

PRINCIPLES

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RAY DALIO

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**To Barbara,
the half of me who has made me
whole for more than forty years.**

PART I

WHERE I'M COMING FROM

1

1	My Call to Adventure: 1949–1967	5
2	Crossing the Threshold: 1967–1979	11
3	My Abyss: 1979–1982	27
4	My Road of Trials: 1983–1994	39
5	The Ultimate Boon: 1995–2010	67
6	Returning the Boon: 2011–2015	91
7	My Last Year and My Greatest Challenge: 2016–2017	117
8	Looking Back from a Higher Level	121

PART II

LIFE PRINCIPLES

131

1	Embrace Reality and Deal with It	132
2	Use the 5-Step Process to Get What You Want Out of Life	168
3	Be Radically Open-Minded	182
4	Understand That People Are Wired Very Differently	204
5	Learn How to Make Decisions Effectively	234
	Life Principles: Putting It All Together	267
	Summary and Table of Life Principles	272

PART III

WORK PRINCIPLES

279

Summary and Table of Work Principles	280
TO GET THE CULTURE RIGHT . . .	318
1 Trust in Radical Truth and Radical Transparency	322
2 Cultivate Meaningful Work and Meaningful Relationships	338
3 Create a Culture in Which It Is Okay to Make Mistakes and Unacceptable Not to Learn from Them	348
4 Get and Stay in Sync	356
5 Believability Weight Your Decision Making	370
6 Recognize How to Get Beyond Disagreements	384
TO GET THE PEOPLE RIGHT . . .	394
7 Remember That the WHO Is More Important than the WHAT	398
8 Hire Right, Because the Penalties for Hiring Wrong Are Huge	404
9 Constantly Train, Test, Evaluate, and Sort People	420
TO BUILD AND EVOLVE YOUR MACHINE . . .	444
10 Manage as Someone Operating a Machine to Achieve a Goal	448
11 Perceive and Don't Tolerate Problems	472
12 Diagnose Problems to Get at Their Root Causes	482
13 Design Improvements to Your Machine to Get Around Your Problems	496
14 Do What You Set Out to Do	518
15 Use Tools and Protocols to Shape How Work Is Done	524
16 And for Heaven's Sake, Don't Overlook Governance!	530
Work Principles: Putting It All Together	539
 CONCLUSION	 543
APPENDIX: TOOLS AND PROTOCOLS FOR BRIDGEWATER'S IDEA MERITOCRACY	545
BIBLIOGRAPHY	553
INDEX	555
ACKNOWLEDGMENTS	565
ABOUT THE AUTHOR	569

INTRODUCTION

Before I begin telling you what I think, I want to establish that I'm a "dumb shit" who doesn't know much relative to what I need to know. Whatever success I've had in life has had more to do with my knowing how to deal with my *not* knowing than anything I know. The most important thing I learned is an approach to life based on principles that helps me find out what's true and what to do about it.

I'm passing along these principles because I am now at the stage in my life in which I want to help others be successful rather than to be more successful myself. Because these principles have helped me and others so much, I want to share them with you. It's up to you to decide how valuable they really are and what, if anything, you want to do with them.

Principles are fundamental truths that serve as the foundations for behavior that gets you what you want out of life. They can be applied again and again in similar situations to help you achieve your goals.

Every day, each of us is faced with a blizzard of situations we must respond to. Without principles we would be forced to react to all the things life throws at us individually, as if we were experiencing each of them for the first time. If instead we classify these situations into

PRINCIPLES

types and have good principles for dealing with them, we will make better decisions more quickly and have better lives as a result. Having a good set of principles is like having a good collection of recipes for success. All successful people operate by principles that help them be successful, though what they choose to be successful at varies enormously, so their principles vary.

To be principled means to consistently operate with principles that can be clearly explained. Unfortunately, most people can't do that. And it's very rare for people to write their principles down and share them. That is a shame. I would love to know what principles guided Albert Einstein, Steve Jobs, Winston Churchill, Leonardo da Vinci, and others so I could clearly understand what they were going after and how they achieved it and could compare their different approaches. I'd like to know which principles are most important to the politicians who want me to vote for them and to all the other people whose decisions affect me. Do we have common principles that bind us together—as a family, as a community, as a nation, as friends across nations? Or do we have opposing principles that divide us? What are they? Let's be specific. This is a time when it is especially important for us to be clear about our principles.

My hope is that reading this book will prompt you and others to discover your own principles from wherever you think is best and ideally write them down. Doing that will allow you and others to be clear about what your principles are and understand each other better. It will allow you to refine them as you encounter more experiences and to reflect on them, which will help you make better decisions and be better understood.

HAVING YOUR OWN PRINCIPLES

We come by our principles in different ways. Sometimes we gain them through our own experiences and reflections. Sometimes we accept them from others, like our parents, or we adopt holistic packages of principles, such as those of religions and legal frameworks.

Because we each have our own goals and our own natures, each of

us must choose our own principles to match them. While it isn't necessarily a bad thing to use others' principles, adopting principles without giving them much thought can expose you to the risk of acting in ways inconsistent with your goals and your nature. At the same time, you, like me, probably don't know everything you need to know and would be wise to embrace that fact. If you can think for yourself while being open-minded in a clearheaded way to find out what is best for you to do, and if you can summon up the courage to do it, you will make the most of your life. If you can't do that, you should reflect on why that is, because that's most likely your greatest impediment to getting more of what you want out of life.

That brings me to my first principle:

● **Think for yourself to decide
1) what you want, 2) what is true,
and 3) what you should do to
achieve #1 in light of #2 . . .**

. . . and do that with humility and open-mindedness so that you consider the best thinking available to you. Being clear on your principles is important because they will affect all aspects of your life, many times a day. For example, when you enter into relationships with others, your principles and their principles will determine how you interact. People who have shared values and principles get along. People who don't will suffer through constant misunderstandings and conflicts. Think about the people you are closest to: Are their values aligned with yours? Do you even know what their values or principles are? Too often in relationships, people's principles aren't clear. This is especially problematic in organizations where people need to have shared principles to be successful. Being crystal clear about my principles is why I labored so much over every sentence in this book.

The principles you choose can be anything you want them to be as long as they are authentic—i.e., as long as they reflect your true

PRINCIPLES

character and values. You will be faced with millions of choices in life, and the way you make them will reflect the principles you have—so it won't be long before the people around you will be able to tell the principles you are really operating by. The worst thing you can be is a phony, because if you're a phony you will lose people's trust and your own self-respect. So you must be clear about your principles and then you must "walk the talk." If inconsistencies seem to exist, you should explain them. It's best to do that in writing because by doing so, you will refine your written principles.

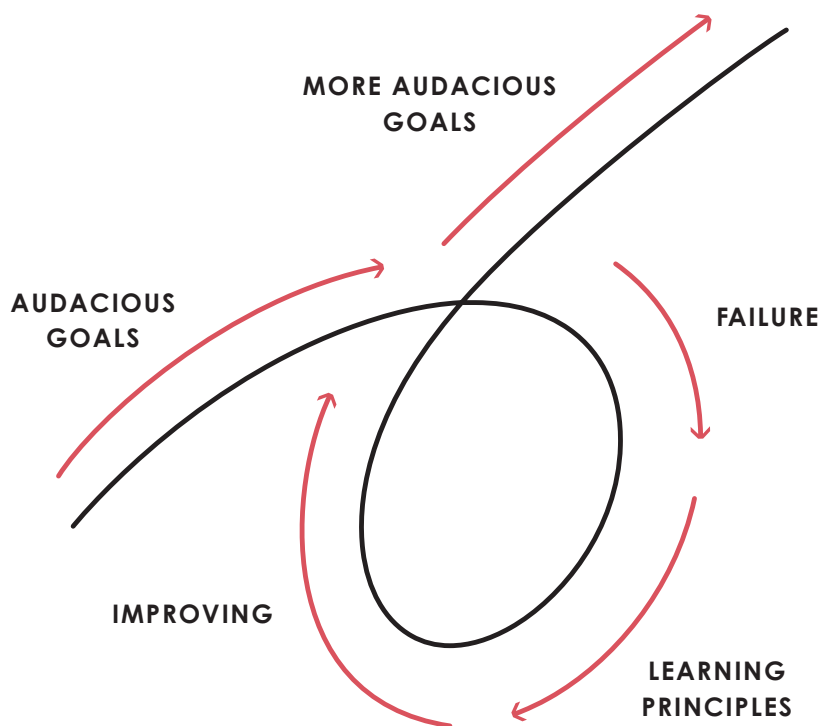
While I will be sharing my own principles, I want to make clear to you that I don't expect you to follow them blindly. On the contrary, I want you to question every word and pick and choose among these principles so you come away with a mix that suits you.

