantage—to be followed by the direct objective of attack. This is the essential *tuishou* sequence of yielding, neutralizing, and sticking. Yielding and neutralizing—*zou* or *zouhua*, "leading by walking away"—is the sneaky retreating rout, followed by converting and redirecting a force to advantage; that advantage is exploited by sticking and following—*nian* or *niansui*—and thus eventually advancing back in a decisive counterattack. (Taken together, as we will see in Chapter 3, this sequence describes *shi*, the strategy of *wuwei*.)

The competition is a subtle interplay of delusive complementary—not opposing—forces between opponents, between hard and soft, each seeking the shrewd strategy of patiently attacking the balance rather than the force, of going right in order to ultimately go decisively left.

This is also the insidious strategy of guerilla warfare. While used effectively, for instance, by the scrappy American colonists against the British in the eighteenth century, it was later used deftly against the mighty United States by the far weaker and smaller Vietcong in the twentieth century, the very same alternating intertemporal softness and hardness: When the U.S. troops surged, the Vietcong retreated in a rout into the mountains (*zouhua*), drawing the U.S. troops out until overextended; then the Vietcong counterattacked, following the U.S. troops (*nian*) in a destructive counterrout. The great frustration—the unfairness—is that the harder you push, the harder you fall. Chairman Mao knew these words from the *Laozi*: "If a small country submits to a great country / It can conquer the great country. Therefore those who would conquer must yield / And those who conquer do so because they yield." We will encounter this again with the guerilla warriors of the north in the Epilogue.)

In the wuwei of taijiquan, the advantage comes not from applying force but from circular yielding, from directing the course of events rather than forcing them; from the Laozi, "Hence an unyielding army is destroyed. An unyielding tree breaks." The patience of the intermediate steps of loss and advantage defeats the impatience of the immediate gain; the direct force is defeated by the counterforce. Thus there are always two games being played in time, one now and one later, against two different opponents. As the great tuishou practitioner Zheng Manqing observed, one must first "learn to invest in loss" by leading "an opponent's force away so that it is useless," and which will "polarize into







its opposite and be transformed into the greatest profit."<sup>23</sup> In *taijiquan* is the essence of *The Dao of Capital*.

So much of waiting and ignoring present circumstances, of willingness to be in an uncomfortable place, is *understanding* the sequential instead of only *seeing* the immediate. There is a definite brand of epistemology at the root of the *Laozi*. To the *Laozi*, much of the exterior world is but exterior diversion, much perception is a distraction from a hidden reality—though one which requires diligent attention. It states this most succinctly in "Venture not beyond your doors to know the world / Peer not outside your window to know the way-making. . . . The farther one goes / The less one knows."<sup>24</sup>

Paul Carus, in his definitive 1913 *The Canon of Reason and Virtue: Being Lao-tze's Tao Teh King*, went so far as to relate this epistemology of the *Laozi* to eighteenth-century German philosopher Immanuel Kant: The *Laozi* "endorses Kant's doctrine of the *a priori*, which means that certain truths can be stated *a priori*, viz., even before we make an actual experience. It is not the globe trotter who knows mankind, but the thinker. In order to know the sun's chemical composition we need not go to the sun; we can analyze the sun's light by spectrum analysis. We need not stretch a tape line to the moon to measure its distance from the earth, we can calculate it by the methods of an *a priori* science (trigonometry)."<sup>25</sup>

Indeed, there is an almost antiempirical vein to the *Laozi*, a stand against the *positivist* view of knowledge as exclusively flowing from sense perceptions. As Jacob Needleman interprets the *Laozi*, "We see only things, entities, events; we do not directly experience the forces and laws that govern nature." Similarly, Ellen Chen says the *Laozi* "is not pro-science in spirit," "repudiating the knowledge of the many as not conducive to the knowledge of the one" (thus invalidating *induction*). Truth is learned from understanding basic natural and logical constructions, a tree that bends to the force of a wind, pent-up water that eventually destroys all in its path, the interplay between snake and bird. There is much deception in appearance, the tyranny of the senses, of empirical data—wisdom that gains particular context and meaning in investing.

#### INTO THE PIT

My exposure to investing came quite by accident. As a 16-year-old (whose only previous experience with markets was through a share in







the Rochester Red Wings minor league baseball team, passed down proudly for three generations) I tagged along with my father when he paid a visit to his good friend (and corn futures trader, whatever that was) Everett Klipp at the Chicago Board of Trade. I stood in the visitors' gallery overlooking the grain trading pits, gaining a bird'seye view over a kaleidoscope of bright trading jackets, flailing arms, and lurching bodies. I was expecting some kind of swanky casino (perhaps out of a James Bond film), but this was different than that. I was mesmerized. It reminded me of watching a flock of birds, a cloud of countless individual parts appearing as a single fuzzy organism, seemingly resting, hovering in midair, until something unseen starts to ripple through it like a pulse of energy, causing a sudden jolting turn in a burst of speed. The flock swoops and dives, rests, and then rises again, with a mechanical yet organic coordination and precision, while the outside observer can only marvel at its driver. In the pit was the same mystery, with pauses interrupted by sudden cascades of noise and energy driven by something imperceptible. It was a financial Sturm und Drang, but within it was an unmistakable, intricate communication and synchronization. In an instant, I scrapped my hard-won Juilliard plans (needless to say, my mother was horrified) and wanted nothing more than to be a pit trader.

After that fateful trip, I became obsessed with the grain futures markets. Price charts soon lined my bedroom walls and I constructed a potted corn and soybean plant laboratory (with seedlings lifted from local farms in the dark of night) for monitoring rainfall and crop progress. From then on, whenever I would see Klipp I always peppered him with questions (often with handy graphs and USDA reports in tow) on price trends, world grain supplies, Soviet demand, Midwest weather patterns—basically on where the markets were headed. His response was always a variation on: "The market is a completely subjective thing, it can do anything. And it is always right, yet always wrong!" His abject disdain for data and information left me bemused, even skeptical of this stubborn old Chicago grain man with the gravelly voice, ever speaking in fortune-cookie prose. How could he have done so well as a speculator without knowing—or even caring—where the market was heading? How could it be that "guys who know where the market is heading are no longer at the Board of Trade. They are either retired or broke. And I can't think of any that are retired." Classic Klipp.







If trading wasn't about predicting price movements, then what was it all about? After all, profiting was buying (or selling) at one price and then eventually selling (or buying) it back at a higher (or lower) price. How could this be done without any ability to forecast? The answer, which took this teenager some time to understand, was that the edge to pit trading was in the order flow—the succession of *mini-routs*, as I always called them—and in the discipline; it was in a patient response to someone else's impatience, someone else's urgency. The edge was a process—an intertemporal process—an intermediate step to gain an advantage, rather than any direct analytical acumen or information. And its monetization—its roundabout production—required time.

The bond pit was where the real action was (and where the average trader's age was perhaps twenty to thirty years below that in the corn pit). When it came time to ask Klipp what to study in college to best prepare me for a career in the bond pit, he advised, "Anything that won't make you think you know too much" (alas, my economics major would have to remain a dirty secret). During summers and over holiday breaks from college (where I can recall always carrying around a copy of the book *The Treasury Bond Basis*, still stubbornly trying to ready myself for trading) I worked as a lowly clerk for a few of Klipp's traders. Finally, after graduating, with backing from Gramma Spitznagel (my first and best investor) I leased a membership at the Chicago Board of Trade and took my place in the bond pit where, at age 22, I became its youngest trader.

The deliverable instrument of the bond futures contract is the 30-year U.S. Treasury bond (or a nearby "cheapest to deliver"), the benchmark interest rate (along with the 10-year) on which long-term debt is based. In the early-1990s, the bond futures pit was the center of the financial universe, the most actively traded contract and the locus of open outcry in all the world. The pit was where anyone with long-term dollar-denominated interest rate risk in the future converged to hedge their rates, whether savers worried about forward rates falling or borrowers concerned about forward rates rising.

Trading pits are configured like concentric rings (octagons, actually) that descend like a staircase, resembling an inverted tiered wedding cake. The very top, outer step of the bond pit was occupied by the biggest and baddest traders (as this was where the biggest brokers with the biggest order flow stood, as well as where the best sight lines were into







the pit—an incalculable advantage). In my first month, I was decidedly not there. In fact, I was at the other extreme, at the very bottom of the pit where only the back month contracts sporadically traded.

For the first month or so, my day started and ended with Klipp standing next to me, feeding me trades and testing to see how I managed them. Klipp made it perfectly clear: "You're not here to make money, you're here to learn how to trade. If you could walk into the pit to make money, you wouldn't even be in here. You'd be in a long line all the way down LaSalle Street, still waiting to get in." This was an imminently roundabout start down a roundabout path.

#### THE PRIVILEGES OF A TRADER

Klipp's methodology was exceedingly simple—almost dubiously so—conveyed as a parent would to a child, not as principles, but as privileges: "As a pit trader, you have two privileges and two privileges only: One, you can demand the edge—buy at the bid price, sell at offer price; two, you can give up that edge when you've made a mistake."

The "edge" of Klipp's allotted privileges is that of the market makers, known as "locals" at the Chicago Board of Trade. (The bond pit was occupied by both locals, virtually all of whom, like me, traded independently for their own accounts, and brokers, whose job was to execute orders on their clients' behalf.) What locals do is provide *immediacy* to those who demand it, meaning they offer prices (a bid price and an ask price) at which they are willing to transact immediately, and in so doing they provide immediate liquidity. In exchange, the locals require a price concession, reflected in their bid and ask prices, a profit they expect to monetize as demands for immediacy flow in from both sides, from buyers as well as sellers. Locals stand in the pit all day waiting for that flow, specifically to trade against an impatient counterparty. It's not up to the locals to determine when they trade; rather, they wait and, if necessary, wait some more.

The price concessions, the "rents" extracted from urgent counterparties (who pay for not having to wait), are the local's ultimate edge. But, upon receiving such a price concession, the local's game is not over; he has the advantage, but he must act yet again, either by stepping aside (taking his loss) or following the market back. He accumulates







inventory (a position) by transacting against urgent order flow, with the intention of closing out of that inventory profitably once the urgency subsides; thus, advancing seems to be receding, and the local advances by retreating. But, naturally, between these two steps is the potential for great loss—the cost of waiting and holding inventory. So the sooner he gets out the better, but in so doing his aim is to transact better than his urgent counterparty, from whom he received his position in the first place. The late legendary bond local Charlie DeFrancesca ("Charlie D.") put it best: "The question is: Can you be more efficient than the market?" <sup>28</sup>

Klipp liked to think about the local's role in more standard business terms, such as the inventory markup of the wholesaler or the retailer, or, more generally, the price spreads that exist in different phases of production for any economic good (including futures contracts). Both involve exploiting intertemporal imbalances between raw material and output, providing immediacy to end users, and the intermediation of waiting, carrying intermediate inventory (including capital goods and other factors of production), and providing a final good at just the right time and place (and, as we will see in Chapter 5, the more roundabout this process, typically the greater these spreads).

The second allotted privilege was "cruel," as Klipp would say, because it meant immediately closing out a trade once it turned negative (a "mistake"), what he called "always taking a one-tick loss." One could expect this to happen roughly half of the time, and much of the other half of the time (depending, of course, on how quickly any profits were grabbed, as we'll discuss) the price would find its way back to show a loss even then as well.

For instance, if the market was three bid, four offered (meaning 115 and 23/32nds bid, offered at 115 and 24/32nd), I had to buy at three or sell at four—"demand the edge"—without exception. If I managed to buy a one-lot (or one contract) at three, and then a big sell order came in and pushed the market down one tick to two bid, three offered, I was expected to immediately sell that one-lot to someone at two ("give up the edge," or "step out," preferably to a broker who would later return the favor), thus taking my one-tick loss (which amounted to \$31.25 on one \$100,000 bond contract). I was officially in Klipp's *Alpha School of Trading*, as everyone called it, after the name of his firm, Alpha Futures. (We were the guys in the aqua jackets who loved to lose money.)







