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.

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.

The challenge for us is that no amount of studying or open-mindedness can genuinely recreate the power of fear and uncertainty.

Some lessons have to be experienced before they can be understood.

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.

Individual investors’ willingness to bear risk depends on personal history.

Different experiences can lead to vastly different views within topics that one side intuitively thinks should be black and white.

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 someone else.

2.

Luck & Risk

Nothing is as good or as bad as it seems.

Luck and risk are both the reality that every outcome in life is guided by forces other than individual effort.

The accidental impact of actions outside of your control can be more consequential than the ones you consciously take.
But both are so hard to measure, and hard to accept, that they too often go overlooked.

If you give luck and risk their proper respect, you realize that when judging people's financial success — both your own and others' — it's never as good or as bad as it seems.

When judging others, attributing success to luck makes you look jealous and mean, even if we know it exists. And when judging yourself, attributing success to luck can be too demoralizing to accept.

Everything worth pursuing has less than 100% odds of succeeding, and risk is just what happens when you end up on the unfortunate side of that equation.

It's possible to statistically measure whether some decisions were wise. But in the real world, day to day, we simply don't. It's too hard. We prefer simple stories, which are easy but often devilishly misleading.

The line between bold and reckless can be thin. When we don't give risk and luck their proper billing it's often invisible.

Be careful who you praise and admire. Be careful who you look down upon and wish to avoid becoming.

Focus less on specific individuals and case studies and more on broad patterns.

The trick when dealing with failure is arranging your financial life in a way that a bad investment here and a missed financial goal there won't wipe you out so you can keep playing until the odds fall in your favor.

3.

Never Enough

When rich people do crazy things.

For a critical element of our society, including many of the wealthiest and most powerful among us, there seems to be no limit today on what enough entails.

There is no reason to risk what you have and need for what you don't have and don't need.

- The hardest financial skill is getting the goalpost to stop moving. Happiness is just results minus expectations.
- Social comparison is the problem here. The ceiling of social comparison is so high that virtually no one will ever hit it.
- “Enough” is not too little. “Enough” is realizing that the opposite — an insatiable appetite for more — will push you to the point of regret.
- There are many things never worth risking, no matter the potential gain. *Reputation is invaluable. Freedom and independence are invaluable. Family and friends are invaluable. Being loved by those who you want to love you is invaluable. Happiness is invaluable. And your best shot at keeping these things is knowing when it’s time to stop taking risks that might harm them. Knowing when you have enough.*

4.

Confounding Compounding

$81.5 billion of Warren Buffett's $84.5 billion net worth came after his 65th birthday. Our minds are not built to handle such absurdities.

Lessons from one field can often teach us something important about unrelated fields.

It is not necessarily the amount of snow that causes ice sheets but the fact that snow, however little, lasts.

A small starting base can lead to results so extraordinary they seem to defy logic.

The skill is investing, but the secret is time.

What seem like small changes in growth assumptions can lead to ridiculous, impractical numbers.

When compounding isn’t intuitive we often ignore its potential and focus on solving problems through other means. Not because we’re overthinking, but because we rarely stop to consider compounding potential.

Good investing isn’t necessarily about earning the highest returns, because the highest returns tend to be one-off hits that can’t be repeated. It’s about earning pretty good returns that you can stick with and which can be repeated for the longest period of time. That’s when compounding runs wild.

5.

Getting Wealthy vs. Staying Wealthy

Good investing is not necessarily about making good decisions. It's about consistently not screwing up.

There's only one way to stay wealthy: some combination of frugality and paranoia.

Getting money is one thing.
Keeping it is another.

Capitalism is hard. But part of the reason this happens is because getting money and keeping money are two different skills.

Keeping money requires the opposite of taking risk. It requires humility, and fear that what you've made can be taken away from you just as fast. It requires frugality and an acceptance that at least some of what you've made is attributable to luck, so past success can't be relied upon to repeat indefinitely.

We can't assume that yesterday's success translates into tomorrow's good fortune.

The ability to stick around for a long time, without wiping out or being forced to give up, is what makes the biggest difference. This should be the cornerstone of your strategy, whether it's in investing or your career or a business you own.

Few gains are so great that they're worth wiping yourself out over.

