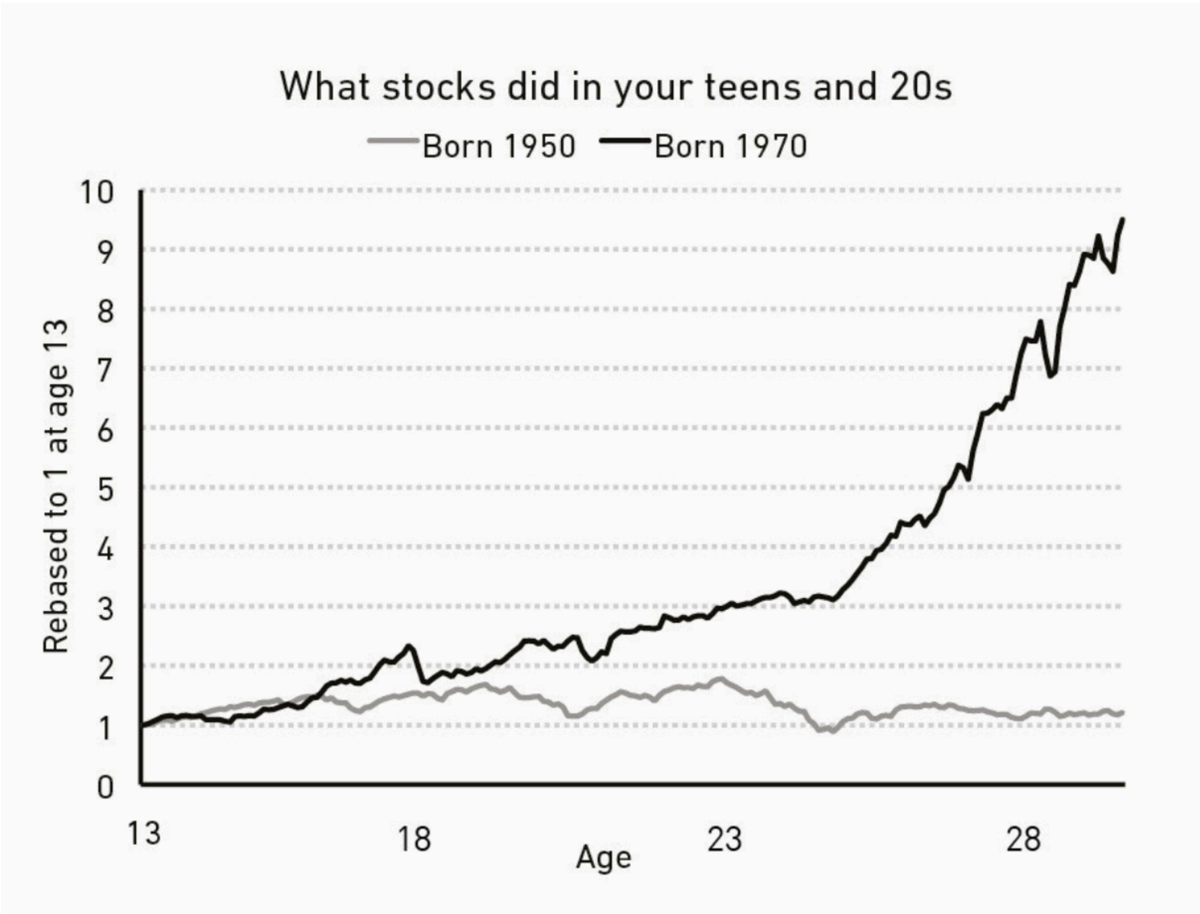
- Take stocks. If you were born in 1970, the S&P 500 increased almost 10-fold, adjusted for inflation, during your teens and 20s. That's an amazing return. If you were born in 1950, the market went literally nowhere in your teens and 20s adjusted for inflation. Two groups of people, separated by chance of their birth year, go through life with a completely different view on how the stock market works



- Luck and risk are both the reality that every outcome in life is guided by forces other than individual effort. They are so similar that you can't believe in one without equally respecting the other. They both happen because the world is too complex to allow 100% of your actions to dictate 100% of your outcomes. They are driven by the same thing: You are one person in a game with seven billion other people and infinite moving parts. The accidental impact of actions outside of your control can be more consequential than the ones you consciously take.

- 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 things are going extremely well, realize it's not as good as you think. You are not invincible, and if you acknowledge that luck brought you success then you have to believe in luck's cousin, risk, which can turn your story around just as quickly.

- Modern capitalism is a pro at two things: generating wealth and generating envy. Perhaps they go hand in hand; wanting to surpass your peers can be the fuel of hard work. But life isn't any fun without a sense of enough. Happiness, as it's said, is just results minus expectations.

