The Psychology of Money
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TIMELESS LESSONS ON WEALTH, GREED, AND HAPPINESS

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For

My parents, who teach me.
Gretchen, who guides me.
Miles and Reese, who inspire me.
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“A genius is the man who can do the average thing when everyone else around him is losing his mind.”

—Napoleon

“The world is full of obvious things which nobody by any chance ever observes.”

—Sherlock Holmes
I spent my college years working as a valet at a nice hotel in Los Angeles.

One frequent guest was a technology executive. He was a genius, having designed and patented a key component in Wi-Fi routers in his 20s. He had started and sold several companies. He was wildly successful.

He also had a relationship with money I’d describe as a mix of insecurity and childish stupidity.

He carried a stack of hundred dollar bills several inches thick. He showed it to everyone who wanted to see it and many who didn’t. He bragged openly and loudly about his wealth, often while drunk and always apropos of nothing.

One day he handed one of my colleagues several thousand dollars of cash and said, “Go to the jewelry store down the street and get me a few $1,000 gold coins.”

An hour later, gold coins in hand, the tech executive and his buddies gathered around by a dock overlooking the Pacific Ocean. They then proceeded to throw the coins into the sea, skipping them like rocks, cackling as they argued whose went furthest. Just for fun.

Days later he shattered a lamp in the hotel’s restaurant. A manager told him it was a $500 lamp and he’d have to replace it.
“You want five hundred dollars?” the executive asked incredulously, while pulling a brick of cash from his pocket and handing it to the manager. “Here’s five thousand dollars. Now get out of my face. And don’t ever insult me like that again.”

You may wonder how long this behavior could last, and the answer was “not long.” I learned years later that he went broke.

The premise of this book is that doing well with money has a little to do with how smart you are and a lot to do with how you behave. And behavior is hard to teach, even to really smart people.

A genius who loses control of their emotions can be a financial disaster. The opposite is also true. Ordinary folks with no financial education can be wealthy if they have a handful of behavioral skills that have nothing to do with formal measures of intelligence.

My favorite Wikipedia entry begins: “Ronald James Read was an American philanthropist, investor, janitor, and gas station attendant.”

Ronald Read was born in rural Vermont. He was the first person in his family to graduate high school, made all the more impressive by the fact that he hitchhiked to campus each day.

For those who knew Ronald Read, there wasn’t much else worth mentioning. His life was about as low key as they come.

Read fixed cars at a gas station for 25 years and swept floors at JCPenney for 17 years. He bought a two-bedroom house for $12,000 at age 38 and lived there for the rest of his life. He was widowed at age 50 and never remarried. A friend recalled that his main hobby was chopping firewood.

Read died in 2014, age 92. Which is when the humble rural janitor made international headlines.

2,813,503 Americans died in 2014. Fewer than 4,000 of them had a net worth of over $8 million when they passed away. Ronald Read was one of them.
In his will the former janitor left $2 million to his stepkids and more than $6 million to his local hospital and library. Those who knew Read were baffled. Where did he get all that money? It turned out there was no secret. There was no lottery win and no inheritance. Read saved what little he could and invested it in blue chip stocks. Then he waited, for decades on end, as tiny savings compounded into more than $8 million. That’s it. From janitor to philanthropist. A few months before Ronald Read died, another man named Richard was in the news. Richard Fuscone was everything Ronald Read was not. A Harvard-educated Merrill Lynch executive with an MBA, Fuscone had such a successful career in finance that he retired in his 40s to become a philanthropist. Former Merrill CEO David Komansky praised Fuscone’s “business savvy, leadership skills, sound judgment and personal integrity.” Crain’s business magazine once included him in a “40 under 40” list of successful businesspeople. But then—like the gold-coin-skipping tech executive—everything fell apart. In the mid-2000s Fuscone borrowed heavily to expand an 18,000-square foot home in Greenwich, Connecticut that had 11 bathrooms, two elevators, two pools, seven garages, and cost more than $90,000 a month to maintain. Then the 2008 financial crisis hit. The crisis hurt virtually everyone’s finances. It apparently turned Fuscone’s into dust. High debt and illiquid assets left him bankrupt. “I currently have no income,” he allegedly told a bankruptcy judge in 2008. First his Palm Beach house was foreclosed. In 2014 it was the Greenwich mansion’s turn. Five months before Ronald Read left his fortune to charity,
Richard Fuscone’s home—where guests recalled the “thrill of dining and dancing atop a see-through covering on the home’s indoor swimming pool”—was sold in a foreclosure auction for 75% less than an insurance company figured it was worth.³

Ronald Read was patient; Richard Fuscone was greedy. That’s all it took to eclipse the massive education and experience gap between the two.