The counterintuitive math of compounding.

Managing investments through a public company meansinvestors cannit withdraw their capital.

Survival gave him longevity 'Warren Buffet'. And longevity — investing consistently from age 10 to at least age 89 — is what made compounding work wonders.

- More than I want big returns, I want to be financially unbreakable. And if I'm unbreakable I actually think I'll get the biggest returns, because I'll be able to stick around long enough for compounding to work wonders.

  Preventing one desperate, ill-timed stock sale can do more for your lifetime returns than picking dozens of big-time winners.

- Planning is important, but the most important part of every plan is to plan on the plan not going according to plan.

  Financial and investment planning are critical, because they let you know whether your current actions are within the realm of reasonable.

  A plan is only useful if it can survive reality. And a future filled with unknowns is everyone's reality.

  Room for error, often called margin of safety, is one of the most underappreciated forces in finance. It comes in many forms: A frugal budget, flexible thinking, and a loose timeline — anything that lets you live happily with a range of outcomes.
  It's different from being conservative. Conservative is avoiding a certain level of risk. Margin of safety is raising the odds of success at a given level of risk by increasing your chances of survival. Its magic is that the higher your margin of safety, the smaller your edge needs to be to have a favorable outcome.

- A barbelled personality — optimistic about the future, but paranoid about what will prevent you from getting to the future — is vital.

  Destruction in the face of progress is not only possible, but an efficient way to get rid of excess.

A mindset that can be paranoid and optimistic at the same time is hard to maintain, because seeing things as black or white takes less effort than accepting nuance. But you need short-term paranoia to keep you alive long enough to exploit long-term optimism.

6.

Tails, You Win

You can be wrong half the time and still make a fortune.

I've been banging away at this thing for 30 years. I think the simple math is, some projects work and some don't. There's no reason to belabor either one. Just get on to the next.

Art is as subjective as it gets. Tails drive everything.

Long tails — the farthest ends of a distribution of outcomes — have tremendous influence in finance, where a small number of events can account for the majority of outcomes.

It is not intuitive that an investor can be wrong half the time and still make a fortune. It means we underestimate how normal it is for a lot of things to fail. Which causes us to overreact when they do.

Anything that is huge, profitable, famous, or influential is the result of a tail event — an outlying one-in-thousands or millions event.

The idea that a few things account for most results is not just true for companies in your investment portfolio. It's also an important part of your own behavior as an investor.

Your success as an investor will be determined by how you respond to punctuated moments of terror, not the years spent on cruise control.
A good definition of an investing genius is the man or woman who can do the average thing when all those around them are going crazy. Tails drive everything.

7.

Freedom

Controlling your time is the highest dividend money pays.

The ability to do what you want, when you want, with who you want, for as long as you want, is priceless. It is the highest dividend money pays.

Having a strong sense of controlling one's life is a more dependable predictor of positive feelings of wellbeing than any of the objective conditions of life we have considered.

Money's greatest intrinsic value — and this can't be overstated — is its ability to give you control over your time. To obtain, bit by bit, a level of independence and autonomy that comes from unspent assets that give you greater control over what you can do and when you can do it.

Using your money to buy time and options has a lifestyle benefit few luxury goods can compete with.

Reactance. People like to feel like they're in control — in the drivers' seat. When we try to get them to do something, they feel disempowered. Rather than feeling like they made the choice, they feel like we made it for them. So they say no or do something else, even when they might have originally been happy to go along.

A wise old owl lived in an oak, The more he saw the less he spoke, The less he spoke, the more he heard, Why aren't we all like that wise old bird?.

Your kids don't want your money (or what your money buys) anywhere near as much as they want you. Specifically, they want you with them.

8.

Man in the Car Paradox

No one is impressed with your possessions as much as you are.

People tend to want wealth to signal to others that they should be liked and admired. But in reality those other people often bypass admiring you, not because they don’t think wealth is admirable, but because they use your wealth as a benchmark for their own desire to be liked and admired.

If respect and admiration are your goal, be careful how you seek it. Humility, kindness, and empathy will bring you more respect than horsepower ever will.

9.

Wealth is What You Don't See

Spending money to show people how much money you have is the fastest way to have less money.