MY PRINCIPLES AND HOW I LEARNED THEM

I learned my principles over a lifetime of making a lot of mistakes and spending a lot of time reflecting on them. Since I was a kid, I've been a curious, independent thinker who ran after audacious goals. I got excited about visualizing things to go after, had some painful failures going after them, learned principles that would prevent me from making the same sort of mistakes again, and changed and improved, which allowed me to imagine and go after even more audacious goals and do that rapidly and repeatedly for a long time. So to me life looks like the sequence you see on the opposite page.

I believe that the key to success lies in knowing how to both strive for a lot and fail well. By failing well, I mean being able to experience painful failures that provide big learnings without failing badly enough to get knocked out of the game.

This way of learning and improving has been best for me because of what I'm like and because of what I do. I've always had a bad rote memory and didn't like following other people's instructions, but I loved figuring out how things work for myself. I hated school because of my bad memory but when I was twelve I fell in love with trading the markets. To make money in the markets, one needs to be



an independent thinker who bets against the consensus and is right. That's because the consensus view is baked into the price. One is inevitably going to be painfully wrong a lot, so knowing how to do that well is critical to one's success. To be a successful entrepreneur, the same is true: One also has to be an independent thinker who correctly bets against the consensus, which means being painfully wrong a fair amount. Since I was both an investor and an entrepreneur, I developed a healthy fear of being wrong and figured out an approach to decision making that would maximize my odds of being right.

● **Make believability-weighted decisions.**

My painful mistakes shifted me from having a perspective of “I know I'm right” to having one of “How do I know I'm right?” They gave me the humility I needed to balance my audacity. Knowing that I could be painfully wrong and curiosity about why other smart people saw things differently prompted me to look at things through the eyes of others as well as my own. That allowed me to see many more dimensions than if I saw things just through my own eyes. Learning how to weigh people's inputs so that I chose the best ones—in other words, so that I believability weighted my decision making—increased my chances of being right and was thrilling. At the same time, I learned to:

● **Operate by principles . . .**

. . . that are so clearly laid out that their logic can easily be assessed and you and others can see if you walk the talk. Experience taught me how invaluable it is to reflect on and write down my decision-making criteria whenever I made a decision, so I got in the habit of doing that. With time, my collection of principles became like a collection

of recipes for decision making. By sharing them with the people at my company, Bridgewater Associates, and inviting them to help me test my principles in action, I continually refined and evolved them. In fact, I was able to refine them to the point that I could see how important it is to:

● **Systemize your decision making.**

I discovered I could do that by expressing my decision-making criteria in the form of algorithms that I could embed into our computers. By running both decision-making systems—i.e., mine in my head and mine in the computer—next to each other, I learned the computer could make better decisions than me because it could process vastly more information than I could, and it could do it faster and unemotionally. Doing that allowed me and the people I worked with to compound our understanding over time and improve the quality of our collective decision making. I discovered that such decision-making systems—especially when believability weighted—are incredibly powerful and will soon profoundly change how people around the world make all kinds of decisions. Our principle-driven approach to decision making has not only improved our economic, investment, and management decisions, it has helped us make better decisions in every aspect of our lives.

Whether or not your own principles are systemized/computerized is of secondary importance. The most important thing is that you develop your own principles and ideally write them down, especially if you are working with others.

It was that approach and the principles it yielded, and not me, that took me from being an ordinary middle-class kid from Long Island to being successful by a number of conventional measures—like starting a company out of my two-bedroom apartment and building it into the fifth most important private company in the U.S. (according to *Fortune*), becoming one of the one hundred richest people in the world (according to *Forbes*), and being considered one of the one

PRINCIPLES

hundred most influential (according to *Time*). They led me to a perch from which I got to see success and life very differently than I had imagined, and they gave me the meaningful work and meaningful relationships I value even more than my conventional successes. They gave me and Bridgewater far more than I ever dreamed of.

Until recently, I didn't want to share these principles outside of Bridgewater because I don't like public attention and because I thought it would be presumptuous to tell others what principles to have. But after Bridgewater successfully anticipated the financial crisis of 2008–09, I got a lot of media attention and so did my principles and Bridgewater's unique way of operating. Most of those stories were distorted and sensationalistic, so in 2010, I posted our principles on our website so people could judge them for themselves. To my surprise, they were downloaded over three million times and I was flooded with thank-you letters from all over the world.

I will give them to you in two books—Life and Work Principles in one book, and Economic and Investment Principles in the other.

HOW THESE BOOKS ARE ORGANIZED

Since I have spent most of my adult life thinking about economies and investing, I considered writing Economic and Investment Principles first. But I decided to begin with my Life and Work Principles because they're more overarching and I've seen how well they work for people, independent of their careers. Since they go so well together, they are combined here in one book prefaced by a short autobiography, *Where I'm Coming From*.

Part I: Where I'm Coming From

In this part, I share some of the experiences—most importantly, my mistakes—that led me to discover the principles that guide my decision making. To tell you the truth, I still have mixed feelings about telling my personal story, because I worry that it might distract you from the principles themselves and from the timeless and uni-

INTRODUCTION

versal cause-effect relationships that inform them. For that reason, I wouldn't mind if you decided to skip this part of the book. If you do read it, try to look past me and my particular story to the logic and merit of the principles I describe. Think about them, weigh them, and decide how much, if at all, they apply to you and your own life circumstances—and specifically, whether they can help you achieve your goals, whatever they may be.

Part II: Life Principles

The overarching principles that drive my approach to everything are laid out in Life Principles. In this section, I explain my principles in greater depth and show how they apply in the natural world, in our private lives and relationships, in business and policymaking, and of course at Bridgewater. I'll share the 5-Step Process I've developed for achieving one's goals and making effective choices; I'll also share some of the insights I've gained into psychology and neuroscience and explain how I've applied them in my private life and in my business. This is the real heart of the book because it shows how these principles can be applied to most anything by most anyone.

Part III: Work Principles

In Work Principles, you'll get a close-up view of the unusual way we operate at Bridgewater. I will explain how we've coalesced our principles into an idea meritocracy that strives to deliver meaningful work and meaningful relationships through *radical truth* and *radical transparency*. I'll show you how this works at a granular level and how it can be applied to nearly any organization to make it more effective. As you will see, we are simply a group of people who are striving to be excellent at what we do and who recognize that we don't know much relative to what we need to know. We believe that thoughtful, unemotional disagreement by independent thinkers can be converted into believability-weighted decision making that is smarter and more effective than the sum of its parts. Because the power of a group is so much greater than the power of an individual, I believe these work

PRINCIPLES

principles are even more important than the life principles on which they're based.

What Will Follow This Book

This print book will be followed by an interactive book in the form of an app that will take you into videos and immersive experiences so that your learning is more experiential. The app will also get to know you through your interactions with it in order to provide you with more personalized advice.

This book and the app will be followed by another volume containing two other parts, Economic and Investment Principles, in which I will pass along the principles that have worked for me and that I believe might help you in these areas.

After that, there will be no advice I can give that will not be available in these two books, and I will be done with this phase of my life.

Think for yourself!

1) What do you want?

2) What is true?

**3) What are you going
to do about it?**

PART I

**WHERE I'M
COMING
FROM**

Time is like a river that carries us forward into encounters with reality that require us to make decisions. We can't stop our movement down this river and we can't avoid those encounters. We can only approach them in the best possible way.

When we are children, other people, typically our parents, guide us through our encounters with reality. As we get older, we begin to make our own choices. We choose what we are going after (our goals), and that influences our paths. If you want to be a doctor, you go to medical school; if you want to have a family, you find a mate; and so on. As we move toward these goals, we encounter problems, make mistakes, and run up against our own personal weaknesses. We learn about ourselves and about reality and make new decisions. Over the course of our lives, we make millions and millions of decisions that are essentially bets, some large and some small. It pays to think about how we make them because they are what ultimately determine the quality of our lives.