  But 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.

- 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 favourable outcome.

- By age 20 the average person can lose roughly half the synaptic connections they had in their brain at age two, as inefficient and redundant neural pathways are cleared out. But the average 20-year-old is much smarter than the average two-year-old. Destruction in the face of progress is not only possible, but an efficient way to get rid of excess.

Imagine if you were a parent and could see inside your child's brain. Every morning you notice fewer synaptic connections in your kid's head. You would panic! You would say, "This can't be right, there's loss and destruction here. We need an intervention. We need to see a doctor!" But you don't. What you are witnessing is the normal path of progress.

Economies, markets, and careers often follow a similar path—growth amid loss.

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Do you know what happened during this period? Where do we begin ...

1.3 million Americans died while fighting nine major wars.

Roughly 99.9% of all companies that were created went out of business.

Four U.S. presidents were assassinated.

675,000 Americans died in a single year from a flu pandemic.

30 separate natural disasters killed at least 400 Americans each.

33 recessions lasted a cumulative 48 years.

The number of forecasters who predicted any of those recessions rounds to zero.

The stock market fell more than 10% from a recent high at least 102 times.

Stocks lost a third of their value at least 12 times.

Annual inflation exceeded 7% in 20 separate years.

The words “economic pessimism” appeared in newspapers at least 29,000 times, according to Google.

Our standard of living increased 20-fold in these 170 years, but barely a day went by that lacked tangible reasons for pessimism.

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.

- How you behaved as an investor during a few months in late 2008 and early 2009 will likely have more impact on your lifetime returns than everything you did from 2000 to 2008.

- 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.

- Intuitively, you’d think the CEO should apologize to shareholders. But CEO Jeff Bezos said shortly after the disastrous launch of the company’s Fire Phone:

  If you think that’s a big failure, we’re working on much bigger failures right now. I am not kidding. Some of them are going to make the Fire Phone look like a tiny little blip.

  A similar thing happens in investing. It’s easy to find Warren Buffett’s net worth, or his average annual returns. Or even his best, most notable investments. They’re right there in the open, and they’re what people talk about.

It's much harder to piece together every investment he's made over his career. No one talks about the dud picks, the ugly businesses, the poor acquisitions. But they're a big part of Buffett's story. They are the other side of tail-driven returns.

- At the Berkshire Hathaway shareholder meeting in 2013 Warren Buffett said he's owned 400 to 500 stocks during his life and made most of his money on 10 of them. Charlie Munger followed up: "If you remove just a few of Berkshire's top investments, its long-term track record is pretty average."

  When we pay special attention to a role model's successes we overlook that their gains came from a small percent of their actions. That makes our own failures, losses, and setbacks feel like we're doing something wrong. But it's possible we are wrong, or just sort of right, just as often as the masters are. They may have been more right when they were right, but they could have been wrong just as often as you.

  It's not whether you're right or wrong that's important," George Soros once said, "but how much money you make when you're right and how much you lose when you're wrong." You can be wrong half the time and still make a fortune.

- 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.

  More than your salary. More than the size of your house. More than the prestige of your job. Control over doing what you want, when you want to, with the people you want to, is the broadest lifestyle variable that makes people happy.

- A small amount of wealth means the ability to take a few days off work when you're sick without breaking the bank. Gaining that ability is huge if you don't have it.

  A bit more means waiting for a good job to come around after you get laid off, rather than having to take the first one you find. That can be life changing.

Compared to generations prior, control over your time has diminished. And since controlling your time is such a key happiness influencer, we shouldn't be surprised that people don't feel much happier even though we are, on average, richer than ever.

- There is a paradox here: 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.

  The letter I wrote after my son was born said, "You might think you want an expensive car, a fancy watch, and a huge house. But I'm telling you, you don't. What you want is respect and admiration from other people, and you think having expensive stuff will bring it. It almost never does—especially from the people you want to respect and admire you.

  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.

- We tend to judge wealth by what we see, because that's the information we have in front of us. We can't see people's bank accounts or brokerage statements. So we rely on outward appearances to gauge financial success. Cars. Homes. Instagram photos.

  But 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.

- There are, of course, wealthy people who also spend a lot of money on stuff. But even in those cases what we see is their richness, not their wealth. We see the cars they chose to buy and perhaps the school they choose to send their kids to. We don't see the savings, retirement accounts, or investment portfolios. We see the homes they bought, not the homes they could have bought had they stretched themselves thin.

It’s difficult to learn from what you can’t see. Which helps explain why it’s so hard for many to build wealth.

- The first idea—simple, but easy to overlook—is that building wealth has little to do with your income or investment returns, and lots to do with your savings rate.