Wealth is what you don't see.

Modern capitalism makes helping people fake it until they make it a cherished industry. But the truth is that wealth is what you don't see.

Wealth is financial assets that haven't yet been converted into the stuff you see.

If you spend money on things, you will end up with the things and not the money.

There is no faster way to feel rich than to spend lots of money on really nice things. But the way to be rich is to spend money you have, and to not spend money you don't have. It's really that simple.

Wealth is hidden. It's income not spent. Wealth is an option not yet taken to buy something later. Its value lies in offering you options, flexibility, and growth to one day purchase more stuff than you could right now.

Wealth is hard, and requires self-control. But it creates a gap between what you could do and what you choose to do that accrues to you over time.

Most people, deep down, want to be wealthy. They want freedom and flexibility, which is what financial assets not yet spent can give you.

The world is filled with people who look modest but are actually wealthy and people who look rich who live at the razor's edge of insolvency.

10.

Save Money

The only factor you can control generates one of the only things that matters. How wonderful.

Building wealth has little to do with your income or investment returns, and lots to do with your savings rate.

Wealth is just the accumulated leftovers after you spend what you take in. The value of wealth is relative to what you need.

Learning to be happy with less money creates a gap between what you have and what you want. A high savings rate means having lower expenses than you otherwise could, and having lower expenses means your savings go farther than they would if you spent more.

Past a certain level of income, what you need is just what sits below your ego and one of the most powerful ways to increase your savings isn't to raise your income. It's to raise your humility.

People's ability to save is more in their control than they might think. Saving is a hedge against life's inevitable ability to surprise the hell out of you at the worst possible moment.

The intangible benefits of money can be far more valuable and capable of increasing your happiness than the tangible things that are obvious targets of our savings.

Savings without a spending goal gives you options and flexibility, the ability to wait and the opportunity to pounce. It gives you time to think. It lets you change course on your own terms. That flexibility and control over your time is an unseen return on wealth.

If you have flexibility you can wait for good opportunities, both in your career and for your investments.

11.

Reasonable > Rational

Aiming to be mostly reasonable works better than trying to be coldly rational.

Do not aim to be coldly rational when making financial decisions. Aim to just be pretty reasonable. Reasonable is more realistic and you have a better chance of sticking with it for the long run, which is what matters most when managing money.

Fevers play a role in helping the body fight infection. They turn on the body's immune system. They help the body fight infection. Normal fevers between 100° and 104° f are good for sick children.

Aiming to be reasonable instead of rational, more people should consider when making decisions with their money.

Investing has a social component that's often ignored when viewed through a strictly financial lens.

Young savers should supercharge their retirement accounts using two-to-one margin (two dollars of debt for every dollar of their own money) when buying stocks.

If familiarity helps you take the leap of faith required to remain backing those investor strangers, it's reasonable.

12.

Surprise!

History is the study of change, ironically used as a map of the future.

Things that have never happened before happen all the time.

History helps us calibrate our expectations, study where people tend to go wrong, and offers a rough guide of what tends to work. But it is not, in any way, a map of the future.

No overreliance on past data as a signal to future conditions in a field where innovation and change are the lifeblood of progress.

Imagine how much harder physics would be if electrons had feelings.

The cornerstone of economics is that things change over time, because the invisible hand hates anything staying too good or too bad indefinitely.

Experiencing specific events does not necessarily qualify you to know what will happen next. In fact it rarely does, because experience leads to overconfidence more than forecasting ability.

The most important events in historical data are the big outliers, the record-breaking events. They are what move the needle in the economy.

The majority of what's happening at any given moment in the global economy can be tied back to a handful of past events that were nearly impossible to predict.

Realizing the future might not look anything like the past is a special kind of skill that is not generally looked highly upon by the financial forecasting community.

What you should learn when you make a mistake because you did not anticipate something is that the world is difficult to anticipate.

The correct lesson to learn from surprises is that the world is surprising.

History can be a misleading guide to the future of the economy and stock market because it doesn't account for structural changes that are relevant to today's world.

Since economies evolve, recent history is often the best guide to the future, because it's more likely to include important conditions that are relevant to the future.

The four most dangerous words in investing are, 'it's different this time.