We are all born with different thinking abilities but we aren't born with decision-making skills. We learn them from our encounters with reality. While the path I went down is unique—being born to particular parents, pursuing a particular career, having particular colleagues—I believe that the principles I learned along the way will work equally well for most people on most paths. As you read my story, try to look through it and me to the underlying cause-and-effect relationships—at the choices I made and their consequences, what I

PRINCIPLES

learned from them, and how I changed the ways I make decisions as a result. Ask yourself what you want, seek out examples of other people who got what they wanted, and try to discern the cause-and-effect patterns behind their achievements so you can apply them to help you achieve your own goals.

To help you understand where I'm coming from, I am giving you an unvarnished account of my life and career, placing special emphasis on my mistakes and weaknesses and the principles I learned from them.

CHAPTER 1

MY CALL TO ADVENTURE:

1949–1967

I was born in 1949 and grew up in a middle-class Long Island neighborhood, the only son of a professional jazz musician and a stay-at-home mom. I was an ordinary kid in an ordinary house and a worse-than-ordinary student. I loved playing around with my pals—touch football in the streets and baseball in a neighbor's backyard when I was young, and chasing girls when I got older.

Our DNA gives us our innate strengths and weaknesses. My most obvious weakness was my bad rote memory. I couldn't, and still can't, remember facts that don't have reasons for being what they are (like phone numbers), and I don't like following instructions. At the same time, I was very curious and loved to figure things out for myself, though that was less obvious at the time.

I didn't like school, not just because it required a lot of memorization, but because I wasn't interested in most of the things my teachers thought were important. I never understood what doing well in school would get me other than my mother's approval.

My mother adored me and worried about my poor grades. Up until middle school, she would make me go to my room and study for a couple of hours before going out to play, but I couldn't bring myself to do it. She was always there for me. She folded and rubber-banded

the newspapers I delivered and baked cookies for the two of us to eat while we watched horror movies together on Saturday nights. She died when I was nineteen. At the time, I couldn't imagine ever laughing again. Now when I think of her I smile.

My dad worked very late hours as a musician—until about three in the morning—so he slept late on weekends. As a result, we didn't have much of a relationship when I was young other than him constantly nagging me to take care of chores like mowing the lawn and cutting the hedges, which I hated. He was a responsible man dealing with an irresponsible kid. Memories of how we interacted seem funny to me today. For example, one time he told me to cut the grass and I decided to do just the front yard and postpone doing the back, but then it rained for a couple of days and the backyard grass became so high I had to cut it with a sickle. That took so long that by the time I was finished, the front yard was too high to mow, and so on.

After my mother died, my dad and I became very close, especially when I started my own family. I both liked and loved him. He had a casual, fun way about him the way musicians tend to, and I admired his strong character, which I assume came from living through the Great Depression and fighting in both World War II and the Korean War. I have memories of him from when he was in his seventies, not hesitating to drive through big snowstorms, shoveling himself out whenever he got stuck like it was no big deal. After playing in clubs and cutting records for most of his life, he began a second career in his midsixties, teaching music in high school and at a local community college, which he continued until he had a heart attack at eighty-one. He lived another decade after that, as sharp as ever mentally.

When I didn't want to do something, I would fight it, but when I was excited about something, nothing could hold me back. For example, while I resisted doing chores at home, I eagerly did them outside the house to earn money. Starting at age eight, I had a newspaper route, shoveled snow off people's driveways, caddied, bussed tables and washed dishes at a local restaurant, and stocked shelves at a nearby department store. I don't remember my parents encouraging me to do these jobs so I can't say how I came by them. But I do know that

having those jobs and having some money to handle independently in those early years taught me many valuable lessons I wouldn't have learned in school or at play.

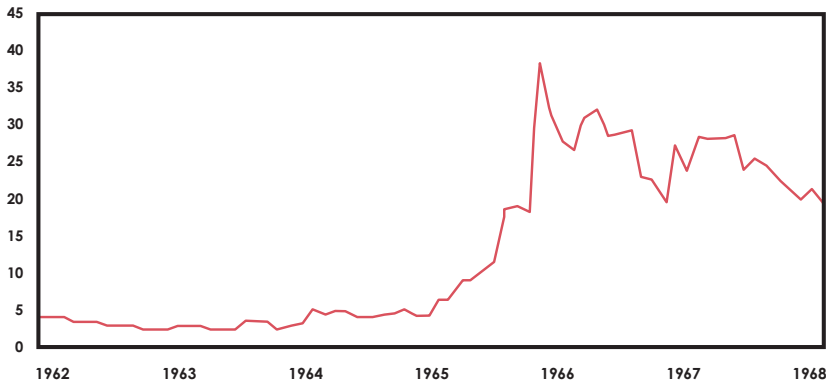
In my early years the psychology of the 1960s U.S. was aspirational and inspirational—to achieve great and noble goals. It was like nothing I have seen since. One of my earliest memories was of John F. Kennedy, an intelligent, charismatic man who painted vivid pictures of changing the world for the better—exploring outer space, achieving equal rights, and eliminating poverty. He and his ideas had a major effect on my thinking.

The United States was then at its peak relative to the rest of the world, accounting for 40 percent of its economy compared to about 20 percent today; the dollar was the world's currency; and the U.S. was the dominant military power. Being “liberal” meant being committed to moving forward in a fast and fair way, while being “conservative” meant being stuck in old and unfair ways—at least that's how it seemed to me and to most of the people around me. As we saw it, the U.S. was rich, progressive, well managed, and on a mission to improve quickly at everything. I might have been naive but I wasn't alone.

In those years, everyone was talking about the stock market, because it was doing great and people were making money. This included the people playing at a local golf course called Links where I started caddying when I was twelve. So I took my caddying money and started playing the stock market. My first investment was in Northeast Airlines. I bought it because it was the only company I'd heard of that was selling for less than \$5 a share. I figured the more shares I bought, the more money I would make. That was a dumb strategy, but I tripled my money. Northeast Airlines was actually about to go broke and another company acquired it. I got lucky, but I didn't know it at the time. I just thought making money in the markets was easy, so I was hooked.

In those days, *Fortune* magazine had a little tear-out coupon you could mail in to get free annual reports from Fortune 500 companies. I ordered them all. I can still remember watching the mailman unhappily lugging all those reports to our door, and I dug into every

NORTHEAST AIRLINES EQUITY PRICE



one of them. That was how I began building an investment library. As the stock market continued to climb, World War II and the Depression seemed like distant memories and investing seemed like simply a matter of buying anything and watching it go up. It would certainly go up, the common knowledge held, because managing the economy had developed into a science. After all, stocks had nearly quadrupled over the previous ten years, and some had done much better than that.

As a result, “dollar-cost averaging”—investing essentially the same dollar amount in the market every month, no matter how few or many shares it could buy—was the strategy most people followed. Of course, picking the best stocks was even better, so that’s what I and everyone else tried to do. There were thousands to choose from, all neatly listed on the last few pages of the newspaper.

While I liked playing the markets, I also loved playing around with my friends, whether in the neighborhood when I was a kid, using fake IDs to get into bars when we were teens, or, nowadays, going to music festivals and on scuba-diving trips together. I’ve always been an independent thinker inclined to take risks in search of rewards—not just in the markets, but in most everything. I also feared boredom and mediocrity much more than I feared failure. For me, great is better than terrible, and terrible is better than mediocre, because terrible at least gives life flavor. The high school yearbook quote my friends chose for me was from Thoreau: “If a man does not keep pace with his

WHERE I'M COMING FROM

companions, perhaps it is because he hears a different drummer. Let him step to the music which he hears, however measured or far away.”

In 1966, my senior year of high school, the stock market was still booming and I was making money and having a blast, cutting school with my best friend Phil to go surfing, and doing what fun-loving high school boys usually do. Of course I didn’t know it then, but that year was to be the stock market’s top. After that, almost everything I thought I knew about the markets was proven wrong.

CHAPTER 2

CROSSING THE THRESHOLD:

1967–1979

I came into this period with the biases I had picked up from my experiences and the people around me. In 1966, asset prices reflected investors' optimism about the future. But between 1967 and 1979, bad economic surprises led to big and unexpected price declines. Not just the economy and the markets but social sentiment deteriorated as well. Living through that taught me that while almost everyone expects the future to be a slightly modified version of the present, it is usually very different. But I didn't know that in 1967. Certain that stocks would eventually rebound, I kept buying them, even as the market fell and I lost money until I figured out what was going wrong and how to deal with it. I gradually learned that prices reflect people's expectations, so they go up when actual results are better than expected and they go down when they are worse than expected. And most people tend to be biased by their recent experiences.