Who could argue with this logic? If, as Klipp said, "There's only one thing that can hurt a trader at the Chicago Board of Trade, and that's a big loss," then, for God's sake, "never take a big loss." As his own mentor said to him some 40 years before, "Any time you can take a loss, do it, and you will always be at the Chicago Board of Trade." (To which Klipp always added with a smile, "Well, I've been losing money since 1954, but he was right, I'm still at the Chicago Board of Trade.") Naturally, this meant taking many small losses. Hence you had to "love to lose money," otherwise you'd just stop doing it.

Impatience and intolerance for many such small losses, as well as urgency for immediate profits, Klipp believed, dealt a death blow to traders, an easy and common one. The well-known *disposition effect* in finance, an observation that goes back at least a century, states that people naturally fall victim to these tendencies, and thus do the opposite of Klipp's approach: We sweat through large losses and take small profits quickly. Going for the immediate gain *feels* so right, while taking the immediate loss *feels* so wrong. The pressing need for consistent and immediate profits is hardwired into our brains; we humans have a shallow *depth of field* (as we will see in Chapter 6).

And nothing is better at amplifying this natural humanness about us than trading too big and having excessive carrying costs. These are the great external magnifying lenses on the immediate. All is decisive when all is at stake, whether through an excessive loss (because of too much leverage)—a loss that you can't afford to take immediately—or an insufficient gain (because of too much debt). No one trade need ever be decisive. As Klipp said, "One trade can ruin your day. One trade can ruin your week. One trade can ruin your month. One trade can ruin your year. One trade can ruin your career!"

It is not surprising, then, that Klipp's approach was not embraced by everyone, even by most; in fact, in many ways he was pit trading's greatest dissident (despite his title, bestowed by the futures industry, of *The Babe Ruth of the Chicago Board of Trade*). Among his greatest critics was none other than Charlie D.—the misinterpretation of whose criticism surely cost many an aspiring Charlie D. his shirt. (There will only ever be one Charlie D.) It was nearly impossible to follow and practice consistently—"brutal" was Klipp's term to describe the formidable challenge of looking beyond the immediate outcome—of retaining *depth of field*—a challenge that Klipp believed was essential to gaining an edge.







This was as it should be; indeed, if everyone accepted Klipp's Paradox, it would no longer be effective, no longer even be a paradox. From the *Laozi*, "The bright path seems dim / Going forward seems like retreat / The easy way seems hard / The highest Virtue seems empty." Here are the favorite Daoist images of water and the valley, the *Laozi's* "attitude of lowliness," which water always seeks.

This was Klipp's roundabout approach, and that of his mentor and perhaps his before: Expect to lose first, the first loss is a good loss; from that comes greater gain later. Call it playing good defense, embracing loss, biding one's time and using the present moment for later advantage, the advantage of then playing more effective offense. Or, as Klipp called it, "looking like a jerk, feeling like a jerk." Waiting must precede opportune action, by definition. Exploiting others' immediacy was the logic of the roundabout approach, the fundamental edge—the ultimate edge of trading and investing.

In baseball the difference between minor leaguer and major leaguer is generally thought to be in hitting the curve ball, as opposed to just a linearly extrapolated fast ball, and so too is the difference in investing in playing the curve, the roundabout intertemporal bends which deviate from the straight course. My mantra has always been like that of Milwaukee Braves pitcher Lew Burdette, who once said, "I earn my living from the hungriness of hitters." I earn my living from the hungriness of investors, from their decisiveness, their forcefulness, from their great urge for immediacy. And this immediacy was not just the bid-ask spread; it was even more so, as we will see, in the larger routs.

#### ROBINSON CRUSOE IN THE BOND PIT

After about a month, Klipp released me into the wilds of the active bond contract, the upper steps. The discipline had to remain the same—I still had but two privileges—and, like a hawk, he kept an eye on me in the pit as well as on my daily trading statements, to make sure that it did.

The king of the bond pit, nay of all pits, was (and will forever be) Lucian Thomas Baldwin III (trading badge "BAL"), known for the largest trading size of any local—thousands of contracts a day—and his ability to single-handedly bully what was then the half-trillion-dollar government bond market. While I was still a teenager, at a time when







most in Chicago idolized M.J., I idolized BAL. As a clerk in the pit, I intently studied his trading. He was a man possessed (which perhaps explained his unfortunate and notorious pencil-stabbing pit incident), but what was so astounding about him was his disciplined control in alternating between tremendous patience and overwhelming aggression.

So naturally I had to pick a spot in the pit near BAL's. He took one look at my fresh face and "SIZ" trading badge and branded me forever "The Sizzler," and made me his personal spitball target. But if I had to be hazed during my start as a pit trader, I was honored that it was by the greatest of all time (and it was something of a rite of passage when he stopped lobbing spitballs and started trading with me).

Venturing into the upper steps of the bond pit was like suddenly getting shipwrecked on a deserted island, all alone and with little access to order flow. I was the Robinson Crusoe of the bond pit. This apt metaphor (the solitary islander who devises a range of strategies for survival amid scarcity, the protagonist of Daniel Defoe's 1719 novel) runs deeper; it has become a quintessential economic parable—used most notably by the Austrian School economists, who focused so much on the actions of the individual in exchanging one state of affairs for another (what they called "autistic exchange"), but going back at least as far as Adam Smith, himself. (Crusoe's simple act of making a crude fishing pole and later sacrificing the time to construct a boat and net, tools by which he becomes more productive, will become integral to our roundabout concept in Chapter 5.)

Klipp had given me the equivalent of a pole with which to catch fish, but that was it. I endlessly cast my meager solitary line, bidding and offering one-lots, but cast after cast, more often than not the result was yet another one-tick loss (the fish stole the bait). Days sometimes passed with little to show for time spent standing and yelling in the pit; then I would hook a meal for a week.

Now, let's say Robinson Crusoe discovers, after exploring various fishing holes around his lonely island home, that at some, perhaps where the water is rather shallow, he can catch smaller fish with some frequency, and he has also discovered a few spots, perhaps where the water is very deep, where the fish are much larger, but fewer in number (and thus bite much less frequently). There is a natural trade-off for Crusoe, then, between size and frequency. This is of course a ubiquitous tradeoff in nature—and, when involving complex phenomena, is often described







in terms of a "power law" of frequency along the size continuum (or "really small things are really common, really big things less so").

The question was: Where should Crusoe fish, or, in the trading pit, how big of a profit was I after—when to grab a winner? Answering this question was necessary to the second step in the roundabout process of pit trading.

While Klipp's methodology, his privileges, defined the edge and the downside of monetizing that edge, it left wide open the size of the profit to wait for. He explained the size of a "good loss," but said nothing about the size of a "good profit." He would always say, "While there's no such thing as taking a loss too quick, you *can* take a profit too quick—but I can't tell you when to take a profit." (The term "scalper" typically meant a local looking to make one tick on every trade. Klipp was the antiscalper.) With Klipp, there was no settling for minnows.

The question of profit size was, of course, not about trade size, which was a simple function of account size, and which, of course, would impact both losses and gains proportionately. This was about the size of profits *relative* to the size of losses, the *payoff*.

In Klipp's basic asymmetric strategy, the bigger the gain I waited for, the less frequently it would occur, and the more asymmetric (or "positively skewed") my payoff would be. For example, taking profits only after they reached ten ticks in my favor would naturally happen less frequently, and would be accompanied by more frequent losses, than after just three ticks. (I would often watch a profit of seven, eight, nine ticks come right back and become a one-tick loss. Not fun!) This could be extended to the absurd: I could shoot for hundreds of ticks, which might not happen for many years, perhaps never at all, with nothing but countless one-tick losses until then. On its own, a very potent strategy, but not necessarily very effective, in the end.

While Klipp was not a scalper, neither was his approach about hitting the jackpot on one lucky trade; it was about incremental gains, exploiting a systematic edge through time. But, indeed, as the profit objective increased, the trade became the equivalent of holding a basket of long option positions (or convex payoffs). Klipp had an intuitive understanding that the market tended to experience infrequent, large moves—what we call "fat tails," for mass in the extremes of the frequency distribution of market returns—and that replicating such a basket, in its simplest and most elegant form, was a good way to play it.







#### FISHING IN "McELLIGOT'S POOL"

As I experimented with moving from small fish to big, with decreasing frequency, I moved from the world of Defoe to that of another literary economic thinker, Theodor Geisel (otherwise known as "Dr. Seuss"). In his 1947 book McElligot's Pool, a young boy coincidentally named Marco imagines all sorts of wondrous fish that he can't see beneath a murky pond but intends to catch nonetheless. A disparaging old farmer repeatedly tells him that there are no fish in the pond, but Marco keeps trying. He casts and casts, undeterred. Marco's bet illustrates rather aptly the second and third century CE skeptic Sextus Empiricus's problem of induction (i.e., the "black swan" problem): All it would take would be one fish to prove that cynical old inductivist farmer wrong. (Marco says, defiantly, "It may be you're right. I've been here three hours / Without one single bite. There might be no fish. . . . But, again, Well, there might.") Although Marco can't see anything in that pond, and no one has ever caught anything there before, he patiently hopes to exploit the extreme unknown that he dreams up, described in Seussian rhyme, "... something bigger ... some sort of a kind of a THING-A-MA-JIGGER!! A fish that's so big, if you know what I mean, that he makes a whale look like a tiny sardine!"32

As a young pit trader, ever squeezing my profits, indeed, I was Marco, waiting for the big unknown trophy. It turned out to be a rather productive approach for me (particularly from the limit down bond collapse of 1994), and such asymmetrical casting is a useful idea when the waters are murky, when you don't know anything (and you don't even know what you don't know). But it seemed to be conflating two edges, one systematic and one fuzzy, the local's edge and some kind of presumed underpriced tendency for large deviations. These were really very much the same, though on different scales. Indeed, all moves in the market, big and small, ultimately have immediacy at their source.

### ENTER THE AUSTRIANS: A VON KARAJAN MOMENT

Klipp was convinced that nothing from academia would be useful in the real, gritty world of financial markets. But he was unaware of a particular old school of economic thought, where hidden within its







formalized foundation was the very same foundation, not only for his Alpha School, but more broadly for a rigorous investment methodology predating and rivaling all others—though locked away by decades of neglect and never drawn out and applied. This was the great Austrian School of Economics, or the Vienna School (named after the origin of its founders), by most accounts nonexistent amid the vast majority of academic economic programs—and what better indication of the precedence of credentials over understanding the world in modern academia. So, Klipp was perhaps right in his expectation, as my collegiate exposure to the Austrians was truly the luckiest of breaks.

It started in a fortuitous economics course at Georgetown University taught by Professor George Viksnins ("Uncle George"). It is most fitting to gain the greatest insight about markets from those who fled antimarket regimes, in his case in Latvia. Uncle George's declared favorite economist was Joseph Schumpeter, a wavering Austrian, to be sure, but close enough to pique my interest. And from there I discovered a book by Henry Hazlitt titled Economics in One Lesson—and if I am able to get my children to read only one economics text in their lifetime, God forbid, it would be Hazlitt's. (In addition to the Austrian tradition's absence from most of the top universities, it should come as no surprise that, according to my diligent research, even Austrian-friendly texts are absent from virtually all the top preparatory schools in the United States—but for one, my favorite: Cranbrook Kingswood in Michigan, where Hazlitt's book is required reading.) Economics in One Lesson is an expansion on the essay, "That Which Is Seen, and That Which Is Not Seen," by nineteenthcentury French economist Frédéric Bastiat (who plays a leading role in Chapter 4 of this book). Hazlitt's proclamation would become a central tenet for me (wherein I would equivalently swap the words "economics" with "investing" and "act or policy" with "capital and production process"): "The whole of economics can be reduced to a single lesson, and that lesson can be reduced to a single sentence: The art of economics consists in looking not merely at the immediate but at the longer effects of any act or policy."33 I could not put Hazlitt's book down (and it would even replace my dog-eared Treasury Bond Basis).