The lesson here is not to be more like Ronald and less like Richard—though that’s not bad advice.

The fascinating thing about these stories is how unique they are to finance.

In what other industry does someone with no college degree, no training, no background, no formal experience, and no connections massively outperform someone with the best education, the best training, and the best connections?

I struggle to think of any.

It is impossible to think of a story about Ronald Read performing a heart transplant better than a Harvard-trained surgeon. Or designing a skyscraper superior to the best-trained architects. There will never be a story of a janitor outperforming the world’s top nuclear engineers.

But these stories do happen in investing.

The fact that Ronald Read can coexist with Richard Fuscone has two explanations. One, financial outcomes are driven by luck, independent of intelligence and effort. That’s true to some extent, and this book will discuss it in further detail. Or, two (and I think more common), that financial success is not a hard science. It’s a soft skill, where how you behave is more important than what you know.

I call this soft skill the psychology of money. The aim of this book is to use short stories to convince you that soft skills are more important than the technical side of money. I’ll do this in a way that will help everyone—from Read to Fuscone and everyone in between—make better financial decisions.
These soft skills are, I’ve come to realize, greatly underappreciated. Finance is overwhelmingly taught as a math-based field, where you put data into a formula and the formula tells you what to do, and it’s assumed that you’ll just go do it.

This is true in personal finance, where you’re told to have a six-month emergency fund and save 10% of your salary.

It’s true in investing, where we know the exact historical correlations between interest rates and valuations.

And it’s true in corporate finance, where CFOs can measure the precise cost of capital.

It’s not that any of these things are bad or wrong. It’s that knowing what to do tells you nothing about what happens in your head when you try to do it.

Two topics impact everyone, whether you are interested in them or not: health and money.

The health care industry is a triumph of modern science, with rising life expectancy across the world. Scientific discoveries have replaced doctors’ old ideas about how the human body works, and virtually everyone is healthier because of it.

The money industry—investing, personal finance, business planning—is another story.

Finance has scooped up the smartest minds coming from top universities over the last two decades. Financial Engineering was the most popular major in Princeton’s School of Engineering a decade ago. Is there any evidence it has made us better investors? I have seen none.

Through collective trial and error over the years we learned how to become better farmers, skilled plumbers, and advanced chemists. But has trial and error taught us to become better with our personal finances? Are we less likely to bury ourselves in debt? More likely to save for a rainy day? Prepare for retirement?
Have realistic views about what money does, and doesn’t do, to our happiness?

I’ve seen no compelling evidence.

Most of the reason why, I believe, is that we think about and are taught about money in ways that are too much like physics (with rules and laws) and not enough like psychology (with emotions and nuance).

And that, to me, is as fascinating as it is important.

Money is everywhere, it affects all of us, and confuses most of us. Everyone thinks about it a little differently. It offers lessons on things that apply to many areas of life, like risk, confidence, and happiness. Few topics offer a more powerful magnifying glass that helps explain why people behave the way they do than money. It is one of the greatest shows on Earth.

My own appreciation for the psychology of money is shaped by more than a decade of writing on the topic. I began writing about finance in early 2008. It was the dawn of a financial crisis and the worst recession in 80 years.

To write about what was happening, I wanted to figure out what was happening. But the first thing I learned after the financial crisis was that no one could accurately explain what happened, or why it happened, let alone what should be done about it. For every good explanation there was an equally convincing rebuttal.

Engineers can determine the cause of a bridge collapse because there’s agreement that if a certain amount of force is applied to a certain area, that area will break. Physics isn’t controversial. It’s guided by laws. Finance is different. It’s guided by people’s behaviors. And how I behave might make sense to me but look crazy to you.

The more I studied and wrote about the financial crisis, the more I realized that you could understand it better through the lenses of psychology and history, not finance.

To grasp why people bury themselves in debt you don’t need
to study interest rates; you need to study the history of greed, insecurity, and optimism. To get why investors sell out at the bottom of a bear market you don’t need to study the math of expected future returns; you need to think about the agony of looking at your family and wondering if your investments are imperiling their future.

I love Voltaire’s observation that “History never repeats itself; man always does.” It applies so well to how we behave with money.

In 2018, I wrote a report outlining 20 of the most important flaws, biases, and causes of bad behavior I’ve seen affect people when dealing with money. It was called The Psychology of Money, and over one million people have read it. This book is a deeper dive into the topic. Some short passages from the report appear unaltered in this book.