That fall, I started at a local college, C. W. Post. I got in on probation because of my C average in high school. But unlike high school, I loved college because I could learn about things that interested me, not because I had to, so I got great grades. I also loved living away from home and having independence.

Learning to meditate helped too. When the Beatles visited India in

1968 to study Transcendental Meditation at the ashram of Maharishi Mahesh Yogi, I was curious to learn it, so I did. I loved it. Meditation has benefited me hugely throughout my life because it produces a calm open-mindedness that allows me to think more clearly and creatively.

I majored in finance in college because of my love for the markets and because that major had no foreign language requirement—so it allowed me to learn what I was interested in, both inside and outside class. I learned a lot about commodity futures from a very interesting classmate, a Vietnam veteran quite a bit older than me. Commodities were attractive because they could be traded with very low margin requirements, meaning I could leverage the limited amount of money I had to invest. If I could make winning decisions, which I planned to do, I could borrow more to make more. Stock, bond, and currency futures didn't exist back then. Commodity futures were strictly real commodities like corn, soybeans, cattle, and hogs. So those were the markets I started to trade and learn about.

My college years coincided with the era of free love, mind-expanding drug experimentation, and rejection of traditional authority. Living through it had a lasting effect on me and many other members of my generation. For example, it deeply impacted Steve Jobs, whom I came to empathize with and admire. Like me, he took up meditation and wasn't interested in being taught as much as he loved visualizing and building out amazing new things. The times we lived in taught us both to question established ways of doing things—an attitude he demonstrated superbly in Apple's iconic "1984" and "Here's to the Crazy Ones," which were ad campaigns that spoke to me.

For the country as a whole, those were difficult years. As the draft expanded and the numbers of young men coming home in body bags soared, the Vietnam War split the country. There was a lottery based on birthdates to determine the order of those who would be drafted. I remember listening to the lottery on the radio while playing pool with my friends. It was estimated that the first 160 or so birthdays called would be drafted, though they read off all 366 dates. My birthday was forty-eighth.

I wasn't smart enough to be afraid of going to war because I naively thought nothing bad could happen to me, but I didn't want to go

because I was charging forward with my life and to put it on hold for two years seemed like an eternity. My dad, though, was adamantly against the war and hell-bent against me going, even though he had believed in and fought in the prior two wars. He had me examined by a doctor who discovered I had hypoglycemia, which gave me an exemption. When I look back on that, I see that I got out of serving on a technicality—that my dad was essentially helping me dodge the draft—which now gives me mixed feelings. I feel guilty I didn't do my part, relieved I didn't experience the harmful consequences so many others suffered from the war, and appreciative of my dad for the love behind his effort to protect me. I have no idea what I'd do if I were faced with the same situation today.

As America's politics and economy deteriorated, the country's mood became depressed. The Tet Offensive in January 1968¹ seemed to convey the U.S. was losing the war; that same year Lyndon Johnson decided not to run for a second term and Richard Nixon was elected, beginning an even more difficult era. At the same time, France's president Charles de Gaulle was turning in his country's dollars for gold because he was concerned the U.S. was printing money to finance its spending. Watching the news and the market move together, I began to see the whole picture and understand the cause-effect relationship between the two.

Around 1970 or 1971, I noticed gold was starting to tick up in world markets. Until then, like most people, I hadn't paid much attention to currency rates because the currency system had been stable throughout my lifetime. But as currency events increasingly appeared in the news, they caught my attention. I learned that other currencies were fixed against the dollar, that the dollar was fixed against gold, that Americans weren't allowed to own gold (though I wasn't sure why), and that other central banks could convert their paper dollars into gold, which was how they were assured that they wouldn't be hurt if the U.S. printed too many dollars. I heard our government

¹ A surprise simultaneous attack by the North Vietnamese on more than one hundred cities and towns in South Vietnam.

officials pooh-pooh the worries about the dollar and the excitement about gold, assuring us that the dollar was sound and that gold was just an archaic metal. Speculators were behind the rising gold prices, they said, and they would get burned once things settled down. Back then, I still assumed that government officials were honest.

In the spring of 1971, I graduated college with a nearly perfect grade point average, which got me into Harvard Business School. The summer before I started at HBS, I got a job as a clerk on the floor of the New York Stock Exchange. By midsummer, the dollar problem began to reach a breaking point. There were reports that Europeans wouldn't accept dollars from American tourists. The global monetary system was in the process of breaking down, but that wasn't clear to me quite yet.

Then, on Sunday, August 15, 1971, President Nixon went on television to announce that the U.S. would renege on its promise to allow dollars to be turned in for gold, which led the dollar to plummet. Since government officials had promised not to devalue the dollar, I listened with amazement as he spoke. Instead of addressing the fundamental problems behind the pressure on the dollar, he continued to blame speculators, crafting his words to make it sound like he was moving to support the dollar while his actions were doing just the opposite. "Floating it," as Nixon was doing, and then letting it sink like a stone, looked a lot like a lie to me. Over the decades since, I've repeatedly seen policymakers deliver such assurances immediately before currency devaluations, so I learned not to believe government policymakers when they assure you that they won't let a currency devaluation happen. The more strongly they make those assurances, the more desperate the situation probably is, so the more likely it is that a devaluation will take place.

As I listened to Nixon speak, I wondered what those developments meant. Money as we'd known it—a claim check to get gold—no longer existed. That couldn't be good. It seemed clear to me that the era of promise that Kennedy had personified was unraveling.

Monday morning I walked onto the floor of the exchange expecting pandemonium. There was pandemonium all right, but not the sort

I expected: Instead of falling, the stock market jumped about 4 percent, a significant daily gain.

To try to understand what was happening, I spent the rest of that summer studying past currency devaluations. I learned that everything that was going on—the currency breaking its link to gold and devaluing, the stock market soaring in response—had happened before, and that logical cause-effect relationships made those developments inevitable. My failure to anticipate this, I realized, was due to my being surprised by something that hadn't happened in my lifetime, though it had happened many times before. The message that reality was conveying to me was "You better make sense of what happened to other people in other times and other places because if you don't you won't know if these things can happen to you and, if they do, you won't know how to deal with them."

Enrolling at Harvard Business School that fall, I was excited about meeting the extraordinarily intelligent people from all over the planet who would be my classmates. And high as my expectations were, the experience was even better. I lived with people from all over the world and we partied together in an exciting, eclectic environment. There was no teacher in front of a blackboard telling us what to remember and no tests to see whether we remembered it. Instead we were given actual case studies to read and analyze. Then we gathered in groups to thrash out what we would do if we were in the shoes of the people in those situations. This was my kind of school!

Meanwhile, thanks to the wave of money printing that had followed the demise of the gold standard, the economy and the stock market were soaring. Stocks were in again in 1972, and the fashion at the time was the Nifty 50. This group of fifty stocks had fast and steady earnings growth and were widely believed to be a sure thing.

As hot as the stock market was, I was more interested in trading commodities, so that spring I begged the director of commodities at Merrill Lynch to give me a summer job. He was surprised because people from places like Harvard Business School weren't typically interested in commodities, which were considered an obscure stepchild of the Wall Street brokerage industry. Up until then, as far as I

know, no Harvard Business School student had ever worked in commodity futures anywhere. Most Wall Street firms didn't even have commodity futures divisions, and Merrill Lynch's was small, tucked away on a side street, and furnished with basic metal desks.

A few months later, when I was back for my second year at HBS, the first oil shock began, with prices quadrupling in a matter of months. The U.S. economy slowed, commodity prices soared, and in 1973 the stock market took a dive. Once again, I was blindsided—but in retrospect I could see that the dominoes had fallen in a logical sequence.

In this case, the debt-financed overspending of the 1960s had continued into the early 1970s. The Fed had funded this spending with easy-credit policies, but by paying back its debts with depreciated paper money instead of gold-backed dollars, the U.S. effectively defaulted. Naturally, with all this money printing the dollar plunged in value. That allowed for more easy credit, which led to even more spending. The inflationary surge that followed the breakdown of the currency system sent commodity prices even higher. In response, in 1973, the Fed tightened monetary policy, which is what central banks do when inflation and growth are too strong. This in turn caused the worst decline in stocks and the worst weakening of the economy since the Great Depression. The Nifty 50 were particularly affected, plunging severely.

The lesson? When everybody thinks the same thing—such as what a sure bet the Nifty 50 is—it is almost certainly reflected in the price, and betting on it is probably going to be a mistake. I also learned that for every action (such as easy money and credit) there is a consequence (in this case, higher inflation) roughly proportionate to that action, which causes an approximately equal and opposite reaction (tightening of money and credit) and market reversals.