The closing verse of Hazlitt's book was an auspicious directive: "The reader who aims at a thorough understanding, and feels prepared for it, should next read *Human Action* by Ludwig von Mises." Finally, as a pit trader, I got around to complying. So there I was, trading in the







bond pit, likely the most competitive capital marketplace in the world, and being lectured to on my daily commute by its greatest acolyte (by way of the cassette version of *Human Action*).

Human Action is the Laozi of the Austrian School, the magnum opus of its central figure, a monumental economics treatise from 1949, which Mises wrote in English but which was based on his 1940 Germanlanguage Nationalökonomie: Theorie des Handelns und Wirtschaftens. (Mises is another case, like Uncle George, of one who evaded the destructive suppression of free markets, among other liberties, in his case the 1938 Nazi Anschluss in Austria.) In Mises's words, in his method, I instantly detected something unmistakably familiar, almost as if I'd heard them before. Hidden within this massive, dense, and formal work was the simplicity of Klipp's Paradox—the simplicity and elegance of the Laozi yet articulated in a way that resolved it. It was a "von Karajan moment" for me, as I was struck by the same blow that the Austrian conductor Herbert von Karajan had described upon first hearing the great Arturo Toscanini conduct. (I would also gain my first understanding of roundaboutness—the circuitous pursuit of goals that is fundamental to The Dao of Capital—in the words of Karajan, who didn't achieve fame as a conductor until he was fifty and ultimately became the most renowned ever. In true Laozian style, Karajan secluded himself in the Austrian Alps for "quiet, concentrated study and meditation" and withdrew from the direct clash against his competitors—a feint that we will see in action with the conifers of Chapter 2. As he wrote in 1947, "For the moment, let the others decimate themselves in the Viennese battle of all against all-my time is sure to come and I await it, calm and confident"—and obsessively pouring over his tattered scores.<sup>35</sup>) Mises's lecture concluded, I immediately started over—over and over again (until my favorite sections became a tangled ball of magnetic tape).

What first stood out was the role of time in Mises's worldview. Time permeated everything; all action was a "temporal succession of events," always of steps and "fractions of time," the aim of which was "the removal of future uneasiness, be it only the future of the impending instant." Acting was to relieve our insatiable "impatience and the pains caused by waiting." And overcoming this natural urge was the necessary key to productivity—roundabout production—"the harvesting of the physically more abundant fruits of production processes consuming more time" and, thus, the significant "role played by taking account







of waiting time." Mises rightfully credited this central notion of the roundabout to his predecessor, the great Austrian economist Eugen von Böhm-Bawerk, the subject of Chapter 5.) Degrees of impatience—what the Austrians call *time preference*, the singular source, in Mises's view, of interest rates—in waiting and forgoing immediate profits (or consumption) and even bleeding capital (such as through costly capital expenditures), was a logical part of our humanness—indeed, part of that humanness which we had to overcome to do certain propitious things (things which cumulatively amounted to the very progress of civilization). This was Klipp's Paradox, writ large, on the grandest scale, formalized and temporalized in the Austrian economic language.

Moreover, of most immediate concern for me (as a treasury bond trader during a period of immense monetary interventionism) was a fundamental result of Mises's framework: Taken to its logical conclusion, a society's time preference could not be repudiated, and the actual market rate of interest had to correspond to the underlying fundamental "originary" rate of interest. Any vain attempt to do otherwise, as when market interest rates are artificially set through monetary intervention, would mislead production and would result in an imbalance and distortion in the economy. Over time, forces would grow stronger and stronger to eliminate that imbalance, and would inevitably succeed in violently driving the artificial rate back to its natural level, and thus the scheme would come to a necessary end. This inevitable seeking of balance from an artificial imbalance, this reversion of opposites, was, to Mises, the very source of "the cyclical fluctuations of business," "the trade cycle," or, more precisely, the boom and bust cycle (the subject of Chapters 7 and 8).37

#### A STATE OF REST

Underlying Mises's observations throughout was the basic unruliness of market prices, of their inherent subjectivity—a subjectivity that stems from the perceptions, needs, tastes, and impatience of humans. As he wrote in *Human Action*, "No laboratory experiments can be performed with regard to human action. We are never in a position to observe the change in one element only, all other conditions of the event remaining unchanged. Historical experience as an experience of complex







phenomena does not provide us with facts in the sense in which the natural sciences employ this term to signify isolated events tested in experiments. The information conveyed by historical experience cannot be used as building material for the construction of theories and the prediction of future events."<sup>38</sup> There it was, the illusory task of predicting markets using empirical data, explained as well as it ever could be.

This fundamental indeterminism led to "the method of economics," what Mises specifically called "the method of imaginary constructions." This was, for Mises, the singular method of *praxeology*, or the science of human action, which "cannot, like the natural sciences, base its teachings upon laboratory experiments and sensory perception of external objects." It required the *a priori* deductive approach to knowledge (again, endorsing Kant) by way of well-crafted *gedanken* (or thought) experiments—a better description than "imaginary," as these constructions were often very real, just not easily observable or tractable. We might think of it as introspection as a source of knowledge in the study of human action. To Mises, these were the axiomatic building blocks of all economic insight.

Principal among Mises's praxeological precepts (in addition to the aforementioned *time preference*) was the notion of the market's *state of rest* (or what he called the *plain state of rest*). The state of rest is essentially an occurrence in a market when "the brokers have carried out all orders which could be executed at the market price. Only those potential sellers and buyers who consider the market price too low or too high respectively have not sold or bought." It is a "lull" that will end with any new initiating order in the market, any new demand for immediacy, be it in response to news or perceptions of traders, and so forth. The state of rest is an intermittent end to all immediacy, a waypoint at which order flow is exhausted by mutually advantageous exchange, and it reoccurs in the markets over and over again.

Mises added another layer to this concept with the hypothetical continuous, yet ever elusive, aim of the market, the *final state of rest*. This was the price at which all transactions continually balanced and cleared, where no change ever occurred again in a particular market—truly an imaginary construction never attained, the intended destination never arrived at. Every state of rest was the result of a searching, bargaining process, a *Preiskampf*, or "price duel" as the Austrians called it, by which the markets were guided toward the final state of rest—though,







naturally, something would change and it would never be reached. Mises's description of the market's ongoing "temporal succession of events," then, was of ever moving from one state of rest to another, ever estimating the inestimable final state of rest.

#### **GUIDING INTO EMPTINESS...**

At times, waves of orders would buffet the bond pit like a tornado, and you could literally feel their surge in the vibrations of scrambling brokers through the floor (before the market even moved—a moment when price swings were decidedly nonrandom in the pit). During those tumults, the prices no longer reflected a balance between buyers and sellers, or, in bond futures, between savers and borrowers.

Within the bond pit, as within all markets, is an elaborate heterogeneous temporal structure, with the urgent orders at the bottom and various degrees of less urgent orders—the least direct, the most patient, the most roundabout—at the top. The orders would swirl around the pit, intolerantly pushing prices as they moved, until finally finding a temporal home, a "fill"; the errors corrected, there was a brief eerie calm, a provisional state of rest, awaiting another swell in response. This was the messy process of price discovery in the pit (an experience that is today forever lost to the world, as such pit action described here no longer exists anywhere), a succession of failed balancing acts, with the locals as fulcrum. And in the futile search for the final state of rest is the market's grand homeostasis.

Here was Mises's whole description of the market process, "always disquieted by a striving after a definite state of rest," with each resulting price an error around the final state price; and these errors, what Mises called "false prices," were the local's edge. The local needed to perceive as quickly as possible these false prices, the wedges between each successive state of rest and the final state, visible only in the constant entrepreneurial urge to immediately modify and correct them—through an auction process that ultimately exhausted that urgency through overcorrection. Thus the local responded to a force by guiding the price to a new imbalance, a new and brief false state of rest.

Mises's market process made explicit what was implicit in the actions of the local, who certainly did not have to understand any







Austrian economics. (As the saying goes, the only PhD that counted in the pits was "papa has dough.") As Mises described, they had *Verstehen*, or an intuitive grasp (or "understanding") of entrepreneurial opportunism. What mattered to the local, their *raison d'être*, was avoiding a swelling inventory, the result of one-sided urgent order flow (as in only sell orders, for instance). In avoiding this, like birds in the flock that alter their course to avoid bumping into a neighboring bird, they thus create complex and efficient dynamics in the whole, from exceedingly simple program-like individual objectives.

Markets are necessarily asynchronous, and with each new asynchronous tidbit of transactional information everyone alters their plans. And it is in ignoring this most elementary of observations that so much of modern economics fails, focusing as it does on a hopeless single *ex ante* equilibrium state where all transacting will happen, free of time. Instead, the perfectly clearing *ex post* "Dutch-auction" price—where all transactions within a period of time, if done simultaneously, would match up—is the moving target that is being repeatedly estimated in the cumulative aggregation of false prices (resulting from the processional states of rest). (Indeed, so much of Austrian Investing is about understanding and recognizing how these estimates can be wildly distorted.)

All of this occurred in the bedlam of the pit, in a succession of *mini-routs* to a succession of states of rest, something which could take many months or even years to learn to decipher in the pit, though perfectly clarified by Mises. The market was not a casino game of flashing random variables (despite untold lives still spent studying their *stochastic* properties), but an intricate coordinating and balancing price-concession process. Indeed, in Mises's construct was that of the pit trader.

Oftentimes, this process could turn into a coordinated (certainly skirting cartel-like) manipulation, as large locals would nudge a market through and thus trigger anticipated "stop orders" (known as "running stops")—to their positional advantage. This was basically about flushing out the immediacy hiding in the market, like a covey of quail. It could be as simple as recognizing the urgency in an order from a broker's visible stress (and other "tells"), or just sensing the crescendos and decrescendos in the order flow as the market explored different price levels. (Here, Baldwin's "coup d'œil" in recognizing the decisive moment—and his ability to wait for it—rivaled Napoleon's.)







These are the basic machinations of market microstructure, and of any marketplace, whether human locals or high-frequency robots: an endless alternating procession of routs. And it is the art of pit trading, in leading the market into imbalance, a momentary false state of rest away from its final state. It could be subtle or violent, involving the slightest one-lot sell order at the bid price or thousands of contracts from one or many orders that send the market into a tailspin. It was the ducking and weaving of the flock, with no driver, no one in charge, only the search to exhaust and placate what was roiling it.

Here was the link between the market-maker's edge and the occasional huge moves of the market. The *major-routs* were identical to the *mini-routs*, only bigger (a property known in mathematics as *self-similarity*, or *fractal*). Specifically, they were both about imbalance seeking balance, of false prices seeking correct prices. The wedge was just bigger.

In the bond pit, order flow thus communicated and the locals thus balanced the immediate intentions expressed by marginal savers and borrowers. This meant that, in fact, when there were no urgent active orders, the economy would (when there was no artificial price setting) be in a state which Mises called *stationary* (another of his praxeological terms we will revisit in Chapter 7). (And a hypothetical final state of rest throughout an economy would provide what Mises called an *evenly rotating economy*—which we might think of as an economy in which nothing ever changes, a kind of economic Dark Ages.)

Understanding this process of liquidity is basically about understanding that any market exchange must be perceived as mutually beneficial to both parties. A failure to understand this, particularly in a market dislocation like a crash, is the source of much angst directed toward high-frequency traders, for instance, who cease their liquidity-providing activities (and thus create liquidity holes) when markets get too volatile. Why should we expect anything else? Why shouldn't the price of immediacy jump to infinity along with perceived demands for immediacy? Why should anyone be expected to accommodate a counterparty at prices that are strongly believed to be in error? After all, to assume anything else would be to assume that liquidity providers are charities.

Klipp's lectures to me as a teenager were spot-on (albeit, expressed in different terms): In ever searching for and finding a new state of rest, the market was always intermittently and provisionally right in







correcting an error, though, in never arriving at a final state of rest, in never achieving a synchronized balance in all orders for immediacy, it was always wrong. And the greater the imbalance, the more wrong it was.