The further back in history you look, the more general your takeaways should be.

Historians are not prophets.

13.

Room for Error

The most important part of every plan is planning on your plan not going according to plan.

Humility that you don't know, and cannot know exactly what's going to happen next.

We must make sure that we have enough money to withstand any swings of bad luck.

The wisdom in having room for error is acknowledging that uncertainty, randomness, and chance—“unknowns”—are an ever-present part of life.

the purpose of the margin of safety is to render the forecast unnecessary.

Margin of safety—you can also call it room for error or redundancy—is the only effective way to safely navigate a world that is governed by odds, not certainties.

The grey area—pursuing things where a range of potential outcomes are acceptable—is the smart way to proceed.

When analyzing other people’s home renovation plans, most people estimate the project will run between 25% and 50% over budget.

Room for error lets you endure a range of potential outcomes, and endurance lets you stick around long enough to let the odds of benefiting from a low-probability outcome fall in your favor.

Having a gap between what you can technically endure versus what’s emotionally possible is an overlooked version of room for error.

Use room for error when estimating your future returns.
You can be risk loving and yet completely averse to ruin, no risk that can wipe you out is ever worth taking.

Leverage—taking on debt to make your money go further—pushes routine risks into something capable of producing ruin. The danger is that rational optimism most of the time masks the odds of ruin some of the time. The result is we systematically underestimate risk.

Think of money as barbelled. Take risks with one portion and terrified with the other.

Room for error does more than just widen the target around what you think might happen. It also helps protect you from things you’d never imagine, which can be the most troublesome events we face.

You can plan for every risk except the things that are too crazy to cross your mind. And those crazy things can do the most harm, because they happen more often than you think and you have no plan for how to deal with them.

Everything that can break will eventually break.

The biggest single point of failure with money is a sole reliance on a paycheck to fund short-term spending needs, with no savings to create a gap between what you think your expenses are and what they might be in the future.

It’s equally important to save for things you can’t possibly predict or even comprehend.

Few financial plans that only prepare for known risks have enough margin of safety to survive the real world.

14.

You'll Change

Long-term planning is harder than it seems because people's goals and desires change over time.

Long-term financial planning is essential. But things change—both the world around you, and your own goals and desires.

It’s hard to make enduring long-term decisions when your view of what you’ll want in the future is likely to shift.

The End of History Illusion is what psychologists call the tendency for people to be keenly aware of how much they’ve changed in the past, but to underestimate how much their personalities, desires, and goals are likely to change in the future.

The first rule of compounding is to never interrupt it unnecessarily. Compounding works best when you can give a plan years or decades to grow. Avoid the extreme ends of financial planning and come to accept the reality of changing our minds.

Regrets are especially painful when you abandon a previous plan and feel like you have to run in the other direction twice as fast to make up for lost time.

The trick is to accept the reality of change and move on as soon as possible.

Sunk costs—anchoring decisions to past efforts that can’t be refunded—are a devil in a world where people change over time.

15.

Nothing's Free

Everything has a price, but not all prices appear on labels.

Everything has a price, and the key to a lot of things with money is just figuring out what that price is and being willing to pay it.

Every job looks easy when you're not the one doing it.

The inability to recognize that investing has a price can tempt us to try to get something for nothing. Which, like shoplifting, rarely ends well.

The irony is that by trying to avoid the price, investors end up paying double.

The price of investing success is not immediately obvious. It's not a price tag you can see, so when the bill comes due it doesn't feel like a fee for getting something good. It feels like a fine for doing something wrong.

Thinking of market volatility as a fee rather than a fine is an important part of developing the kind of mindset that lets you stick around long enough for investing gains to work in your favor.

The worthwhile tradeoff of fees is obvious when it's clear you're paying one. Same with investing, where volatility is almost always a fee, not a fine.

The volatility/uncertainty fee—the price of returns—is the cost of admission to get returns greater than low-fee parks like cash and bonds.

If you view the admission fee as a fine, you'll never enjoy the magic. Find the price, then pay it.

16.

You & Me

Beware taking financial cues from people playing a different game than you are.

The common answer here is that people are greedy, and greed is an indelible feature of human nature.