- Investment returns can make you rich. But whether an investing strategy will work, and how long it will work for, and whether markets will cooperate, is always in doubt. Results are shrouded in uncertainty.

  Personal savings and frugality—finance’s conservation and efficiency—are parts of the money equation that are more in your control and have a 100% chance of being as effective in the future as they are today.

- Wealth is just the accumulated leftovers after you spend what you take in. And since you can build wealth without a high income, but have no chance of building wealth without a high savings rate, it’s clear which one matters more.

- Only saving for a specific goal makes sense in a predictable world. But ours isn’t. Saving is a hedge against life’s inevitable ability to surprise the hell out of you at the worst possible moment.

- If you have flexibility you can wait for good opportunities, both in your career and for your investments. You’ll have a better chance of being able to learn a new skill when it’s necessary. You’ll feel less urgency to chase competitors who can do things you can’t, and have more leeway to find your passion and your niche at your own pace. You can find a new routine, a slower pace, and think about life with a different set of assumptions. The ability to do those things when most others can’t is one of the few things that will set you apart in a world where intelligence is no longer a sustainable advantage.

- Invest in a promising company you don't care about, and you might enjoy it when everything's going well. But when the tide inevitably turns you're suddenly losing money on something you're not interested in. It's a double burden, and the path of least resistance is to move onto something else. If you're passionate about the company to begin with—you love the mission, the product, the team, the science, whatever—the inevitable down times when you're losing money or the company needs help are blunted by the fact that at least you feel like you're part of something meaningful. That can be the necessary motivation that prevents you from giving up and moving on.

- Most forecasts about where the economy and the stock market are heading next are terrible, but making forecasts is reasonable. It's hard to wake up in the morning telling yourself you have no clue what the future holds, even if it's true. Acting on investment forecasts is dangerous. But I get why people try to predict what will happen next year. It's human nature. It's reasonable.

- Everyone who follows the economy or investment markets should hang on their wall: Things that have never happened before happen all the time.

- It is smart to have a deep appreciation for economic and investing history. 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.

  An overreliance on past data as a signal to future conditions in a field where innovation and change are the lifeblood of progress.

- But investing is not a hard science. It's a massive group of people making imperfect decisions with limited information about things that will have a massive impact on their wellbeing, which can make even smart people nervous, greedy and paranoid.

- 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 thing that makes tail events easy to underappreciate is how easy it is to underestimate how things compound. How, for example, 9/11 prompted the Federal Reserve to cut interest rates, which helped drive the housing bubble, which led to the financial crisis, which led to a poor jobs market, which led tens of millions to seek a college education, which led to $1.6 trillion in student loans with a 10.8% default rate. It's not intuitive to link 19 hijackers to the current weight of student loans, but that's what happens in a world driven by a few outlier tail events.

  This is not a failure of analysis. It's a failure of imagination. 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. 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.

- 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. The biggest gains occur infrequently, either because they don't happen often or because they take time to compound. So the person with enough room for error in part of their strategy (cash) to let them endure hardship in another (stocks) has an edge over the person who gets wiped out, game over, insert more tokens, when they're wrong.

  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.

- The trick that often goes overlooked—even by the wealthiest—realizing that you don't need a specific reason to save. It's fine to save for a car, or a home, or for retirement. But it's equally important to save for things you can't possibly predict or even comprehend—the financial equivalent of field mice.

- Compounding works best when you can give a plan years or decades to grow. This is true for not only savings but careers and relationships. Endurance is key. And when you consider our tendency to change who we are over time, balance at every point in your life becomes a strategy to avoid future regret and encourage endurance.

  Aiming, at every point in your working life, to have moderate annual savings, moderate free time, no more than a moderate commute, and at least moderate time with your family, increases the odds of being able to stick with a plan and avoid regret than if any one of those things fall to the extreme sides of the spectrum.

- Sunk costs—anchoring decisions to past efforts that can't be refunded—are a devil in a world where people change over time. They make our future selves prisoners to our past, different, selves. It's the equivalent of a stranger making major life decisions for you.

- Like everything else worthwhile, successful investing demands a price. But its currency is not dollars and cents. It's volatility, fear, doubt, uncertainty, and regret—all of which are easy to overlook until you're dealing with them in real time.

  Say you want a new car. It costs $30,000. You have three options: 1) Pay $30,000 for it, 2) find a cheaper used one, or 3) steal it. In this case, 99% of people know to avoid the third option, because the consequences of stealing a car outweigh the upside.