#### MOVING ON

Despite childhood dreams of becoming a pit trader finally realized, having moved up the steps from trading one-lots to tens and then hundreds of contracts, the time came to move on. I had been increasingly targeting larger bond price moves through options (flashed across the trading floor into the bond options pit from the bond futures pit), and my edge was increasingly moving away from that of the local. Moreover, it was early 1997, and the death knell for open outcry was being tolled by growing volume in the competing electronic trading (known at the Chicago Board of Trade as Project A).

And along with this new technology came a raging U.S. stock market, an unprecedented asset bubble clearly, from Mises, from an unprecedented monetary distortion—Greenspan had been on a loose monetary policy spree, following a Mexican debt crisis, and he inexplicably continued into President Bill Clinton's reelection. <sup>43</sup> It would end either through Greenspan applying the brakes (which seemed unlikely as he and Clinton had convinced themselves of a "New Economy" that was far from a bubble—not too hot, but just right, the "Goldilocks economy") or a capital and resource crunch applying them for him. Either way, the interest rate market was in extreme imbalance, an illusory temporary respite. Why plumb the murky depths of McElligot's Pool in the pit when whales were visible just under the surface?

I moved to Wall Street to become a proprietary trader at a primary government bond dealer (an investment house that participates directly in Federal Reserve transactions and Treasury auctions), and moved from bond futures and options to my new speciality, "midcurve" options on Eurodollar futures (or short-term options, expiring in less than a year, on forward three-month LIBOR contracts, expiring in more than a year). Naturally, the premiums for these options were then very low, and owning them allowed me to acquire a favorable position in the Eurodollar futures once the market woke up. It was just like being back in the pit: Option contracts are a means of gaining immediacy (though







conditional on a price threshold, the "strike price"); owning them provides immediacy in the routs, and hedging them (what option traders call "long gamma hedging") can often pay for that privilege (and then some) by providing liquidity in the pit (thus earning back the price of immediacy).

It was the perfect setup for an Austrian play. What quickly became clear, however, was that the significance of the trade wasn't predominately in the hoped-for lump payout; it was in the advantage afforded by the timing of that payout. The interest rate shock I was targeting (either a surprise tightening, like 1994, or a surprise easing, from an inevitable credit bust) would be accompanied by a general market dislocation wherein immediacy would be in exceedingly high demand, and I would be essentially all alone in having the fresh capital to exploit it. As effective as the option trade was, it was but the prelude, an intermediate waypoint toward an even greater edge, an attack and counterattack of tuishou. In the option trade was the temporal coordination of capital with its most advantageous and opportune use. This was a chance encounter with roundabout investing, the key to Klipp's approach and paradox: Fishing most effectively by not even fishing at all, but rather by constructing a harpoon for later use—just in time for the appearance of a whale.

As it turned out, the markets did not rest in 1997 nor, especially, in the summer of 1998. The obvious counterattack, upon booking gains in the Eurodollar options trades, was to short the freshly blown-out "on-the-run-off-the-run" bond spread—and as it inevitably converged I would follow it right back to zero. This was a pure "flight to liquidity" distortion, as everyone demanded the more liquid bellwether bond over the off-the-run bond, amplified by the ill-fated hedge fund Long Term Capital Management paying anything to unwind that very same convergence trade. (It turns out their name was most apropos, as this spread was, with certainty, a perfectly profitable *long term* trade—a shame that profit was entirely usurped by the path, by their profoundly shallow *depth of field.*)

Of course, Greenspan continued his monetary distortion apace throughout the crises, which meant the insurgencies would continue. Indeed, the whales of '97 and '98 would be but a preparation for much bigger Thing-A-Ma-Jiggers to come. I joined Nassim Taleb in 1999 as he was launching Empirica Capital, a mutually obvious relationship from







our shared pit trading background and a shared view on the certainty of an eventual collapse in the then-bubbly U.S. stock market (and to this day there is no one with whom I more enjoy and benefit from sparring about tails). We called ourselves "crisis hunters" (we were, indeed, the first formalized tail protection firm ever)—which we duly snagged in the 2000 equity collapse. This would be the highlight of an aggregate Empirica record that, while functioning well as a tail hedge, was the lowest return period in my career, before or since (though much has been learned along the way—representing a wonderful barrier to entry as competitors come and go.) We parted ways in 2005, and I went on to form my own investment firm Universa Investments, moving beyond the basic mandate at Empirica. (After I started, Nassim joined me again but in a strictly hands-off, passive capacity.) Nassim has since gone on to do voluminous and very significant work on uncertainty, specifically the "black swan problem" (as well as his neologism antifragility—the convexity of Marco), which has wonderful far-reaching consequences—albeit less straightforward, I believe, for capital investment.

I show in Chapter 9 how extreme uncertainty and *black swans* are not the stories of the big stock market busts of the past century in the United States (including those during my career), and how the effectiveness of exploiting such busts, or "tail hedging," is highly conditional on the particular environment of economic distortion. The real black swan problem of stock market busts is not about a remote event that is considered unforeseeable; it is rather about a foreseeable event that is considered remote—which I have spent the bulk of my career exploiting (and which explains the use of this moniker in some of my current partnerships).

Although I naturally employ positive-asymmetric, convex payoffs—a trite thing to say, as in the familiar "favorable risk/reward"—all the data clearly shows that most such "volatility loving" payoffs are and have been overpriced, *ex ante* (using power law tail and other rigorous valuation measures) and *ex post*; and this is why I do not apply what has come to be known as the *barbell strategy*. These bets are mostly the stuff of gamblers and financial salesmen, from nonlinear derivative securities to highly volatile equities to momentum strategies of all stripes; alone, they are a direct, frontal attack. Rather, to me, convexity is an efficient (lowrisk) tool for exploiting routs of pent-up immediacy and distortion, but only under the right circumstances (as in the game of *tuishou*); and it is only a part of a roundabout strategy, an intermediate step (of *zouhua* and







*nian*) toward the decisive end goal of productive capital investment (the counterattack)—not the game itself. It is a tool of Austrian Investing, but not its key; that belongs to the *roundabout*, a *depth of field*, and, of course, the Austrians.

Today one of my old aqua Alpha trading jackets (stained with ink and blood) is mounted on my office wall, like a skin from some Hemingway-esque safari. Draped over it is a tattered Adam Smith necktie. From day one at the Board of Trade my uniform included this tie. Gamblers' ticks have their place, and neckties were required on the floor, but mostly I was following the example set by Uncle George, who proudly wore his with such zeal. Smith was, of course, the free market apostle who radically asserted its organic coordinating function; Mises himself had declared the publication date of Smith's magnum opus (An Inquiry into the Nature and Causes of the Wealth of Nations), falling as it did on the same year as the United States' independence, "the dawn of freedom both political and economic." That tie was and still remains an important reminder for me that the pits—and markets in general—are not a casino, but a purposeful force, the Misesian market process at the very heart of the progression of civilization.

It was a roundabout start along a roundabout path toward the methodology of Austrian Investing, from the pit to my current investment partnerships at Universa—which started constructing Thing-A-Ma-Jigger harpoons in 2008, conveniently (though not coincidentally) put to productive use at the end of that year and into the next—and at Dao Capital (respectively comprising Austrian Investing I and II, of Chapters 9 and 10). This is our path as we follow *The Dao of Capital*.

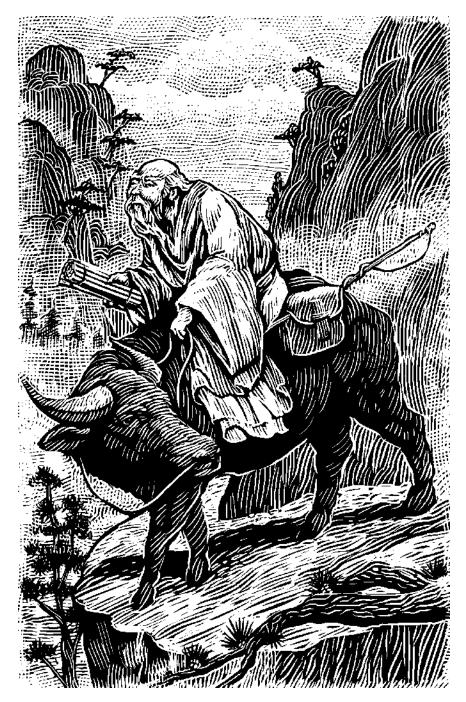
## THE WISDOM OF THE SAGES

Legend has it that, during the Warring States Period in ancient China, as one of the seven states began to fall into decline, Laozi decided it was time to leave it behind and spend the rest of his days in solitude. As he made his way on an ox, he reached the border gate at Hangu Pass, the site of many a bloody battle; beyond was Laozi's unknown new home. As the story goes, the gatekeeper realized that Laozi was leaving for good, forever taking with him all the wisdom he possessed, and entreated the Old Master to write down his thoughts for









Laozi, "The Old Master," Retreats from the World, Leaving His Wisdom Behind







posterity. Laozi complied and wrote down a concise treatise of some 5,000 Chinese characters.

The story, we can surmise, is fictional, perhaps much like the author himself. What is undeniable, however, is the efficacy of the words that remained, which have lasted more than two thousand years, and still echo in the wisdom of the ages: a perception of time and the preeminence of patience, a depth of field and the roundabout way of doing by not doing, and the very illusory nature of historical experience—the wisdom of an old grain trader who loved to lose money and of a great school of economic thought that would change the world forever. All would be scorned, yet all would persist, and one day come together in an archetypal investment methodology.







## Index

Adaptive learning, 113	Austrian Alps, 20
Addiction, tradeoff and, 158–161	Austrian Business Cycle Theory (ABCT), 168
Aesop's fables, 48, 122, 159–160	169, 210, 219, 232
Age of Enlightenment, 67	Austrian capital theory, 81, 102, 221-222
"Agio theory," 113	Austrian economics:
Alpha Futures, 13	Daoism and, xvii-xviii
Alpha School of Trading, 13, 19, 29	political vocabulary and, xxii
"Alpha" T-score, 237	Austrian economists, central bank and, xxi
Ames, Roger, 4, 5, 35, 46	Austrian Empire, 65
Andermann, Hermine, 96	Austrian Investing:
"Angel investor," 259	capital investment and, 51–52
Angiosperms:	capitalistic strategies, xxvii
advantages of, 37	distortion/Misesian tools (see Austrian
conifers competing with, 39, 45, 46, 48	Investing I)
fast-growing, 38, 41, 42, 43	essence of, 83
"Animal spirits," 211, 220, 221, 233	intertemporal exchange and, 142
Anschluss, 20	introduction to, xxv
Antifragility, 28	methodology of, 29
Anti-market regimes, 19	objective of, 239
A priorism doctrine:	rigor/appeal of, 274
Austrian School and, 76, 84, 102	roundabout approach and, xxiv
Bastiat and, 85	seen immediacy/unseen and, 104
defined, 9, 22	thinking behind, 254
historical experience and, 100	time expectations and, 140, 142
Aprioristic approach, 167, 177	Austrian Investing I:
Aristotle, 86, 115–116	central bank hedging, 248-251
The Art of War (Sun). See Sunzi	distortion, witness to, 231-236
Asymetric strategy, 17	eagle and swan, 240-244
Attention deficit disorder (ADD),	homeostasis en force, 229-230
157, 277	initial investment strategy and, 236-240
Attention deficit hyperactivity disorder	overview of, 227-229
(ADHD), 157, 158	roundabout investor, 248-251
August (prince), of Prussia, 64, 66	stock market crashes and, 240-244
Austria, defeat of Prussia, 99	tail hedging, prototypical, 244–248