I was beginning to see things happening over and over again, which led me to see that most everything is “another one of those”: Most everything has happened repeatedly before for logical cause-effect reasons. Of course, being able to both properly identify which ones of those are happening and to understand the cause-effect relationships

behind them remained difficult. Though most everything seemed inevitable and logical in retrospect, nothing was nearly as clear in real time.

Because people chase what's hot and avoid what's not, stock investing fell out of favor after 1973 and commodity trading became the thing to do. With my background in commodities and my Harvard MBA, I became a sought-after property. Dominick & Dominick, a middle-sized, hundred-year-old brokerage firm, hired me as director of commodities for \$25,000 a year, which was near the top of what HBS graduate starting salaries were that year. My new boss paired me with an older, experienced guy who had lots of commodities brokerage experience, and we were assigned the task of setting up a commodities division. I was in way over my head, though I was too arrogant to realize it at the time. I probably would have learned a lot of painful lessons had the job continued, but the bad stock market took Dominick & Dominick under before we'd made much progress.

As the economy unraveled, the Watergate scandal dominated the headlines and I saw again how politics and economics intertwine, usually with economics leading. This downward spiral led people to become pessimistic, so they sold their stocks and the market continued to fall. Things couldn't have gotten much worse but everyone was afraid they would. It was the mirror image of what I'd witnessed in 1966 when the market hit its top, and just as it was then, the consensus was wrong. When people are very pessimistic, they sell out, prices typically get very cheap, and action to improve conditions has to be taken. Sure enough, the Fed eased its monetary policy and stocks hit bottom in December 1974.

At the time, I was single and living in New York; I was having a great time partying with friends from HBS and dating a lot. My roommate was dating a Cuban woman and he set me up on a blind date with one of her friends, an exotic woman from Spain named Barbara who could barely speak English. This wasn't a problem, because we communicated in different ways. She thrilled me for nearly two years before we moved in together, got married, had four sons, and shared an amazing life together. She still thrills me but is too private a person for me to say more about her.

While I worked in the brokerage business, I also traded my own account. Though I had many more winning positions than losing ones, I can only recall the losing ones now. I remember one big one when I owned pork bellies. For several days the market for them was limit down—meaning that the price had fallen so low that trading had to be stopped. I later described the impact of this experience to Jack Schwager, the author of *Hedge Fund Market Wizards*:

In those days, we had the big commodity boards, which clicked whenever prices changed. So each morning, on the opening, I would see and hear the market click down 200 points, the daily limit, stay unchanged at that price, and know that I had lost that much more, with the amount of potential additional losses still undefined. It was a very tactile experience . . . [and] it taught me the importance of risk controls, because I never wanted to experience that pain again. It enhanced my fear of being wrong and taught me to make sure that no single bet, or even multiple bets, could cause me to lose more than an acceptable amount. In trading you have to be defensive and aggressive at the same time. If you are not aggressive, you are not going to make money, and if you are not defensive, you are not going to keep money. I believe that anyone who has made money in trading has had to experience horrendous pain at some point. Trading is like working with electricity; you can get an electric shock. With that pork belly trade and other trades, I felt the electric shock and the fear that comes with it.

After Dominick & Dominick closed its retail business, I moved on to a bigger, more successful brokerage firm. During my short stay there, it took over numerous other firms and changed its name several times, eventually becoming Shearson, though Sandy Weill stayed in charge through it all.

Shearson put me in charge of its futures hedging business, which included both commodity futures and financial futures. I was the person helping clients who had price risks in their businesses manage them by using futures. I developed quite an expertise in the grain and

WHERE I'M COMING FROM

livestock markets, which often led me down to West Texas and the agricultural areas of California. The Shearson brokers, cattle producers, and grain dealers I dealt with were great folks who brought me into their worlds, taking me to honky-tonks, dove hunts, and barbecues. We worked and had a blast together, and I built a second life with them that lasted several years—though my job at Shearson lasted only a bit more than a year.

Much as I loved the job and the people I worked with, I didn't fit into the Shearson organization. I was too wild. For example, as a joke that now seems pretty stupid, I hired a stripper to drop her cloak while I was lecturing at a whiteboard at the California Grain & Feed Association's annual convention. I also punched my boss in the face. Not surprisingly, I was fired.

But the brokers, their clients, and even the ones who fired me liked me and wanted to keep getting my advice. Even better, they were willing to pay me for it, so in 1975 I started Bridgewater Associates.

STARTING BRIDGEWATER

Actually, I *restarted* it. Just after I graduated from HBS and went to work in commodities at Dominick & Dominick, I'd set up a little business with Bob Scott, a friend from HBS. Along with a few pals in other countries, we made halfhearted attempts to sell commodities from the U.S. to other countries. We called it Bridgewater because we were "bridging the waters" and it had a good ring to it. By 1975 there wasn't much left of this commodities company, but as it did already exist on paper, I used it.

I worked out of my two-bedroom apartment. When a pal from HBS who I shared the apartment with moved out, I made his bedroom an office. I worked with another friend I played rugby with, and we hired a great young woman who worked as our assistant. That was Bridgewater.

I spent most of my time following the markets and putting myself in the shoes of my corporate clients to show them how I would handle

market risks if I were them. And of course I continued to trade my own account. Pursuing a mission with friends to help clients beat the markets was much more fun than having a real job. As long as my basic living expenses were covered, I knew I'd be happy.

In 1977, Barbara and I decided to have a child, so we got married. We moved into a rented brownstone in Manhattan and I moved the company there too. The Russians were buying lots of grain at the time and wanted my advice, so I took Barbara on a combined honeymoon-business trip to the USSR. We arrived in Moscow on New Year's Eve and rode by bus from the drab airport through a dusting of snow, past St. Basil's Cathedral to a big party with a lot of incredibly friendly, fun-loving Russians.

My business has always been a way to get me into exotic places and allow me to meet interesting people. If I make any money from those trips, that's just icing on the cake.

MODELING MARKETS AS MACHINES

I was really getting my head into the livestock, meat, grain, and oilseed markets. I loved them because they were concrete and less subject than stocks to distorted perceptions of value. While stocks could stay too high or too low because "greater fools" kept buying or selling them, livestock ended up on the meat counter where it would be priced based on what consumers were willing to pay. I could visualize the processes that led to those sales and see the relationships underlying them. Since livestock eat grain (mostly corn) and soymeal, and since corn and soybeans compete for acreage, those markets are closely related. I learned just about everything imaginable about them—what the planted acreage and typical yields were in each of the major growing areas; how to convert rainfall levels in different weeks of the growing season into yield estimates; how to project harvest sizes, carrying costs, and livestock inventories by weight group, location, and rates of weight gain; and how to project dressing yields, retailer margins, consumer preferences by cut of meat, and the amounts to be slaughtered in each season.

This wasn't academic learning: People with practice in the business

showed me how the agricultural processes worked, and I organized what they told me into models I used to map the interactions of those parts through time.

For example, by knowing how many cattle, chickens, and hogs were being fed, how much grain they ate, and how fast they gained weight, I could project both when and how much meat would come to market and when and how much corn and soymeal would be consumed. Likewise, by seeing how much acreage was planted with corn and soybeans in all the growing areas, doing regressions that showed how rainfall affected the yields in each of these areas, and applying weather forecasts and rainfall data, I could project the timing and quantity of corn and soybean production. To me it all looked like a beautiful machine with logical cause-effect relationships. By understanding these relationships, I could come up with decision rules (or principles) I could model.

These early models were a far cry from the ones we use now; they were back-of-the-envelope sketches, analyzed and converted into computer programs with the technology I could afford at the time. At the very beginning, I did regressions on my handheld Hewlett-Packard HP-67 calculator, plotted charts by hand with colored pencils, and recorded every trade in composition notebooks. When the personal computer came along, I could input the numbers and watch them be converted into pictures of what would happen on spreadsheets. Knowing how cattle, hogs, and chickens progressed through their stages of production, how they competed for meat-eater dollars, what meat-eaters would spend and why, and how the profit margins of meatpackers and retailers would influence their behaviors (for example, which cuts of meat they would push in advertisements), I could see how the machine produced cattle, hog, and chicken prices that I could bet on.