What you’re holding is 20 chapters, each describing what I consider to be the most important and often counterintuitive features of the psychology of money. The chapters revolve around a common theme, but exist on their own and can be read independently.

It’s not a long book. You’re welcome. Most readers don’t finish the books they begin because most single topics don’t require 300 pages of explanation. I’d rather make 20 short points you finish than one long one you give up on.

On we go.
1. No One's Crazy

Your personal experiences with money make up maybe 0.00000001% of what's happened in the world, but maybe 80% of how you think the world works.
Let me tell you about a problem. It might make you feel better about what you do with your money, and less judgmental about what other people do with theirs.

People do some crazy things with money. But no one is crazy.

Here’s the thing: People from different generations, raised by different parents who earned different incomes and held different values, in different parts of the world, born into different economies, experiencing different job markets with different incentives and different degrees of luck, learn very different lessons.

Everyone has their own unique experience with how the world works. And what you’ve experienced is more compelling than what you learn second-hand. So all of us—you, me, everyone—go through life anchored to a set of views about how money works that vary wildly from person to person. What seems crazy to you might make sense to me.

The person who grew up in poverty thinks about risk and reward in ways the child of a wealthy banker cannot fathom if he tried.

The person who grew up when inflation was high experienced something the person who grew up with stable prices never had to.

The stock broker who lost everything during the Great Depression experienced something the tech worker basking in the glory of the late 1990s can’t imagine.

The Australian who hasn’t seen a recession in 30 years has experienced something no American ever has.
On and on. The list of experiences is endless.

You know stuff about money that I don’t, and vice versa. You go through life with different beliefs, goals, and forecasts, than I do. That’s not because one of us is smarter than the other, or has better information. It’s because we’ve had different lives shaped by different and equally persuasive experiences.

Your personal experiences with money make up maybe 0.00000001% of what’s happened in the world, but maybe 80% of how you think the world works. So equally smart people can disagree about how and why recessions happen, how you should invest your money, what you should prioritize, how much risk you should take, and so on.

In his book on 1930s America, Frederick Lewis Allen wrote that the Great Depression “marked millions of Americans—inwardly—for the rest of their lives.” But there was a range of experiences. Twenty-five years later, as he was running for president, John F. Kennedy was asked by a reporter what he remembered from the Depression. He remarked:

I have no first-hand knowledge of the Depression. My family had one of the great fortunes of the world and it was worth more than ever then. We had bigger houses, more servants, we traveled more. About the only thing that I saw directly was when my father hired some extra gardeners just to give them a job so they could eat. I really did not learn about the Depression until I read about it at Harvard.

This was a major point in the 1960 election. How, people thought, could someone with no understanding of the biggest economic story of the last generation be put in charge of the economy? It was, in many ways, overcome only by JFK’s experience in World War II. That was the other most widespread emotional experience of the previous generation, and something his primary opponent, Hubert Humphrey, didn’t have.
The challenge for us is that no amount of studying or open-mindedness can genuinely recreate the power of fear and uncertainty.

I can read about what it was like to lose everything during the Great Depression. But I don’t have the emotional scars of those who actually experienced it. And the person who lived through it can’t fathom why someone like me could come across as complacent about things like owning stocks. We see the world through a different lens.

Spreadsheets can model the historic frequency of big stock market declines. But they can’t model the feeling of coming home, looking at your kids, and wondering if you’ve made a mistake that will impact their lives. Studying history makes you feel like you understand something. But until you’ve lived through it and personally felt its consequences, you may not understand it enough to change your behavior.

We all think we know how the world works. But we’ve all only experienced a tiny sliver of it.

As investor Michael Batnick says, “some lessons have to be experienced before they can be understood.” We are all victims, in different ways, to that truth.

In 2006 economists Ulrike Malmendier and Stefan Nagel from the National Bureau of Economic Research dug through 50 years of the Survey of Consumer Finances—a detailed look at what Americans do with their money.

In theory people should make investment decisions based on their goals and the characteristics of the investment options available to them at the time.

But that’s not what people do.

The economists found that people’s lifetime investment decisions are heavily anchored to the experiences those investors
had in their own generation—especially experiences early in their adult life.

If you grew up when inflation was high, you invested less of your money in bonds later in life compared to those who grew up when inflation was low. If you happened to grow up when the stock market was strong, you invested more of your money in stocks later in life compared to those who grew up when stocks were weak.

The economists wrote: “Our findings suggest that individual investors’ willingness to bear risk depends on personal history.”