Austrian Investing II:	embryological studies of, 88-89
buying the Siegfrieds, 263–269	evolution and, 87
caterpillar teleo-mechanism, 88	teleology, mechanics and, 86
overview of, 253–255	Balance:
Siegfried, dragon slayer, 255-263	natural systems and, 202
value investing, 269–275	resources and, 185
An Austrian Perspective on the History of	Baldwin, Lucian Thomas, III, 15-16, 24
Economic Thought (Rothbard), xvii	Bank credit, 193
Austrian pine, 43	Banking system, credit and, 170-171
The Austrians:	Bankruptcy, 115, 128
Austrian Investing and, 29	Banks, central. See Central banks
critics of, 176	Barbell strategy, 28
play, setup for, 27	"Basin of attraction," 214
singular focus of, 74	Bastiat, Frédéric:
Austrian School of Economics:	Austrian capital theory and, 81
adaptability of, 168	Austrian tradition and, 85
central principals of, xviii, 102	best-known work of, 82
core of, xviii, 84	books/publishing, 80-81, 83
devotee of, 275–276	elevation of temporal by, 83
economists from, 16	essay by, xx, 19
founders of, xxiv, 86, 89–93, 97, 103	foreseen and, 75, 78-85
Laozi of, 20	as gentleman farmer, 78–79
methodology of, 76	"good economist" and, 172,
positive/normative dichotomy in, 84	224, 286
renaissance for, 178	government interventionism and, 77
student of, xxii	legacy of, 85
subjectivism and, 101	opportunity cost and, 118
sweeping study of, xix	pro-Austrian nature of, 80
as Vienna School, 19	style of, 83–84
Austrian tax code, 105	teleology and, 89
Austrian tradition:	writing skill of, 83
Bastiat and, 85	Battle of methods. See Methodenstreit
establishment of, 76	Bauer, Otto, 171
roots of (see Seen and foreseen)	Beethoven, Ludwig von, 66
skepticism of data and, 177	Benz, Karl, 125
Austrian view, 199–200	Bernanke, Ben, 212, 249
Austrian Weltanschauung, 85	Bismark, Otto von ("Iron Chancellor")
Austro-Hungarian Empire, 107, 168	100
"Autistic exchange," 16, 108	"Black swan" problem, xxviii, 18, 28,
Auto-catalytic "multiplier effect," 125	230, 241, 248, 249. See also "Tail
Axiom of the axe, 120, 121, 122, 157, 267	events"
	Böhm-Bawerk, Eugen von:
The Babe Ruth of the Chicago Board of	"agio theory," 113
Trade, 14	as Austrian School founder, xxiv,
Baer, Karl Ernst von:	103–104
butterfly/metamorphosis, 88–89, 113	as bourgeois Marx, 113-116







career of, 105	Business cycle, xxix, 21, 191, 194,
death of, 171	199–200, 201
Jahresringe, 123–124, 126, 141, 258	Business cycle theory, 195
legacy of, 107	"Businessman of the Century," 126
Marxists and, 225	
Menger, Mises and, 93, 102	Canon of Chen Family Taijiquan, 6
Positive Theory of Capital, 96	The Canon of Reason and Virtue: Being
roundabout approach and, 21, 223,	Lao-tze's Tao Teh King (Carus), 9
Böhm–Bawerk, Eugen von:	Capital:
soldiers and, 161	Austrians and, 74
subjectivity of time and, 153–154, 155	bleeding, 21
time inconsistency and, 195	cost of, 195
time preference and, 133, 141, 144, 145,	deployment of, 112
146, 158, 163, 284	"Faustmann's ratio" and, 122
Bolshevism, 171	habits of awareness and, xxiv
Bonaparte, Napoleon:	heterogenous, 254
conquerors of, 85	highly productive, 255
invasion of Russia, 74	intertemporal aspect of, xxiii, 122
in Napoleonic Europe, 63-64	labor and, 82
Tribunat assembly of, 76–77	land as "capital," 189
"Bonaparte Symphony," 66	maturity class, 124
Bond futures contract, 11	opportunity cost of, 118-119
Bond pit, 11, 23, 25	as a process, xxiii
Bond spread, "on-the-run-off-the-	rings of (see Rings of capital)
run," 27	roundabout, 273
Boom and bust cycle:	shi of, 223–225
credit inflation and, 197–198	source of, 125
distortion and, 220	teleological analysis and, 102
false prosperity and, 194	as temporal structure, 110
imbalance and, 21	titles to, 250
natural market and, 216	Capital & Interest (Böhm-Bawerk), 105
Boreal forest:	Capital accumulation:
roundabout approach and, 277–278	as "acatalytic process," 112
sisu, Finns and, 278–284	artificial lowering of rates and, 192
sisu—character and, 284–290	constructive, 201
Boston Medical & Surgical Journal, 150	in progressing economy, 189
Botanists, 39, 40	roundabout production and, 184
Brain:	as sequential process, 104
evolution and, 164	Capital acquisitions, 190
injury/iron bar, 149–151	Capital consumption, 192–193, 197, 201
shi and li, 151–153	Capital deployment, 43
Brühl, Marie von, 64, 66-67, 68	Capital goods, 124, 125, 190
Bryant, Clara Jane, 127	Capital heterogeneity and, 122-123
Buffett, Howard, 272	Capital investment:
Buffett, Warren, 142, 272, 273	artificial lowering of rates and, 200
Burdette, Lew, 15, 64	Austrian Investing, 51–52







Capitalism:	Chen, Ellen, 9
bureaucrats and, xix	Chen style taijiquan, 6
class struggle and, 114	Chen Village, 6, 7
free will and, 286–287	Chen Xin, 6
means-ends framework and, 80	Chicago Board of Trade:
progress of, 134	Babe Ruth of, 14
sisu and, 284	Klipp and, xxix, 3, 10, 142, 223
stability and, 42	"locals" at (see "Locals")
Capitalistic investment strategies. See	membership at, xxix, 11
Austrian Investing	Project A, 26
Capitalization:	China, xxiv, xxv, 56, 164. See also Warring
formal conception of, 118	States of China
rationale for, 116	Chinese martial arts, 6
Capital stock, 193	Churchill, Winston, 69
Capital structures:	The Circle Bastiat, 84
artificial lowering of rates and, 192, 193	Circuitous route. See Roundabout
as cumulative, 124	approach
entrepreneurs and, 105	Civilizations, 42
expansion of, 122	Classical Liberalism and the Austrian School,
roundabout, 255–256, 257	xviii
Capital theory:	Clausewitz, Carl Philipp Gottlieb von:
Austrian, 81, 102, 221-222	"balance of power" and, 72-73
production and, 107	Great War and, 69, 70
The Carrot Seed (Krauss), 160	intertemporal strategy and, 73-74
Carrying costs, 14, 163	military strategy and, 224
"Carry trades," 196, 197	misinterpreted writings of, xxvi
Carus, Paul, 9	in Napoleonic Europe, 64-68
Case study:	in Prussian Army, 64, 66, 68
buying the Siegfrieds, 263-269	roundabout approach of, 71-72
tail hedging, prototypical, 244–248	shi and, 51
Cash, "sitting in," 197	strategic doppelgänger of, 54, 55
"Catallaxy," 217	wife of, 64, 66–67, 68
Caterpillar teleo-mechanism, 88-89	Ziel, Mittel, und Zweck, 52
Cause and effect:	Clausewitz, Friedrich Gabriel, 65
means-ends framework and, 86	Clinton, Bill, 26
Mengerians and, 91	"Cluster of errors," 221
Cautionary tales, 159–160	Collectivism, xvii
Central bank:	Communist Manifesto (Marx), 83
capital structures and, 200	Communists, 82
hedging, 248–251	Compustat's Point in Time database, 264
homeostatic process and, 211	Confucius, 4
lowering rates, xxi, 190-194	Conifer effect, 43–49
"open market operations," 195	Conifers:
Ce Qu'On Voit et Ce Qu'On Ne Voit Pas	adaptations of, 38-39, 44
(Bastiat), 82	in boreal forest, 44
"Charlie D." See DeFranchesca, Charlie	callitris trees, 40–41







"capital," amassing, 277	Daoism, xvii–xviii, xxiv, 3, 4
competition and (see Angiosperms)	Daoist images, 216
counter-rout and, 46	Daoist texts. See Laozi (Daoist text); Sunzi
as epitome of shi, 278	(Daoist text)
extreme conditions and, 46	Darwin, Charles, 86–87
growth of, 35, 38, 110-111	Das Kapital (Marx), 83, 113
intergenerational strategy of, 135	D-Day, 69
longevity of, 46–47	Deciduous trees. See Angiosperms
roundabout approach and, 35, 36, 45, 46,	Defoe, Daniel, 16, 17, 109
49–50, 157, 289	DeFranchesca, Charlie, 13, 14
Siegfried and, 257	Delayed gratification, 152–153
"slow seedling hypothesis," 39-41	"Delayed riposte," 73
teleology and, 38	Depth of field:
Constitution, xx	Austrian Investing and, 29
Consumer goods, 124, 137, 201	of the Dao, 34
Consumer prices, 191	defined, 2
Consumer spending, 188, 193	focus and, 2
Consumption:	intertemporal, 142
deferred, 110	<i>Laozi</i> and, 4, 31
time preference and, 144	productivity and, 123
Contraction, 201	retaining, 14
Convexity, 28	shallow, 14, 27, 262
Convex payoffs, 17, 28	Dictionnaire d'Economie Politique, 83
Coudroy, Felix, 80	Direct within the indirect, 57
Counter-rout, 46	Discounted cash flow analysis, 119
Cranbrook Kingswood prep school, 19	Discounted Utility model, 156
Crash. See Stock market crash	Discounting:
CrazyBusy (Hallowell), 157	exponential, 155–157, 196
Creative destruction, 208	hyperbolic (see Hyperbolic discounting)
Credit:	Disequilibrium, 254
banking system and, 170-171	Disposition effect, 14
cheap, 192	Distorted forest, lessons from, 209–212
Credit expansion, 172, 191, 193–194,	Distortion:
199, 219	awareness of, 227-228
Credit inflation, 197–198	away from stationarity, 190
"Crisis hunters," 28	"black swans" and, 241
Crossbow, as embodiment of shi, 57–59, 63	boom and bust, 194
Cybernetics. See Market cybernetics	central banks and, xix
Cybernetics (Weiner), 89	credit expansion and, 199
7	homeostasis and, 219–220
Daimler, Gottlieb, 125	market process and, 201–202
Dao:	message: "do nothing," 222-223
of Sun Wu, 56–57	monetary, 26, 27, 229, 232, 233, 240,
time preference and, 141	248, 249
Dao Capital, 29	root of, 231
Daodejing. See Laozi	tail events and, 245
, G	•









Distortion (continued)	maximizing, 251
trap of, 252	order flow and, 11
witness to, 231–236	privileges and, 12, 13
"Dividend discount model," 119	systematic, through time, 17
"Dividend investing," 197	Edison, Thomas, 128, 133, 134
Downstream. See Upstream/downstream	Edison Illuminating
"Drawdowns," 235	
Diawdowns, 255	Company, 127 "Efficient markets," 254
Eagle and swan. See Austrian Investing I	Einstein, Albert, 146
	Emotions. See Psychology of time
EBIT (operating earnings before interest	preference
and tax expenses are deducted), 256,	÷
262, 266, 272, 273	Empirica Capital, 27–28
Economic Harmonies (Bastiat), 80, 81	Empiricism, 108
Economic machine, 133	Empiricus, Sextus, 18
Economic parable. See Nibelungenland	Entrepreneur:
Economic productivity. See Productivity	"alertness" of, 187
Economics:	capital structure and, 105
Austrian (see Austrian economics)	labor hours and, 114
as "deadly serious," 198	risk and, 115
Discounted Utility model of, 156	roundabout approach and, 111,
human action and, 177	130, 138
mainstream, 167	teleology and, 206
"new" view of, xvii	Entrepreneurial dispersion, 184
Nobel prize for, 176, 179	Equilibrium, 224
Economics in One Lesson (Hazlitt), 19, 82, 176	Equity Q ratio, 186, 231
Economic Sophisms (Bastiat), 81	Eurodollar futures, 26
Economists, pre-Austrian, 84	Eurodollar options trades, 27
Economy:	Evenly rotating economy (ERE), 25, 182
boom and bust in, 194	183, 185
development level of, 124	Evolution, 86–87, 141, 143, 164–165, 216
disequalibrium in, 105	Expansion, 201
evenly rotating (ERE), 25, 182, 183,	Exploitation theory, 115
184, 185	Exponential discounting, 155–157, 196
forest (see Faustmann, Martin)	
forest, malinvestment in, 41, 42, 49	"False humility," 142
government planners and, xix	"False prices," 23, 24, 179, 184,
modern exchange, 102	185–186, 256
"New Economy," 26	"False shortcut," 103
one-man (see Robinson Crusoe)	False state of rest, 23, 25
progressing, 189	Fama, Eugene, 272
stationary, 25, 182–183, 184, 191	Farjon, Aljos, 48
Ecosystem. See Forest	"Fat tails," 17
Edge(s):	Faust (Goethe), 68
Austrian Investing and, 165	Faustmann, Martin. See also Land
conflating two, 18	expectation value (LEV; Land
"false prices" and, 23	replacement value (LRV)