As basic as those early models were, I loved building and refining them—and they were good enough to make me money. The approach to price determination I was using was different from the one I had learned in my economics classes where supply and demand were both measured in terms of quantities sold. I found it much more practical to measure demand as the amount spent (instead of as the quantity

bought) and to look at who the buyers and sellers were and why they bought and sold. I will explain this approach in Economic and Investment Principles.

This different approach was one of the key reasons I caught economic and market moves others missed. From that point on, whenever I looked at any market—commodities, stocks, bonds, currencies, whatever—I could see and understand imbalances that others who defined supply and demand in the traditional way (as units that equaled each other) missed.

Visualizing complex systems as machines, figuring out the cause-effect relationships within them, writing down the principles for dealing with them, and feeding them into a computer so the computer could “make decisions” for me all became standard practices.

Don’t get me wrong. My approach was far from perfect. I vividly remember one “can’t lose” bet that personally cost me about \$100,000. That was most of my net worth at the time. More painful still, it hurt my clients too. The most painful lesson that was repeatedly hammered home is that you can never be sure of anything: There are always risks out there that can hurt you badly, even in the seemingly safest bets, so it’s always best to assume you’re missing something. This lesson changed my approach to decision making in ways that will reverberate throughout this book—and to which I attribute much of my success. But I would make many other mistakes before I fully changed my behavior.

BUILDING THE BUSINESS

While making money was good, having meaningful work and meaningful relationships was far better. To me, meaningful work is being on a mission I become engrossed in, and meaningful relationships are those I have with people I care deeply about and who care deeply about me.

Think about it: It’s senseless to have making money as your goal as money has no intrinsic value—its value comes from what it can buy, and it can’t buy everything. It’s smarter to start with what you really

want, which are your real goals, and then work back to what you need to attain them. Money will be one of the things you need, but it's not the only one and certainly not the most important one once you get past having the amount you need to get what you really want.

When thinking about the things you really want, it pays to think of their relative values so you weigh them properly. In my case, I wanted meaningful work and meaningful relationships equally, and I valued money less—as long as I had enough to take care of my basic needs. In thinking about the relative importance of great relationships and money, it was clear that relationships were more important because there is no amount of money I would take in exchange for a meaningful relationship, because there is nothing I could buy with that money that would be more valuable. So, for me, meaningful work and meaningful relationships were and still are my primary goals and everything I did was for them. Making money was an incidental consequence of that.

In the late 1970s, I began sending my observations about the markets to clients via telex. The genesis of these *Daily Observations* (“Grains and Oilseeds,” “Livestock and Meats,” “Economy and Financial Markets”) was pretty simple: While our primary business was in managing risk exposures, our clients also called to pick my brain about the markets. Taking those calls became time-consuming, so I decided it would be more efficient to write down my thoughts every day so others could understand my logic and help improve it. It was a good discipline since it forced me to research and reflect every day. It also became a key channel of communication for our business. Today, almost forty years and ten thousand publications later, our *Daily Observations* are read, reflected on, and argued about by clients and policymakers around the world. I'm still writing them, along with others at Bridgewater, and expect to continue to write them until people don't care to read them or I die.

In addition to providing clients with these observations and advice, I began to manage their exposures by buying and selling on their behalf. Sometimes I was paid a fixed fee each month and sometimes I received a percentage of the profits. Among my consulting clients

during this period was McDonald's, which was a huge beef buyer, and Lane Processing, then the largest chicken producer in the country. I made them both a lot of money—especially Lane Processing, which did even better from its speculations in the grain and soy markets than it did from raising and selling chickens.

Around this time, McDonald's had conceived of a new product, the Chicken McNugget, but they were reluctant to bring it to market because of their concern that chicken prices might rise and squeeze their profit margins. Chicken producers like Lane wouldn't agree to sell to them at a fixed price because they were worried that their costs would go up and *they* would be squeezed.

As I thought about the problem, it occurred to me that in economic terms a chicken can be seen as a simple machine consisting of a chick plus its feed. The most volatile cost that the chicken producer needed to worry about was feed prices. I showed Lane how to use a mix of corn and soymeal futures to lock in costs so they could quote a fixed price to McDonald's. Having greatly reduced its price risk, McDonald's introduced the McNugget in 1983. I felt great about helping make that happen.

I identified similar types of price relationships in the cattle and meat markets. For example, I showed cattle feeders how they could lock in strong profit margins by hedging good price relationships between their cost items (feeder cattle, corn, and soymeal) and what they were going to sell (fed cattle) six months later. I developed a way of selling different cuts of fresh meat for future delivery at fixed prices far below frozen meat prices but that still produced big profit margins. Combining my clients' deep understanding of the way the "machines" of their own businesses operated with my knowledge of the way markets functioned worked to our mutual advantage, while making the markets more efficient overall. My ability to visualize these complex machines gave us a competitive edge against those who were shooting from the hip, and eventually changed the way these industries operated. And, as always, it was a kick to be working with people I liked.

On March 26, 1978, my wife gave birth to our first son, Devon. To have a child was the most difficult decision I ever made, because

WHERE I'M COMING FROM

I couldn't know what the experience would be like and it would be irrevocable. It turned out to be my best decision. While I won't delve too much into my family life in this book, I pursued it with the same sort of intensity with which I pursued my career, and I linked them. To give you an idea about how interwoven they were in my mind, Devon was named after one of the oldest breeds of cattle known to man, among the first breeds imported into the U.S. and renowned for its high fertility.

CHAPTER 3

MY ABYSS:

1979–1982

From 1950 until 1980, debt, inflation, and growth moved up and down together in steadily larger waves, with each bigger than the one before, especially after the dollar's link to gold was broken in 1971. In the 1970s, there were three such waves. The first came in 1971, as a result of the dollar's devaluation. The second, which came between 1974 and 1975, took inflation to its highest level since World War II. The Fed tightened the money supply, driving interest rates to record highs, which caused the worst stock market and economic downturn since the 1930s. The third and largest wave came in 1979–82 and was one of the greatest economic/market crescendos and reversals since 1929–32. Interest rates and inflation soared and crashed; stocks, bonds, commodities, and currencies went through one of their most volatile periods ever; and unemployment hit its highest level since the Great Depression. It was a time of extreme turbulence for the global economy, for the markets, and for me personally.

In 1978–80 (as in 1970–71 and in 1974–75) different markets began to move in unison because they were more influenced by swings in money and credit growth than by changes in their individual supply-demand balances. These big moves were exacerbated by the oil shock that followed the fall of the Shah of Iran. That oil market vola-

tility led to the creation of the first oil futures contract, which gave me trading opportunities (by then, there were futures markets in interest rates and currencies as well, and I was making bets in all of them).

Because all markets were being driven by these factors, I immersed myself in macroeconomics and historical data (especially interest rates and currency data) to improve my understanding of the machine at play. As inflation began to rise in 1978, I realized the Fed would likely act to tighten the monetary supply. By July 1979, inflation was clearly out of control, and President Jimmy Carter appointed Paul Volcker chairman of the Federal Reserve. A few months later, Volcker announced that the Fed would limit the growth of the money supply to 5.5 percent. According to my calculations at the time, 5.5 percent money growth would break the inflation spiral—but it would also strangle the economy and markets and likely cause a catastrophic debt crisis.

A SILVER ROLLER COASTER

Just before Thanksgiving, I met with Bunker Hunt, then the richest man in the world, at the Petroleum Club in Dallas. Bud Dillard, a Texan friend and client of mine who was big in the oil and cattle businesses, had introduced us a couple of years before, and we regularly talked about the economy and markets, especially inflation. Just a few weeks before our meeting, Iranian militants had stormed the U.S. embassy in Tehran, taking fifty-two Americans hostage. There were long lines to buy gas and extreme market volatility. There was clearly a sense of crisis: The nation was confused, frustrated, and angry.

Bunker saw the debt crisis and inflation risks pretty much as I saw them. He'd been wanting to get his wealth out of paper money for the past few years, so he'd been buying commodities, especially silver, which he had started purchasing for about \$1.29 per ounce, as a hedge against inflation. He kept buying and buying as inflation and the price of silver went up, until he had essentially cornered the silver market. At that point, silver was trading at around \$10. I told him I thought it might be a good time to get out because the Fed was becoming tight enough to raise short-term interest rates above long-term rates (which

was called “inverting the yield curve”). Every time that happened, inflation-hedged assets and the economy went down. But Bunker was in the oil business, and the Middle East oil producers he talked to were still worried about the depreciation of the dollar. They had told him they were also going to buy silver as a hedge against inflation so he held on to it in the expectation that its price would continue to rise. I got out.