Not intelligence, or education, or sophistication. Just the dumb luck of when and where you were born.

The Financial Times interviewed Bill Gross, the famed bond manager, in 2019. “Gross admits that he would probably not be where he is today if he had been born a decade earlier or later,” the piece said. Gross’s career coincided almost perfectly with a generational collapse in interest rates that gave bond prices a tailwind. That kind of thing doesn’t just affect the opportunities you come across; it affects what you think about those opportunities when they’re presented to you. To Gross, bonds were wealth-generating machines. To his father’s generation, who grew up with and endured higher inflation, they might be seen as wealth incinerators.

The differences in how people have experienced money are not small, even among those you might think are pretty similar.

Take stocks. If you were born in 1970, the S&P 500 increased almost 10-fold, adjusted for inflation, during your teens and 20s. That’s an amazing return. If you were born in 1950, the market went literally nowhere in your teens and 20s adjusted for inflation. Two groups of people, separated by chance of their birth year, go through life with a completely different view on how the stock market works:
Or inflation. If you were born in 1960s America, inflation during your teens and 20s—your young, impressionable years when you’re developing a base of knowledge about how the economy works—sent prices up more than threefold. That’s a lot. You remember gas lines and getting paychecks that stretched noticeably less far than the ones before them. But if you were born in 1990, inflation has been so low for your whole life that it’s probably never crossed your mind.
America’s nationwide unemployment in November 2009 was around 10%. But the unemployment rate for African American males age 16 to 19 without a high school diploma was 49%. For Caucasian females over age 45 with a college degree, it was 4%.

Local stock markets in Germany and Japan were wiped out during World War II. Entire regions were bombed out. At the end of the war German farms only produced enough food to provide the country’s citizens with 1,000 calories a day. Compare that to the U.S., where the stock market more than doubled from 1941 through the end of 1945, and the economy was the strongest it had been in almost two decades.

No one should expect members of these groups to go through the rest of their lives thinking the same thing about inflation. Or the stock market. Or unemployment. Or money in general.

No one should expect them to respond to financial information the same way. No one should assume they are influenced by the same incentives.
No one should expect them to trust the same sources of advice. No one should expect them to agree on what matters, what’s worth it, what’s likely to happen next, and what the best path forward is.

Their view of money was formed in different worlds. And when that’s the case, a view about money that one group of people thinks is outrageous can make perfect sense to another.

A few years ago, *The New York Times* did a story on the working conditions of Foxconn, the massive Taiwanese electronics manufacturer. The conditions are often atrocious. Readers were rightly upset. But a fascinating response to the story came from the nephew of a Chinese worker, who wrote in the comment section:

My aunt worked several years in what Americans call “sweat shops.” It was hard work. Long hours, “small” wage, “poor” working conditions. Do you know what my aunt did before she worked in one of these factories? She was a prostitute.

The idea of working in a “sweat shop” compared to that old lifestyle is an improvement, in my opinion. I know that my aunt would rather be “exploited” by an evil capitalist boss for a couple of dollars than have her body be exploited by several men for pennies.

That is why I am upset by many Americans’ thinking. We do not have the same opportunities as the West. Our governmental infrastructure is different. The country is different. Yes, factory is hard labor. Could it be better? Yes, but only when you compare such to American jobs.

I don’t know what to make of this. Part of me wants to argue, fiercely. Part of me wants to understand. But mostly it’s an example of how different experiences can lead to vastly different views within topics that one side intuitively thinks should be black and white.
Every decision people make with money is justified by taking the information they have at the moment and plugging it into their unique mental model of how the world works.

Those people can be misinformed. They can have incomplete information. They can be bad at math. They can be persuaded by rotten marketing. They can have no idea what they’re doing. They can misjudge the consequences of their actions. Oh, can they ever.

But every financial decision a person makes, makes sense to them in that moment and checks the boxes they need to check. They tell themselves a story about what they’re doing and why they’re doing it, and that story has been shaped by their own unique experiences.

Take a simple example: lottery tickets.

Americans spend more on them than movies, video games, music, sporting events, and books combined.

And who buys them? Mostly poor people.

The lowest-income households in the U.S. on average spend $412 a year on lotto tickets, four times the amount of those in the highest income groups. Forty percent of Americans cannot come up with $400 in an emergency. Which is to say: Those buying $400 in lottery tickets are by and large the same people who say they couldn’t come up with $400 in an emergency. They are blowing their safety nets on something with a one-in-millions chance of hitting it big.