axiom of the axe, 120, 121, 122,	supplier to, 44
157, 267	Ford, William, 127
discount rate, annual, 121	"Ford-Edison money," 133, 270
exponential discounting, 155	Fordismus, 126
formula, LEV and, 118, 119–120,	Ford Motor Company:
156–157	"rings" of production, 132
return on invested capital (ROIC), 121	River Rouge plant, 129, 130
rotation period (r) and, 120	roundabout production and, 128
roundabout, paradox of, 117–118, 122	Foreseeable events, 28
subjectivity of time and, 155	Forest:
"Faustmann's ratio" LEV/LRV:	boreal (see Boreal forest)
1st-quartile firms, 267	conifer effect, 43–49
"changeups" and, 267	conifers (see Conifers)
forest economy and, 117, 121, 122	depth of field and, 206
low/high, 260, 261, 265	economy (see Faustmann, Martin)
in Nibelungenland, 182, 185, 187,	fire suppression (see Yellowstone effect)
188, 189	growth, logic of, 49–50
ROIC and, 259	Laozi and, 34
Federal Reserve, xx, xxi, 172, 195, 201, 210,	pinecones and, 33–34, 35
212, 249	"recruitment bottlenecks," 207
Federal Reserve Flow of Funds, 231	slow seedlings in, 39-41
Federal Wildland Fire Management, 210	and the tree, 36–39
Fiat money system, xxi, xxii	wildfire (see Wildfire)
Final state of rest, 22–23, 25	Fortune, 126
Financial crisis of 2008, 212	Forward perception, 160–161
Fire. See Wildfire	Forward selves, 145–146
First consequences, tyranny of, 83	Founding Fathers, xix-xx
Ford, Edsel, 127	Fractal, 25
Ford, Henry:	France, Second Republic of, 82
as capitalist, 132	Freedom, xx, xxii
capital structure and, 258	Free markets:
economic machine and, 133	Austrian economists and, xvii
as entrepreneur, 126, 127-128, 130, 134	Austrians and, 76
equity partners and, 267	political action and, xix
farming/rural life, 126, 127, 128,	Free trade:
130, 134	Bastiat and, 83
labor/wages, 132	interventionism and, 82
"mass production," 126, 129	French, Kenneth, 272
Model T and, 129–130	French Revolution, 65, 67
New Deal and, 132–133	Further Essays on Capital and Interest
profits and, 131, 286	(Böhm-Bawerk), 107
racing cars/stunts, 128–129	Futures contracts, local's role and, 13
"rings" of production, 132	"Future self," 145–146
roundabout approach and, xxiv, 127–128,	Future Shock (Toffler), 157
129, 140, 161, 224, 229, 254	Futures market, 3
as roundabout <i>Unternnehmer</i> , 125, 126	Future utility, undervaluation of, 158







Gage, Phineas, 149-151, 158, 274, 285 Hannibal and Me (Kluth), 135 Gedanken experiment, 163, 177 Hart, Basil Henry Liddell (Sir), 51, 69, Geisel, Theodor, 17 69 - 70General Equilibrium Theory, 101 Hayek, F.A., xvii General Theory of Employment, Interest, and Hayek, Friedrich, 90, 176, 179, 206, 214, Money (Keynes), 167, 173 215-216, 218 Georgetown University, 19 Hazlitt, Henry, 19, 82, 176, 267 German Historical School: Hedge funds, xxv data/recordkeeping of, 97 Hedging: economic theories and, 100 central bank and, 248-251 means-ends framework and, 100 prototypical tail, 244-248 Mengarians and, 98 tail, 245-248, 251 Menger's break from, 99-100, 225 Hegel, William Friedrich, 67 socialists and, 100-101 HFRI Fund Weighted Composite Index, thinking through tasks and, 228 237 - 238German historicism, 170 Hillsdale College, 176 Goethe, Johann Wolfgang von, 35 Historical experience: "Goldilocks Economy," 26 complex phenomena and, 21-22 Goodwill, 132 illusory nature of, 31 Government: a priori reasoning and, 100 Historicists. See German Historical School economic growth and, xx economic planning and, xxi History and Critique of Interest Theories intervention, xxii (Böhm-Bawerk), 107 Hitler, Adolf, 173, 279 Government bailouts, 163 Government interventionism. Hofstadter, Douglas, 217 See Interventionism Homeostasis: Government planners, economy and, xix balance and, 214 Graham, Benjamin, 270-271, 274 defined, 206 Grain futures markets, 10 distorted forest and, 209-212 Grain trader. See Klipp, Everett distortion and, 219-220 Gratification paradigm, 152-153 distortion's message, 222-223 Great Depression, 133, 167, 169-173, 270 en force, 229-230 The Great War, 69, 70, 95, 168, 171 how things go right, 216-217 market cybernetics and, 213-215 Greenblat, Joel, 272 Greenspan, Alan, 26, 27, 210, 249 overview of, 203-205 "Greenspan put," 210 sand pile effect and, 220-222 Growth, logic of, in forest, 49–50 shi of capital and, 223-225 Grundsätze der Volkswirtschaftslehre spontaneous order, 217-219 teleology of market, 205-207 (Menger), 90 Guerilla warfare, 8, 278 Yellowstone effect and, 207-209 Gymnosperms, 36. See also Conifers How Children Succeed (Tough), 288 Hsing (strategic positioning): Habsburg Dynasty, 65, 95 on battlefield, 282 Hall, David, 4, 5, 46 shi and, 53, 281 Hallowell, Edward, 157, 158 time preference and, 141 Handeln, 251 Hülsmann, Jörg Guido, 169, 172







"Human action," 205	dangers of, 172
Human Action (Mises), xxi, 19-20, 21, 98,	general rate of, 195
168, 175–179, 184, 193, 194, 271, 287	perverse effects of, 193
Human well-being, 91–92	Inflationary credit expansion, 172
Humility, false, 5	The Intelligent Investor (Graham), 271
"Husbanding reserves," 73	Interest, as cost of time, 116
Hyperbolic discounting:	Interest rates:
"carry trades" and, 196–197	artificial changes in, 211-212
phenomenon sometimes called, xxvi	central bank lowering, 190–194
time inconsistency and, 140, 195	credit and, 171
time preference and, 144, 157, 239–240	equilibrium analysis of, 258
1	Fed and, 195
Image, role, 35	market, 26
Imbalance:	market-induced drop in, 187–190
balance and, 3, 26	multiple, 194
crash and, 194	"originary" rate, 21
exploiting situation of, 6, 13	payback and, 111
leading market into, 25	time preference and, 21
pit trading and, 25	Intertemporal dimension:
Immediacy:	adapting to, 164–165
all market moves and, 18	of capital, xxiii
exploiting others, 15	Clausewitz and, 73–74
gains/losses and, 14	edge, order flow and, 11
innate desire for, 138	farming and, 35
"locals" and, 12	opportunities and, 2, 5
option contracts and, 26–27	strategy and (see Shi (intertemporal
pent-up, 28 price of, 244	strategy)) Intertemporal opportunism, 288
roundabout approach and, 15	Intertemporal trade-off, 145, 148
	Interventionism:
"stop orders" and, 24	Bastiat and, 77
Impatience:	central banks and, xix
acting and, 20	
degrees of, 21	extreme state, 84
delayed gratification and, 152	free trade and, 82
time preference and, 140	Inversion, 135–136, 157
"Imputation," 118	Investigations into the Method of the Social
Indeterminism, 22	Sciences with Special Reference to
Indirect approach, military strategy	Economics (Menger), 98–99
and, 69	Investing. See also "Dividend investing"
Induction, problem of, 18	capitalistic strategies (see Austrian
Inductivist methods, 177	Investing)
Industrial competition, 77–78	focus on, xxiii
Industrial Revolution, 149	out-of-the-money puts, 245, 247
Inflation:	roundabout (see Roundabout investing)
capital consumption and, 193	way of thinking and, xxix
credit and, 197–198	weigi-style, 238









Investment. See also Malinvestment	gain/loss approach of, 14, 142
capital (see Capital investment)	informal title of, 14
edge (see Edge(s))	"Klippisms" of, 33
real resources and, 188	local's role and, 13
savings and, 211	nature as greatest teacher, 34
stock market and, 131	paradox of (see Klipp's Paradox)
success, 165	pinecone imagery and, 35, 45, 289
types of, 200	roundabout approach of, 15
Investment strategy, initial, 236–240	shi of, 224
Iron bar/brain injury, 149–151	simplicity and, 237
	Klipp's Paradox:
Jacobi, Carl Gustav Jacob, 135	on grandest scale, 21
Jahresringe, 123–124, 126, 141, 258	key to, 27
Jefferson, Thomas, 76	Laozi and, 2–3
Jevons, William, 90, 91	losing in order to win, 207, 239, 277
Journal des Economistes, 81, 83	roundabout approach, 1, 122
Jullien, François, 5	simplicity of, 20
Juvenal, 241	time and, 2
-	Kluth, Andreas, 135
Kahneman, Daniel, 147	"Knockouts," 162–163
Kalevala (epic poem), 284	Kongzi (Confucius), 4
Kant, Immanuel, 9, 22, 86, 87, 205	König, Gottlob, 117
Karajan, Herbert von, 20, 287	König-Faustmann formula, 117
"Karl Marx and the Close of His	Kraus, Ruth, 160
System," 115	Kreditanstalt, 172, 173, 240
Kay, John, 130	Krugman, Paul, 186, 187, 211
Keynes, John Maynard, 167, 173-174, 220,	Kundera, Milan, 147
221–222	
Keynesians:	Labor:
income flows and, 222	capital and, 82
Keynesian avalanche, 84	division of, 92
"liquidity trap," 198	"full value of," 115
Mises and, 225	"losing" now/future advantage, 110
spending and, 200	"socially necessary," 114
Tobin and other, 233	teleology and, 80
Kirzner, Israel, 168, 187	turnover and, 132
Kissinger, Henry, 56	Land capital theory, 117
Klipp, Everett:	Land expectation value (LEV), 117, 118,
Alpha School of, 13, 19	119, 120, 185, 186, 190
as anti-scalper, 17	Land of the Nibelungen. See
asymetric strategy of, 17	Nibelungenland
carrying costs and, 163	Land replacement value (LRV), 117, 121
Chicago Board of Trade and, xxix, 3, 10,	185, 186, 193
142, 223	Laozi (Daoist text):
college major advice, 11	attributed author(s) of, 3-4
farming and, 35	of the Austrian School, 20







as depth of field, 4	Loss(es):
epistemology and, 9	big, 14
essential theme of, 2–3, 5	many small, 14
false humility and, 5	"one-tick," 13, 16, 17
military art and, 6	Louv, Richard, 158
nature and, 34, 48–49	Ludwig von Mises Room, 176
Old Master and, 29–30	Lynch, Peter, 267
philosophical matters and, 57	•
a priori doctrine and, 9	"The Magic Formula," 272
words from, xxvi, xxix, 8, 15,	Mahler, Gustav, 287
48–49, 224	Major-routs, 25, 42
wuwei and, 53	Maladjustments, in forest "economy," 49
Lau, D.C., 53	Malinvestment:
Lehman Brothers, 162	contraction and, 201
Leitmotif. See Conifers	in forest "economy," 41, 42
Lewis, Michael, 137	interest rates and, 198
Li (direct path):	Malinvestment liquidation, 234–235
described, 59–60	Manipulation, art of, 5
Gewalt as German equivalent of, 69	Mannerheim, Carl Gustaf, 280
immediate end and, 276	Mao, Zedong, 8, 56
shi, weiqi board and, 60–64	Marco (McElligot's Pool), 17, 28
shi and, 63–64, 136, 223, 224, 238	Marcus, Sigfried, 125
time preference and, 139–140	Market(s):
Liberalism:	as asynchronous, 24
Bastiat and, 80	destruction of free, 20
last knight of, 169	"fat tails" and, 17
Libertarians, Daoists and, xvii	free (see Free markets)
Liberty, xx, xxii	homeostatic process and, 221
LIBOR contracts, 26	imbalance in (see Imbalance)
Liquidation, malinvestment, 234–235	microstructure, 24–25
Liquidity:	as a process (see Market as process)
in the bond pit, 27	process, 23–24
central bank and, 191–192	state of rest, 21–23, 22, 217
"flight to liquidity," 27	as subjective, 10
process of, 25	suppression of, 211
"Liquidity trap," 198	teleology and, xxvii, 205–207
"Locals:"	Market as process:
as market makers, 12	homeostatic nature and, 206
order flow and, 12–13, 23, 24	parable illustrating, 179–187
privileges of, 12, 13	prevailing, 201–202
"scalpers," 17	teleological, 168
"Long gamma hedging," 27	tuishou and, 169
"Long-term," acting, 285	Market cybernetics:
Long-Term Capital Management (LTCM),	defined, 203, 213
27, 162, 163, 254	feedback mechanisms, 204, 205, 213–215
Long term trade, 27	miscommunication and, 221
<i>O</i>	