On December 8, 1979, Barbara and I had our second son, Paul. Everything was changing very fast, but I loved the intensity of it all.

By early 1980, silver had gone to nearly \$50, and as rich as he was, Bunker became a lot richer. While I had made a lot of money on silver's rise to \$10, I was kicking myself for missing the ride to \$50. But at least, by being out, I didn't lose money. There are anxious times in every investor's career when your expectations of what should be happening aren't aligned with what is happening and you don't know if you're looking at great opportunities or catastrophic mistakes. Because I had a strong tendency to be right but early, I was inclined to think that was the case. It was, but to have missed the \$40 move up was inexcusable to me.

When the plunge finally did happen, in March 1980, silver crashed back down below \$11. It ruined Hunt, and he nearly brought down the whole U.S. economy as he fell.² The Fed had to intervene to control the ripple effects. All of this pounded an indelible lesson into my head: Timing is everything. I was relieved that I was out of that market, but watching the richest man in the world—who was also someone I empathized with—go broke was jarring. Yet it was nothing compared to what was to come.

EXPANDING THE TEAM

Later that same year, a great guy named Paul Colman joined Bridgewater. We had become good friends from our dealings in the cattle and beef industry, and I respected his intellect and values, so I convinced him we should conquer that world together. He brought his wonderful

² His inability to meet his obligations, especially his margin calls at brokerage houses, could have led to cascading defaults.

wife and kids up from Guymon, Oklahoma, and our families became inseparable. We ran the business in a scrappy, seat-of-the-pants way. Because the office part of the brownstone where I lived and worked was generally such a mess—with chicken bones or other scraps from working through the previous night's dinner littering my desk—we held all our client meetings at the Harvard Club. Paul would hide a clean blue oxford shirt and tie amid the mess so I'd have something to wear. In 1981, we decided we wanted to raise our families in more of a country setting, so we all moved up to Wilton, Connecticut, to run Bridgewater from there.

Colman and I worked by challenging each other's ideas and trying to find the best answers; it was a constant back-and-forth, which we both enjoyed, especially at a time when there was so much to figure out. We would debate about the markets and the forces behind them late into the night, plug data into the computer before we went to bed, and see what it spit out in the morning.

MY BIG DEPRESSION CALL

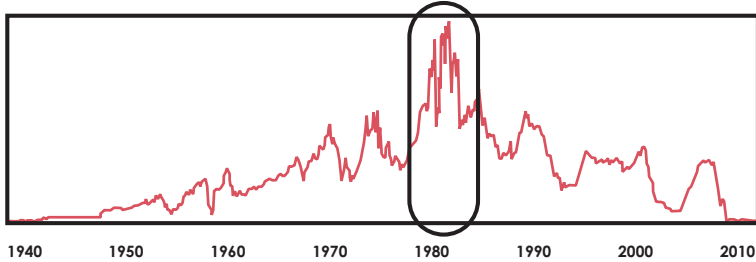
The economy was in even worse shape in 1979–81 than it was during the financial crisis of 2007–08 and the markets were more volatile. In fact, some would say this was the most volatile period ever. The charts opposite going back to 1940 show the volatility of interest rates and gold.

As you can see, there had been nothing like it prior to 1979–82. It was one of the most pivotal times in the last hundred years. The political pendulum throughout the world swung to the right, bringing Margaret Thatcher, Ronald Reagan, and Helmut Kohl to power. “Liberal” had ceased to mean being in favor of progress and had come to mean “paying people not to work.”

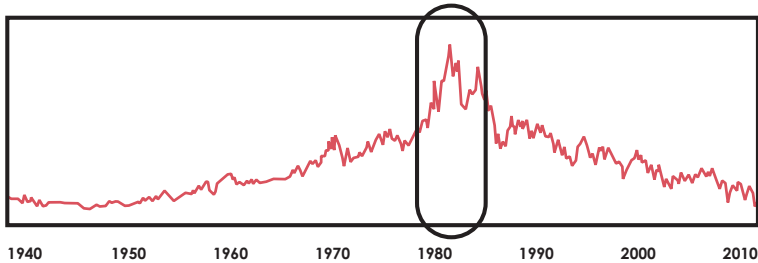
As I saw it, the Fed was stuck between a rock and a hard place. They either had to a) print money to relieve debt problems and keep the economy going (which had already pushed inflation to 10 percent in 1981 and was causing people to dump bonds and buy inflation-hedged assets), or b) break the back of inflation by becoming bone-crushingly tight (which would break the back of debtors because debt was at the

WHERE I'M COMING FROM

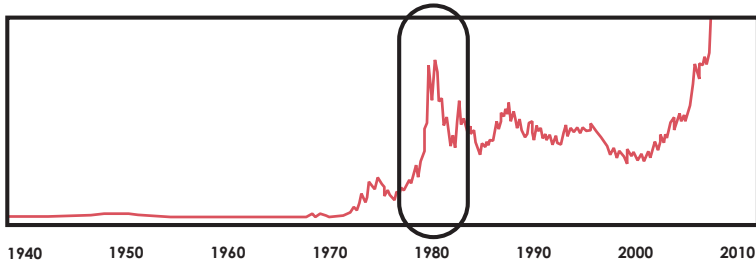
T-BILL RATE



10 YR BOND YIELD



GOLD PRICE



highest levels since the Great Depression). The worsening problem showed up in both progressively higher levels of inflation and progressively worse levels of economic activity. Both appeared to be coming to a head. Debts continued to rise much faster than the incomes borrowers needed to repay them, and American banks were lending huge amounts—much more than they had in capital—to emerging countries. In March 1981, I wrote a *Daily Observation* entitled “The Next

Depression in Perspective” and concluded it by saying, “The enormity of our debt implies that the depression will be as bad or worse than that witnessed in the thirties.”

This view was extremely controversial. To most people, “depression” was a scary word used by kooky and sensationalist people, not something thoughtful people took seriously. But I had studied debt and depressions back to 1800, done my calculations, and was confident that the debt crisis led by emerging countries was coming. I had to share my thinking with my clients. Because my views were so controversial I asked others to track my reasoning and point out to me where it was bad. No one could find any flaws in my logic, though they were all reluctant to endorse my conclusion.

Because I believed that the choice was between accelerating inflation and deflationary depression, I was holding both gold (which performs well in accelerating inflation) and bonds (which perform well in deflationary depressions). Up until that point, gold and bonds had moved in opposite directions, depending on whether inflation expectations rose or fell. Holding those positions seemed much safer than holding alternatives like cash, which would lose value in an inflation environment, or stocks, which would crash in a depression.

At first, the markets went against me. But my experience with silver and other trades had taught me that I had a chronic problem with timing, so I believed I was just early and what I was expecting would happen soon. That didn’t take long to happen. By the fall of 1981, the tight Fed policies were having a devastating effect, my bond bets were beginning to pay off, and my kooky views were starting to look right on. In February 1982, the Fed temporarily added liquidity to avoid a cash crunch. In June, as the scramble for liquidity intensified, the Fed responded by printing money, increasing liquidity to its highest level since Paul Volcker’s appointment. But it still wasn’t enough.

THE GREATEST WHIPSAW EVER

In August 1982, Mexico defaulted on its debt. By then, it was clear to most everyone that a number of other countries were about to follow.

This was a huge deal, because U.S. banks had lent about 250 percent of their capital to other countries just as at risk as Mexico. Business loan activity in the U.S. ground to a halt.

Because I was one of the few people who had seen these things coming, I started to get a lot of attention. Congress was holding hearings on the crisis and invited me to testify; in November I was the featured guest on *Wall Street Week with Louis Rukeyser*, the must-watch show for anyone in the markets. In both appearances, I confidently declared that we were headed for depression and explained why.

After Mexico's default, the Fed responded to the economic collapse and debt defaults by making money more readily available. This caused the stock market to jump by a record amount. While that surprised me, I interpreted it as a knee-jerk reaction to the Fed's move. After all, in 1929 a 15 percent rally was followed by the greatest crash of all time. In October, I laid out my prognosis in a memo. As I saw it, there was a 75 percent chance the Fed's efforts would fall short and the economy would move into failure; a 20 percent chance it would initially succeed at stimulating the economy but still ultimately fail; and a 5 percent chance it would provide enough stimulus to save the economy but trigger hyperinflation. To hedge against the worst possibilities, I bought gold and T-bill futures as a spread against euro-dollars, which was a limited-risk way of betting on credit problems increasing.