People make financial decisions they regret, and they often do so with scarce information and without logic.

Investors often innocently take cues from other investors who are playing a different game than they are.

An idea exists in finance that seems innocent but has done incalculable damage. It's the notion that assets have one rational price in a world where investors have different goals and time horizons.

An iron rule of finance is that money chases returns to the greatest extent that it can. If an asset has momentum—it's been moving consistently up for a period of time—it's not crazy for a group of short-term traders to assume it will keep moving up. Not indefinitely; just for the short period of time they need it to. Momentum attracts short-term traders in a reasonable way.

Bubbles aren't so much about valuations rising. That's just a symptom of something else: time horizons shrinking as more short-term traders enter the playing field.

Announcing record trading volume, which is what happens when investors are buying and selling in a single day.

The only thing that mattered to flippers was that the price of the home would be more next month than it was this month. And for many years, it was.

Profits will always be chased. And short-term traders operate in an area where the rules governing long-term investing—particularly around valuation—are ignored, because they're irrelevant to the game being played.

Bubbles do their damage when long-term investors playing one game start taking their cues from those short-term traders playing another.

Many finance and investment decisions are rooted in watching what other people do and either copying them or betting against them.

An anchor of psychology is not realizing that rational people can see the world through a different lens than your own.

Being swayed by people playing a different game can also throw off how you think you're supposed to spend your money.

We might not even have different styles. We're just playing a different game. Few things matter more with money than understanding your own time horizon and not being persuaded by the actions and behaviors of people playing different games than you are.

17.

The Seduction of Pessimism

Optimism sounds like a sales pitch.
Pessimism sounds like someone trying to help you.

For reasons I have never understood, people like to hear that the world is going to hell.

Real optimists don't believe that everything will be great. That's complacency. Optimism is a belief that the odds of a good outcome are in your favor over time, even when there will be setbacks along the way.

Pessimism just sounds smarter and more plausible than optimism. A constant drumbeat of pessimism usually drowns out any triumphalist song.

I have observed that not the man who hopes when others despair, but the man who despairs when others hope, is admired by a large class of persons as a sage.

Pessimism is seductive when dealing with money. It just helps to know what they are to ensure we don't take them too far.

Organisms that treat threats as more urgent than opportunities have a better chance to survive and reproduce.

Money is ubiquitous, so something bad happening tends to affect everyone and captures everyone's attention. A recession barreling down on the economy could impact every single person—including you, so pay attention.

Two topics that will affect your life whether you are interested in them or not: ***money and health.***

Pessimists often extrapolate present trends without accounting for how markets adapt. Extremely good and extremely bad circumstances rarely stay that way for long because supply and demand adapt in hard-to-predict ways.

A realist who understood that necessity is the mother of all invention, it was far less scary.

Progress happens too slowly to notice, but setbacks happen too quickly to ignore.

Growth is driven by compounding, which always takes time. Destruction is driven by single points of failure, which can happen in seconds, and loss of confidence, which can happen in an instant.

It takes years to realize how important a product or company is, but failures can happen overnight.

The short sting of pessimism prevails while the powerful pull of optimism goes unnoticed.

In investing you must identify the price of success—volatility and loss amid the long backdrop of growth—and be willing to pay it.

Pessimism reduces expectations, narrowing the gap between possible outcomes and outcomes you feel great about. Expecting things to be bad is the best way to be pleasantly surprised when they're not.

18.

When You'll Believe Anything

Appealing fictions, and why stories are more powerful than statistics.

When we think about the growth of economies, businesses, investments and careers, we tend to think about tangible things.

The more you want something to be true, the more likely you are to believe a story that overestimates the odds of it being true. “appealing fictions.” They have a big impact on how we think about money—particularly investments and the economy.

If you desperately need a solution and a good one isn’t known or readily available to you, the path of least resistance is toward Hajaji’s reasoning: willing to believe anything. Not just try anything, but believe it.

You’ll believe just about anything when the stakes are that high.

Investing is one of the only fields that offers daily opportunities for extreme rewards.

The bigger the gap between what you want to be true and what you need to be true to have an acceptable outcome, the more you are protecting yourself from falling victim to an appealing financial fiction.