Market cybernetics (continued)	"Menger School," 99
originator in field of, 213	Merrill Lynch, "Face Retirement" feature,
"paradox of thrift" and, 221–222	159–160
steermanship and, 214	Metamorphosis, 88–89
Market dislocation, 25, 27	Methodenstreit, 97–101
Market-induced drop in interest rates,	"Method of economics," 22
187–190	Methodological individualism, 108
Market makers. See "Locals"	Mexican debt crisis, 26
"Marshmallow test"/preschool, 152-153,	Michigan, 44
196, 215, 230, 239, 288	"Midcurve" options, 26
Martial arts, 6	Military strategy:
Marx, Karl, 83, 113–116	handeln and, 70–71
Marxian theorists, 171	"indirect approach" to, 69
Marxists, 81	industrial competition and, 77–78
"Mass production," 126, 129	"Mini-portfolio," 273
Master Sun. See Sun, Wu (Master Sun)	Mini-routs, 11, 24, 25, 42
Maybach, Wilhelm, 125	Minsky, Hyman:
Mayerling Incident, 95	boom and bust cycles and, 220
McElligot's Pool (Geisel), 17	sand pile effect, 220–222
Means-ends framework. See also Ziel, Mittel,	Mischel, Walter, 152
und Zweck	Mises, Ludvig von:
capitalism and, 80	apriorism of, 177
cause and effect and, 86	Austrian School and, xxiv, 179
duality of, 77	birth of, 169
Menger and, 100, 101	Böhm-Bawerk and, 107, 168, 170, 171
route characteristics and, 76	business cycle theory and, 191, 201
sports and, 135–136	capital consumption, 192–193
teleology of time and, 160–161	career of, 170, 171, 175–176
Menger, Carl:	economic science and, 84
	education of, 170
as Austrian School founder, xxiv, 76, 86,	
89–93, 94, 97, 103–104	ends, goals, aims, 74
birth of, 89	evenly rotating economy
discovery of, 101–102	(ERE), 25, 182
economics as value-free, 84	family of, 169–170, 172
education of, 89–90	final state of rest, 21–23
factors of production, 92	fleeing the Nazis, 173–175
followers of, 102	future prices and, 188
"goods-character" and, 91–92	Great Depression and, 169–173
means-ends framework and, 100, 101	Human Action, xxi, 19–20, 21, 98, 168,
Methodenstreit and, 97–100	175–179, 193, 194, 201, 271, 287
opportunity cost and, 118	inflationary view of, 193, 197
retirement of, 96	lectures by, xvii
subjective theory and, 113	as liberal, 172
teleological thinking and, 91	market as process, xxvii, 23–24, 169, 186
as tutor to prince, 93–97	201, 206
Mengerians, 97, 98	Memoirs of, 95, 170







Menger and, 102, 167	market-induced drop in rates and, 188,
Methodenstreit and, 97-98, 100, 101	189–190
Nazis and, 278	numerator/denominator in, 229
non-neutrality of money, xx-xxi, xxii	paradox of, 198
perception of time and, 163	properties of, 238
personal style of, xviii	returns and, 234-235
praxeology and, 177	stationarity and, 221
protégé of, 206, 217	Unternehmer and, 179, 186, 187
"von Karajan moment" and, 19–21	"Multiplier effect," 125
wife, Margit, 173, 174, 175, 179	My Life and Work (Ford), 126
Mises-Hayek studies, 179	Myopia, 141, 147
Misesian Stationarity index, xxviii. See also	
MS index	Napoleonic Europe, 63-64,
Misesian strategy, 253	76–77
Misesian tools:	Napoleonic France, 64
central bank hedging and, 248-251	Napoleonic Wars, 65, 67, 89
distortion, witness to, 231–236	National Bureau of Economic Research
homeostasis en force, 229-230	(NBER), 175
initial investment strategy and,	Nationalökonomie: Theorie des Handelns und
236–240	Wirtschaftens, 20
overview of, 227-229	National Recovery Administration
roundabout investor and, 251-252	(NRA), 133
stock market crashes and, 240-244	National Socialism, 168, 171, 175
tail hedging and, 244–248	Nature. See also Brain; Conifers; Evolution
Modern exchange economy, 102	Forest
Modern finance theory, 119	as greatest teacher, 34, 289
Modern market economies, 199–200	"harmony of," 89
Modern Portfolio Theory, 101	human intervention and, 210
Monetary distortion, 26, 27, 229, 232, 233,	Laozi and, 34
240, 248, 249	mate selection, 134-135
Monetary interventionism, 21	natural systems, 202
Monetary policy, xxi, 198, 200, 212	water and, 53–54
Monetary system, xx	'wholeness' in, 46
Money:	"Nature Deficit Disorder," 158
business is money fallacy, 132	Nazi Gleichschaltung, 174
growth, xx	Nazis:
manipulation of, xxi	fleeing the, 173–175, 278
non-neutrality of, xx-xxi, xxii	rise of, 168
supply of, 170–171	stature of Menger and, 175
Moneyball (Lewis), 137	Nazism, 84
Motti strategy, 282	Needleman, Jacob, 9
MS index:	The Netherlands, 219
artificial lowering of rates and, 192, 199	Neue Wiener Tagblatt, 90
buying/selling and, 236	New Deal, 132–133, 175
distortion in markets and, 253, 275	"New Economy," 26
footprints of, 232	Newsweek. 176







New York Times blog, 186	Peters, Ralph, 68
New York University, 169, 175	"Physics envy," 167, 243
Nian or niansui, 8, 29	Pinecones, 33–34, 35, 289, 290
Nibelungenland:	Pit trader. See Trading pit
central bank lowering rates, 190-194	Plain state of rest, 21–23
day of reckoning in, 198-199	Planning for Freedom (Bismark), 101
market-induced drop in interest rates,	Portfolio construction techniques, 273
187–190	The Positive Theory of Capital (Böhm-
Unternehmer in, 179–187	Bawerk), 96, 107, 116
	"Power law," 16
Obliquity (Kay), 130	Power law tail, 27
"The Old Master:"	Praxeology:
false humility and, 5	"acting man" and, 85
Laozi and, 3-4, 29-30	Austrian School and, 84
One-lot, 13, 16	defined, 80
"One-tick loss," 13, 16, 17	gedanken experiments and, 177
On Growth and Form (Thompson), 87	a priori approach of, 167
On the Origin of Species (Darwin), 86-87	state of rest and, 22
On War (Clausewitz), xxvi, 51	Pre-Austrian economists, 76, 84, 102
"Open market operations," 195	Preiskampf ("price duel"), 22, 217
Opportunity cost, 118–119, 120	"Present shock," 157
Option contracts, 26–27	Price discovery, 168
Options, "midcurve," 26	"Price to book" (P/B) ratio, 271,
Order flow:	272, 273
"locals" and, 12–13	"Price to earnings" (P/E) ratios, 271, 272
pit trading and, 11, 25	Principles of Economics (Menger), 90–91, 96
Österreichische Schule, 100, 101–102. See also	97, 99, 170
Austrian School of Economics	Problem of induction, 18
Otto, Nikolaus, 125	Procrastination, 144
Out-of-the-money puts, 245, 247	Production. See also "Mass production"
F,,	capital theory and, 107
Panic of 1819, 219	factors of, 92
The Panic of 1819 (Rothbard), 272	labor hours and, 114
Parable. See Nibelungen	"rings of," 123–124, 125, 132
"Paradox of thrift," 221–222	roundabout (see Produktionsumweg)
Paret, Peter, 67	structure of, 192
Patience:	Productivity:
conifers and, 35	diminishing marginal, 183–184
time preference and, 140	"multiplier effect" and, 125
Paul, Ron, xvii-xxii, 101, 169	Robinson Crusoe and, 111
Payback, 111	Produktionsumweg:
Payoffs:	advantages of, 125
convex, 17, 28	capital accumulation and, 112
"volatility loving," 28	constraints on, 113
Pentagon, 59	defined, 108
People's Republic of China, 59	direct/roundabout way and, 112
reopies respublic of Office, 57	direct, foundabout way and, 112







epitome of, 129 future productivity advantage and, 111 indirect path and, 130 industrialization and, 116 interest rates and, 119, 122 intertemporal strategy and, 262 myopic market and, 267 Robinson Crusoe and, 109–112	Ricardo, David, 117 Rings of capital: capital heterogeneity and, 122–123 capital structures and, 124 Jahresringe, 123–124 roundabout production and, 123–124 Risk, entrepreneur and, 115 The Road to Serfdom (Hayek), xvii
sports/games and, 136, 138	Robinson Crusoe:
time preference and, 144	Austrian tradition and, 88, 262-263
Profits:	in the bond pit, 15–17
aggregate, 189, 190	conifers and, 39
hyperbolic discounting and, 197	as entrepreneur, 224
roundabout means of, xxiv	Produktionsumweg and, 109–112
small margin and, 131	time preference and, 142-143
Progressing economy, 189	Roosevelt Administration, 132–133
Protectionism:	Rothbard, Murray, xvii, xviii, xxvii,
Bastiat and, 81	76, 84, 89, 97, 176, 208, 217,
French government's, 78	221, 272
The Protestant Ethic and the Spirit of	Roundabout approach. See also Austrian
Capitalism (Weber), 171	Investing; Böhm-Bawerk, Eugen
Prototypical tail hedging, 244–248	von; Klipp's Paradox; Roundabout
Prussia:	investing; Shi; Shi (intertemporal
defeat of, 99	strategy); Umweg
Prince August of, 64, 66	Austrian Investing and, 29
Prussian Army, 64, 65, 66, 67, 68	chance to encounter, 27
Psychology of time preference:	conifers and, 35, 36, 45, 46, 49-50
forward selves and, 145-146	convexity and, 28
intertemporal trade-offs, 145, 148	discipline of, xxix
memory/mental time travel, 147-148	entrepreneurs and, 130 (see also Ford,
species development and, 148	Henry)
static gestalt characteristics, 147	gains/losses and, 15
well-being, 145, 146	human activity and, 134-138
Pu (uncarved block), 34, 35	keyword, xxiii
"Push hands." See Tuishou ("push hands")	loss/gain and, 1
	as paradox, 129
Q ratio, 186	sports and, 137
Quantitative easing, 221	starting in, 12
	Roundabout capital, 273
Rae, John, 144	Roundabout investing:
Raico, Ralph, xviii	arrow of time in, 140
Reagan, Ronald, 5	MS index levels and, 248
Return on invested capital (ROIC), 256,	productive capital and, 254
257, 258, 259, 260–261, 262, 263–264,	"Roundabout production," 20, 190, 254.
265, 268, 272	See also Produktionsumweg
Reversion, 207	Rousseau, Jean-Jacques, 80