I was dead wrong. After a delay, the economy responded to the Fed's efforts, rebounding in a noninflationary way. In other words, inflation fell while growth accelerated. The stock market began a big bull run, and over the next eighteen years the U.S. economy enjoyed the greatest noninflationary growth period in its history.

How was that possible? Eventually, I figured it out. As money poured out of these borrower countries and into the U.S., it changed everything. It drove the dollar up, which produced deflationary pressures in the U.S., which allowed the Fed to ease interest rates without raising inflation. This fueled a boom. The banks were protected both because the Federal Reserve loaned them cash and the creditors' committees and international financial restructuring organizations such

as the International Monetary Fund (IMF) and the Bank for International Settlements arranged things so that the debtor nations could pay their debt service from new loans. That way everyone could pretend everything was fine and write down those loans over many years.

My experience over this period was like a series of blows to the head with a baseball bat. Being so wrong—and especially so publicly wrong—was incredibly humbling and cost me just about everything I had built at Bridgewater. I saw that I had been an arrogant jerk who was totally confident in a totally incorrect view.

So there I was after eight years in business, with nothing to show for it. Though I'd been right much more than I'd been wrong, I was all the way back to square one.

At one point, I'd lost so much money I couldn't afford to pay the people who worked with me. One by one, I had to let them go. We went down to two employees—Colman and me. Then Colman had to go. With tears from all, his family packed up and returned to Oklahoma. Bridgewater was now down to just one employee: me.

Losing people I cared so much about and very nearly losing my dream of working for myself was devastating. To make ends meet, I even had to borrow \$4,000 from my dad until we could sell our second car. I had come to a fork in the road: Should I put on a tie and take a job on Wall Street? That was not the life I wanted. On the other hand, I had a wife and two young children to support. I realized I was facing one of life's big turning points and my choices would have big implications for me and for my family's future.

FINDING A WAY PAST MY INTRACTABLE INVESTMENT PROBLEM

Making money in the markets is tough. The brilliant trader and investor Bernard Baruch put it well when he said, "If you are ready to give up everything else and study the whole history and background of the market and all principal companies whose stocks are on the board as carefully as a medical student studies anatomy—if you can do all that

and in addition you have the cool nerves of a gambler, the sixth sense of a clairvoyant and the courage of a lion, you have a ghost of a chance.”

In retrospect, the mistakes that led to my crash seemed embarrassingly obvious. First, I had been wildly overconfident and had let my emotions get the better of me. I learned (again) that no matter how much I knew and how hard I worked, I could never be certain enough to proclaim things like what I'd said on *Wall Street Week*: “There'll be no soft landing. I can say that with absolute certainty, because I know how markets work.” I am still shocked and embarrassed by how arrogant I was.

Second, I again saw the value of studying history. What had happened, after all, was “another one of those.” I should have realized that debts denominated in one's own currency can be successfully restructured with the government's help, and that when central banks simultaneously provide stimulus (as they did in March 1932, at the low point of the Great Depression, and as they did again in 1982), inflation and deflation can be balanced against each other. As in 1971, I had failed to recognize the lessons of history. Realizing that led me to try to make sense of all movements in all major economies and markets going back a hundred years and to come up with carefully tested decision-making principles that are timeless and universal.

Third, I was reminded of how difficult it is to time markets. My long-term estimates of equilibrium levels were not reliable enough to bet on; too many things could happen between the time I placed my bets and the time (if ever) that my estimates were reached.

Staring at these failings, I realized that if I was going to move forward without a high likelihood of getting whacked again, I would have to look at myself objectively and change—starting by learning a better way of handling the natural aggressiveness I've always shown in going after what I wanted.

Imagine that in order to have a great life you have to cross a dangerous jungle. You can stay safe where you are and have an ordinary life, or you can risk crossing the jungle to have a terrific life. How would you approach that choice? Take a moment to think about it

because it is the sort of choice that, in one form or another, we all have to make.

Even after my crash, I knew I had to go after the terrific life with all its risks, so the question was how to “cross the dangerous jungle” without getting killed. In retrospect, my crash was one of the best things that ever happened to me because it gave me the humility I needed to balance my aggressiveness. I learned a great fear of being wrong that shifted my mind-set from thinking “I’m right” to asking myself “How do I know I’m right?” And I saw clearly that the best way to answer this question is by finding other independent thinkers who are on the same mission as me and who see things differently from me. By engaging them in thoughtful disagreement, I’d be able to understand their reasoning and have them stress-test mine. That way, we can all raise our probability of being right.

In other words, I just want to be right—I don’t care if the right answer comes from me. So I learned to be radically open-minded to allow others to point out what I might be missing. I saw that the only way I could succeed would be to:

1. Seek out the smartest people who disagreed with me so I could try to understand their reasoning.
2. Know when not to have an opinion.
3. Develop, test, and systemize timeless and universal principles.
4. Balance risks in ways that keep the big upside while reducing the downside.

Doing these things significantly improved my returns relative to my risks, and the same principles apply in other aspects of life. Most importantly, this experience led me to build Bridgewater as an idea meritocracy—not an autocracy in which I lead and others follow, and not a democracy in which everyone’s vote is equal—but a meritocracy that encourages thoughtful disagreements and explores and weighs people’s opinions in proportion to their merits.

Bringing these opposing opinions into the open and exploring them

taught me a lot about how people think. I came to see that people's greatest weaknesses are the flip sides of their greatest strengths. For example, some people are prone to take on too much risk while others are too risk averse; some are too focused on the details while others are too big-picture. Most are too much one way and not enough another. Typically, by doing what comes naturally to us, we fail to account for our weaknesses, which leads us to crash. What happens after we crash is most important. Successful people change in ways that allow them to continue to take advantage of their strengths while compensating for their weaknesses and unsuccessful people don't. Later in the book I will describe specific strategies for change, but the important thing to note here is that beneficial change begins when you can acknowledge and even embrace your weaknesses.

Over the years that followed, I found that most of the extraordinarily successful people I've met had similar big painful failures that taught them the lessons that ultimately helped them succeed. Looking back on getting fired from Apple in 1985, Steve Jobs said, "It was awful-tasting medicine, but I guess the patient needed it. Sometimes life hits you in the head with a brick. Don't lose faith. I'm convinced that the only thing that kept me going was that I loved what I did."

I saw that to do exceptionally well you have to push your limits and that, if you push your limits, you will crash and it will hurt a lot. You will think you have failed—but that won't be true unless you give up. Believe it or not, your pain will fade and you will have many other opportunities ahead of you, though you might not see them at the time. The most important thing you can do is to gather the lessons these failures provide and gain humility and radical open-mindedness in order to increase your chances of success. Then you press on.

My final lesson was perhaps the most important one, because it has applied again and again throughout my life. At first, it seemed to me that I faced an all-or-nothing choice: I could either take on a lot of risk in pursuit of high returns (and occasionally find myself ruined) or I could lower my risk and settle for lower returns. But I needed to

PRINCIPLES

have both low risk and high returns, and by setting out on a mission to discover how I could, I learned to go slowly when faced with the choice between two things that you need that are seemingly at odds. That way you can figure out how to have as much of both as possible. There is almost always a good path that you just haven't discovered yet, so look for it until you find it rather than settle for the choice that is then apparent to you.

As difficult as this was, I eventually found a way to have my cake and eat it too. I call it the "Holy Grail of Investing," and it's the secret behind Bridgewater's success.

CHAPTER 4

MY ROAD OF TRIALS:

1983–1994

Coming out of my crash, I was so broke I couldn't muster enough money to pay for an airplane ticket to Texas to visit a prospective client, even though the fees I'd earn were many times the cost of the fare—so I didn't make that trip. Still, I gradually added clients, revenue, and a new team. With time, my upswings increased in magnitude and my downswings were both tolerable and educational. I never thought of what I was doing as building (or rebuilding) a company; I was just getting the things I needed to play my game.

Computers were among the most valuable things I acquired, because of how they helped me think. Without them, Bridgewater would not have been nearly as successful as it turned out to be.

The first microcomputers (what would later be known as personal computers) had come on the market during the late 1970s, and I had been using them as econometricians did, applying statistics and computing power to economic data to analyze the workings of the economic machine. As I wrote in a December 1981 article, I believed (and still believe) that “theoretically . . . if there was a computer that could hold all of the world's facts and if it was perfectly programmed