Incentives are a powerful motivator, and we should always remember how they influence our own financial goals and outlooks. It can’t be overstated: there is no greater force in finance than room for error, and the higher the stakes, the wider it should be.

Everyone has an incomplete view of the world. But we form a complete narrative to fill in the gaps. I am just as susceptible to explaining the world through the limited set of mental models I have at my disposal.

History cannot be interpreted without the aid of imagination and intuition. The sheer quantity of evidence is so overwhelming that selection is inevitable. Where there is selection there is art. Those who read history tend to look for what proves them right and confirms their personal opinions. They defend loyalties. They read with a purpose to affirm or to attack. They resist inconvenient truth since everyone wants to be on the side of the angels. Just as we start wars to end all wars.

The ability to explain the past, gives us the illusion that the world is understandable. It gives us the illusion that the world makes sense, even when it doesn’t make sense. That’s a big deal in producing mistakes in many fields.

We all want the complicated world we live in to make sense. So we tell ourselves stories to fill in the gaps of what are effectively blind spots.

Coming to terms with how much you don’t know means coming to terms with how much of what happens in the world is out of your control. And that can be hard to accept.

Risk is what’s left over when you think you’ve thought of everything.

The illusion of control is more persuasive than the reality of uncertainty.

- When planning we focus on what we want to do and can do, neglecting the plans and skills of others whose decisions might affect our outcomes.
- Both in explaining the past and in predicting the future, we focus on the causal role of skill and neglect the role of luck.
- We focus on what we know and neglect what we do not know, which makes us overly confident in our beliefs.

19.

All Together Now

What we've learned about the psychology of your own money.

Medicine is a complex profession and the interactions between physicians and patients are also complex.

Go out of your way to find humility when things are going right and forgiveness/compassion when they go wrong.

Less ego, more wealth. Saving money is the gap between your ego and your income, and wealth is what you don’t see.

Increase your time horizon. Time is the most powerful force in investing. It makes little things grow big and big mistakes fade away.

You can be wrong half the time and still make a fortune, because a small minority of things account for the majority of outcomes. No matter what you’re doing with your money you should be comfortable with a lot of stuff not working.

Use money to gain control over your time, because not having control of your time is such a powerful and universal drag on happiness.

Be nicer and less flashy. No one is impressed with your possessions as much as you are.

Save. Just save. You don’t need a specific reason to save.

Define the cost of success and be ready to pay it. Because nothing worthwhile is free. And remember that most financial costs don’t have visible price tags.

Worship room for error. A gap between what could happen in the future and what you need to happen in the future in order to do well is what gives you endurance, and endurance is what makes compounding magic over time.

Many times over. Avoid the extreme ends of financial decisions.

Avoid the extreme ends of financial decisions. Everyone’s goals and desires will change over time, and the more extreme your past decisions were the more you may regret them as you evolve.

You should like risk because it pays off over time. But you should be paranoid of ruinous risk because it prevents you from taking future risks that will pay off over time.

Define the game you’re playing, and make sure your actions are not being influenced by people playing a different game.

Respect the mess. Smart, informed, and reasonable people can disagree in finance, because people have vastly different goals and desires.

20.

Confessions

The psychology of my own money.

What works for one person may not work for another.

I mostly just want to wake up every day knowing my family and I can do whatever we want to do on our own terms. Every financial decision we make revolves around that goal.

Independence, to me, doesn't mean you'll stop working. It means you only do the work you like with people you like at the times you want for as long as you want.

It's mostly a matter of keeping your expectations in check and living below your means. Independence, at any income level, is driven by your savings rate.

Comfortable, but nothing close to fancy. Comfortably living below what you can afford, without much desire for more, removes a tremendous amount of social pressure that many people in the modern first world subject themselves to.

Good decisions aren't always rational. At some point you have to choose between being happy or being "right."

The first rule of compounding is to never interrupt it unnecessarily.

Beating the market should be hard; the odds of success should be low. If they weren't, everyone would do it, and if everyone did it there would be no opportunity.

Life is about playing the odds, and we all think about odds a little differently.

I can afford to not be the greatest investor in the world, but I can't afford to be a bad one.

Simple investment strategies can work great as long as they capture the few things that are important to that strategy's success.