Dudalf van Habsburg (Crayen Brings)	"basin of attraction" and, 214
Rudolf von Habsburg (Crown Prince).	
See also Habsburg Dynasty Mayerling Incident, 95	of capital, 223–225 central concept, 54
Menger as tutuor to, 93–97	crossbow and, 57–58, 58–59, 63
"Running stops," 24	
	definitions, multiple, 52, 54
Rushkoff, Douglas, 157	epitome of, 278
Russell, Bertrand, 243	intertemporal choice and, 158
Co.D.C	li, weiqi board and, 60–64
S&P Composite Index:	li and, 61, 63–64, 136, 223, 238, 283
capitalization-weighted, 273	motifs/imagery for, 52
"drawdowns," 235	motti strategy and, 282
Siegfried strategy and, 265, 268	as positional advantage, 53
tail hedging and, 245–246	roundabout approach and, 60, 276
total excess returns of, 233	sisu and, 279, 281, 282, 284, 288
Sages, wisdom of, 29, 30	strategy and, 52, 62
Samuelson, Paul, 155–156, 167	Sunzi and, 52
Sand pile effect, 220–222	teleology and, 55
Savings:	time preference and, 139–140,
interest rates and, 190–194	142, 148
investment and, 211	Umweg and, 103
Savings-driven declines, 197	U.S. Department of Defense and, 59
Say, Jean-Baptiste, 76–77, 104	weiqi game and, 62–63
"Scalpers," 17	Ziel, Mittel, Zweck and, 74
Schadenfreude, 48	Shiller, Robert, 190
Scharnhorst, Gerhard von, 66	Sibelius, Jean, xxiv, 287
Schmoller, Gustav, 98, 99	Siegfried:
Schumpeter, Joseph, 19, 83, 101, 115	buying the Siegfrieds, 263–269
Second Republic, 82	the dragon slayer, 255, 255–263, 285
Securities markets, 285	as far-sighted visionary, 267
Security Analysis (Graham), 270, 271	portfolio of, 273
Seen and foreseen:	shi and, 224–225
bridge from seen to foreseen, 76	Siilasvuo, Hjalmar, 283
cause, as seen, 82	"Silk reeling," 6
foreseen, 75, 82	"Sinking fund," 193
that which must be foreseen, 78-85	Sinologists, 4, 35
Self-control, 151, 152, 153	Sisu of boreal forest:
Self-determination, 287	character/character-building,
Self-knowledge, time preference and,	284–290
144–145	Finns and, 278–284
Self-regulation, 158	roundabout approach and,
Self-similarity, 25	277–278
Sennholz, Hans, xvii	Skewness, 163
Servomechanisms ("servos"), 213	Smith, Adam:
Seven Years' War, 65	cybernetics and, 216
Shi (intertemporal strategy). See also	free-market stance of, 76
Roundabout approach	"invisible hand," 222
1.1	*







land capital theory, 117	ancient text, 3
necktie, 287	Clausewitz and, 65
"universal opulence," 92	indirect means and, 51
Wealth of Nations, 29, 93	nuanced, 52
Socialism, xvii, 82, 100–101, 168, 171, 172,	oral tradition and, 56
175, 219	shi and, 52, 60
Socialism: An Economic and Sociological	victory and, 57
Analysis (Mises), 172	Vom Kriege and, 54
Softness overcoming hardness, 6–9	Suomussalmi, battle of, 283
Soil rent theory, 117	, ,
Spitznagel, Gramma, 11	Taijiquan, 59, 214
Spontaneous order, 217–219	"Tail events," xxviii. See also "Black swar
Sports/games, 135–137	problem
Stalin, Joseph, 279	"Tail hedging," xxviii, 28,
Stanford University, 152, 159	244–248, 251
State of rest, 21–23, 217	Tail production firm, 28
Static gestalt characteristics, 147	Taleb, Nassim, 27–28, 241
Stationarity, 185, 186, 190, 221, 224	"Teleological fallacy," 75
Stationary economy, 182–183, 184, 191	Teleology:
Stock market:	of Baer's butterfly, 88–89
homeostatic process and, 230	example of, 80
interest rates and, 191	final objective and, 52
losses/busts, xxviii, 28	Kantian, 87
as "side show," 131	of market, 205–207
stock price movements and, xxix	market process and, xxvii
Stock market crashes, 25, 132, 173,	mechanisms of, xxiv
240-244. See also Sand pile effect	of purposeful "behavior," 38
Stock prices, 190	revival of, 86–87
"Stop orders," 24	shi approach and, 54
Stories. See Aesop's fables; Cautionary tales;	of time, 148, 160–161
Nibelungen	Teleonomy, 89
Strategic advantage, 290	"Tells," 24
Strategy: The Indirect Approach (Hart), 69	Temporal bias, 143
"Strike price," 27	Temporal dimension, farming and, 35
Subjective theory, 113	That Which Is Seen, and That Which Is
Subjective value theory, 115, 261	Not Seen (Bastiat), 19, 82
Sun, Wu (Master Sun):	Theorie des Geldes (Mises), 170, 171, 173
bird of prey of, 230, 282	Theory and History (Mises), 100
Clausewitz and, 52	Theory of Money and Credit (Mises),
crossbows and, 58–59	170, 173
Dao of, 56-57	Thompson, D'Arcy, 87
military strategy and, 224, 283	Tijiquan (martial art):
shi of, 54	creation of, 6
strategic doppelgänger of, 54, 55	described, 7, 9
Sunzi attributed to, 51	tuishou and, 7–8
Sunzi (Daoist text):	wuwei of. 8







3 3 0 INDEX

Time. See also Intertemporal dimension;	Trader:
Temporal dimension	free options, 162, 163
arrow of, 140	privileges of, 12–15
as milieu, xxiii	Trading pit. See also "Carry trades"
in Mise's worldview, 20	bond pit, 11, 15–17, 23, 25
patience and, 3	configuration of, 11–12
perception of, 2	early interest in, 9–10
stockpile of, 110	grain futures markets, 10
subjectivity of, 153–158	greatest dissident (see Klipp, Everett)
Time expectations, skewed, 140	order flow and, 11
Time inconsistency:	price discovery and, 168
financial implications and, 144	Traité d'économie politique (Say), 77
hyperbolic discounting and, 140, 144	Treasuries, long-term, 195
myopic, 141, 215	The Treasury Bond Basis, 11
success and, 165	Treasury bonds, U.S., 11
term structure and, 194–198	Treatise on Political Economy (Say), 77
Time preference:	Troubled Asset Relief Program of 2008
addiction and, 158–159	(TARP), 211
brain injury and, 149–151	Tuishou ("push hands"):
consumer, 189	on battlefield, 282
degrees of impatience, 21, 22	conifers/angiosperms and, 47
depth of field and, 142	convexity and, 28
drop in, 190	described, 7–8
evolution and, 164–165	essential sequence of, 8
forward perception, 160-161	market as process and, 169
interest and, 133	nian or niansui, 8, 29
li, shi and, 139–140	option trade and, 27
meta-knowledge of, 143, 165	practitioner of, 8–9
monetary policy and, 212	ultimate game of, 250
patience/impatience and, 140	zou or zouhua, 8, 29
procrastination and, 144	"Tulip mania," 219–220
Produktionsumweg and, 144	Turgot, A.R.J., 76
psychology of (see Psychology of time	·
preference)	Umweg:
time inconsistency and (see Time	advantage of being, 134
inconsistency)	Böhm-Bawerk and, 103-107, 108,
Tobin, James, 186, 233	110, 112, 113–116, 121, 123,
Tobin's Q ratio, 186, 231	126, 133
Today and Tomorrow (Ford), 126	Robinson Crusoe and, 110
Toffler, Alvin, 157	shi and, 103
Tolstoy, Leo, 67	stationarity and, 224
"Too big to fail," 163, 210, 211	time preference and, 160-161
Tortoise and hare fable, 48, 122, 207, 272	Uncarved block (pu), 34, 35
Tough, Paul, 288	"Uncle George." See Viksnins, George
Tradeoff:	("Uncle George")
addiction and, 158-159	Universa Investments, 28, 29, 248
intertemporal, 62-63, 145, 148	Universal strategic thinking, 104
-	







University of Vienna, 76, 89, 93, 99, 107,	Wealth of Nations (Smith), 29, 76, 93
170, 171, 175	Weaver, Earl, 136–137
Unternehmer:	Weber, Max, 171
"current immediate"/"later immediate,"	Weiner, Norbert, 89, 213, 214
105	Weiqi game:
Henry Ford as, 125, 126	on battlefield, 281
intertemporal aspect of, 137	game board, 61
in land of Nibelungen, 179–187	intertemporal tradeoff, 62-63
roundabout path of (see Umweg)	inversion and, 135-136
"undertaker" and, 76, 104	object of game, 62
Upstream/downstream:	opening sequence, 63, 64
Bastiat and, 85	shi strategy and, 60-61, 137, 238
military strategy and, 73-74	Wei wuwei ("doing/not doing"):
positioning and, 104	of the conifers, 47
U.S. Secretary of Defense, 59	as paradox, 5
U.S. Treasury bond, 30-year, 11	shi and, 223
·	steermanship and, 214
Value investing, 142, 269-275	Well-being, 145, 146
Value stocks, 272	Wiener Tagblatt, 90
Vertical integration, 125	Wiener Zeitung, 90
Vetsera, Marie Alexandrine von, 95	Wieser, Friedrich von, 107, 118
Vienna:	Wildfire:
as crossroads between east/west, 85-87	lessons learned, 209-212
newspapers of, 90	post-wildfire conditions and, 45, 49
Ringstrasse in, 85	resource reallocation and, 41–43
Vienna School, 19	serotinous pinecones and, 47-48
Vienna Woods, 95, 121	suppression of, 207–209
Viksnins, George ("Uncle George"), 19,	Wilhelm Meisters Wanderjahre (Goethe), 35
20, 29	Wilhem, Friedrich, III (king), 67
Virgil, 170	Will-power, 151, 152, 159
Vom Kriege (Clausewitz):	Winter War, 278–284
advantages and, 283	Wisdom:
direct confrontation and, 51	imagery and, 35
Sunzi and, 54	of the sages, 29, 30
as target of misinterpretation, xxvi,	"Wise circuitous methods," 111
68–70	Woods, Tiger, 135, 161
on war, 54–55	Worldview, Austrian, 85
"Von Karajan moment," 18–21	Wu, 58
	Wuwei:
Wall Street, xxiv, 26, 161-164	defined, 5
Wall Street Journal, 210	"false humility" of, 142
Walras, Léon, 90, 91	Laozi and, 5
War and Peace (Tolstoy), 67	shi and, 53
Warfare. See Military strategy	tangible representation of, 6
Warring States of China, xxv, 112, 286	of tijiquan, 8
Warring States Period, 3, 29, 51, 56, 64, 217	warfare and, 57
"Wealth effect," 221	weigi board and, 137
· · · · · · · · · · · · · · · · · · ·	







332 INDEX

Yellowstone effect, 207–209 Yellowstone National Park, 42, 209, 210, 212, 213 Yielding, circular, 8 *Yin* and *yang*, 59–60, 61

Zhangsanfeng (Daoist priest), 6, 59
Zheng, Manqing, 8
Zhuangzi (Daoist scholar), 3, 217, 219
Ziel, Mittel, und Zweck:
Austrian methodology and, 102
baseball and, 136–137
capitalism and, 286
central bank hedging, 248–251

conflating, 89
conifers and, 289
framework of, 52
German language and, 55, 86
means-ends framework and, 91
military strategy and, 224
roundabout approach and, 103, 130–131
seen, foreseen and, 76
shi and, 53, 54, 74
time preference and, 161
upstream/downstream and, 85
Wall Street and, 161
Zweck finally attained, 275–276
Zou or zouhua, 8, 29, 272