That seems crazy to me. It probably seems crazy to you, too. But I’m not in the lowest income group. You’re likely not, either. So it’s hard for many of us to intuitively grasp the subconscious reasoning of low-income lottery ticket buyers.

But strain a little, and you can imagine it going something like this:

We live paycheck-to-paycheck and saving seems out of reach.
Our prospects for much higher wages seem out of reach. We
can’t afford nice vacations, new cars, health insurance, or homes in safe neighborhoods. We can’t put our kids through college without crippling debt. Much of the stuff you people who read finance books either have now, or have a good chance of getting, we don’t. Buying a lottery ticket is the only time in our lives we can hold a tangible dream of getting the good stuff that you already have and take for granted. We are paying for a dream, and you may not understand that because you are already living a dream. That’s why we buy more tickets than you do.

You don’t have to agree with this reasoning. Buying lotto tickets when you’re broke is still a bad idea. But I can kind of understand why lotto ticket sales persist.

And that idea—“What you’re doing seems crazy but I kind of understand why you’re doing it.”—uncovers the root of many of our financial decisions.

Few people make financial decisions purely with a spreadsheet. They make them at the dinner table, or in a company meeting. Places where personal history, your own unique view of the world, ego, pride, marketing, and odd incentives are scrambled together into a narrative that works for you.

Another important point that helps explain why money decisions are so difficult, and why there is so much misbehavior, is to recognize how new this topic is.

Money has been around a long time. King Alyattes of Lydia, now part of Turkey, is thought to have created the first official currency in 600 BC. But the modern foundation of money decisions—saving and investing—is based around concepts that are practically infants.

Take retirement. At the end of 2018 there was $27 trillion in U.S. retirement accounts, making it the main driver of the common investor’s saving and investing decisions.\(^5\)
But the entire concept of being entitled to retirement is, at most, two generations old.

Before World War II most Americans worked until they died. That was the expectation and the reality. The labor force participation rate of men age 65 and over was above 50% until the 1940s:

Social Security aimed to change this. But its initial benefits were nothing close to a proper pension. When Ida May Fuller cashed the first Social Security check in 1940, it was for $22.54, or $416 adjusted for inflation. It was not until the 1980s that the average Social Security check for retirees exceeded $1,000 a month adjusted for inflation. More than a quarter of Americans over age 65 were classified by the Census Bureau as living in poverty until the late 1960s.

There is a widespread belief along the lines of, “everyone used to have a private pension.” But this is wildly exaggerated. The Employee Benefit Research Institute explains: “Only a quarter of
those age 65 or older had pension income in 1975.” Among that lucky minority, only 15% of household income came from a pension.

*The New York Times* wrote in 1955 about the growing desire, but continued inability, to retire: “To rephrase an old saying: everyone talks about retirement, but apparently very few do anything about it.”

It was not until the 1980s that the idea that everyone deserves, and should have, a dignified retirement took hold. And the way to get that dignified retirement ever since has been an expectation that everyone will save and invest their own money.

Let me reiterate how new this idea is: The 401(k)—the backbone savings vehicle of American retirement—did not exist until 1978. The Roth IRA was not born until 1998. If it were a person it would be barely old enough to drink.

It should surprise no one that many of us are bad at saving and investing for retirement. We’re not crazy. We’re all just newbies.

Same goes for college. The share of Americans over age 25 with a bachelor’s degree has gone from less than 1 in 20 in 1940 to 1 in 4 by 2015. The average college tuition over that time rose more than fourfold adjusted for inflation. Something so big and so important hitting society so fast explains why, for example, so many people have made poor decisions with student loans over the last 20 years. There is not decades of accumulated experience to even attempt to learn from. We’re winging it.

Same for index funds, which are less than 50 years old. And hedge funds, which didn’t take off until the last 25 years. Even widespread use of consumer debt—mortgages, credit cards, and car loans—did not take off until after World War II, when the GI Bill made it easier for millions of Americans to borrow.

Dogs were domesticated 10,000 years ago and still retain some behaviors of their wild ancestors. Yet here we are, with between 20 and 50 years of experience in the modern financial system, hoping to be perfectly acclimated.
For a topic that is so influenced by emotion versus fact, this is a problem. And it helps explain why we don’t always do what we’re supposed to with money.

We all do crazy stuff with money, because we’re all relatively new to this game and what looks crazy to you might make sense to me. But no one is crazy—we all make decisions based on our own unique experiences that seem to make sense to us in a given moment.

Now let me tell you a story about how Bill Gates got rich.