  But say you want to earn an 11% annual return over the next 30 years so you can retire in peace. Does this reward come free? Of course not. The world is never that nice. There's a price tag, a bill that must be paid. In this case it's a never-ending taunt from the market, which gives big returns and takes them away just as fast. Including dividends the Dow Jones Industrial Average returned about 11% per year from 1950 to 2019, which is great. But the price of success during this period was dreadfully high. The shaded lines in the chart show when it was at least 5% below its previous all-time high. This is the price of market returns. The fee. It is the cost of admission. And it hurts.

- Many people in investing choose the third option. Like a car thief—though well-meaning and law-abiding—they form tricks and strategies to get the return without paying the price. They trade in and out. They attempt to sell before the next recession and buy before the next boom. Most investors with even a little experience know that volatility is real and common. Many then take what seems like the next logical step: trying to avoid it.

  The question is: Why do so many people who are willing to pay the price of cars, houses, food, and vacations try so hard to avoid paying the price of good investment returns?

  The answer is simple: 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. And while people are generally fine with paying fees, fines are supposed to be avoided. You're supposed to make decisions that preempt and avoid fines. Traffic fines and IRS fines mean you did something wrong and deserve to be punished. The natural response for anyone who watches their wealth decline and views that drop as a fine is to avoid future fines.

  It sounds trivial, but 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.

- Even among those that don't, the stock market's gyrations are promoted so heavily in the media that the Dow Jones Industrial Average might be the stock-less household's most-watched economic barometer.

  Stocks rising 1% might be briefly mentioned in the evening news. But a 1% fall will be reported in bold, all-caps letters usually written in blood red. The asymmetry is hard to avoid.

- 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.

  In stock markets, where a 40% decline that takes place in six months will draw congressional investigations, but a 140% gain that takes place over six years can go virtually unnoticed.

- Pessimism reduces expectations, narrowing the gap between possible outcomes and outcomes you feel great about. Maybe that's why it's so seductive. Expecting things to be bad is the best way to be pleasantly surprised when they're not.

- When we think about the growth of economies, businesses, investments and careers, we tend to think about tangible things—how much stuff do we have and what are we capable of?

  But stories are, by far, the most powerful force in the economy. They are the fuel that can let the tangible parts of the economy work, or the brake that holds our capabilities back.

- 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.

- Consider that 85% of active mutual funds underperformed their benchmark over the 10 years ending 2018. That figure has been fairly stable for generations. You would think an industry with such poor performance would be a niche service and have a hard time staying in business. But there's almost five trillion dollars invested in these funds.[66] Give someone the chance of investing alongside "the next Warren Buffett" and they'll believe with such faith that millions of people will put their life savings behind it.

- It's hard for a policymaker to predict an outright recession, because a recession will make their careers complicated. So even worst-case projections rarely expect anything worse than just "slow-ish" growth. It's an appealing fiction, and it's easy to believe because expecting anything worse is too painful to consider.

- Policymakers are easy targets for criticism, but all of us do this to some extent. And we do it in both directions. If you think a recession is coming and you cash out your stocks in anticipation, your view of the economy is suddenly going to be warped by what you want to happen. Every blip, every anecdote, will look like a sign that doom has arrived—maybe not because it has, but because you want it to.

- Hindsight, 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.

  Most people, when confronted with something they don't understand, do not realize they don't understand it because they're able to come up with an explanation that makes sense based on their own unique perspective and experiences in the world, however limited those experiences are. 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.

- When I'm blind to parts of how the world works I might completely misunderstand why the stock market is behaving like it is, in a way that gives me too much confidence in my ability to know what it might do next. Part of the reason forecasting the stock market and the economy is so hard is because you are the only person in the world who thinks the world operates the way you do. When you make decisions for reasons that I can't even comprehend, I might follow you blindly into a decision that's right for you and disastrous to me.

  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 – Carl Richards.

- We need to believe we live in a predictable, controllable world, so we turn to authoritative-sounding people who promise to satisfy that need.

- Satisfying that need is a great way to put it. Wanting to believe we are in control is an emotional itch that needs to be scratched, rather than an analytical problem to be calculated and solved. The illusion of control is more persuasive than the reality of uncertainty. So we cling to stories about outcomes being in our control.

  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.

- The outcome of a start-up depends as much on the achievements of its competitors and on changes in the market as on its own efforts. However, entrepreneurs naturally focus on what they know best—their plans and actions and the most immediate threats and opportunities, such as the availability of funding. They know less about their competitors and therefore find it natural to imagine a future in which the competition plays little part.

- Manage your money in a way that helps you sleep at night. That's different from saying you should aim to earn the highest returns or save a specific percentage of your income. Some people won't sleep well unless they're earning the highest returns; others will only get a good rest if they're conservatively invested. To each their own. But the foundation of, "does this help me sleep at night?" is the best universal guidepost for all financial decisions.

- If you want to do better as an investor, the single most powerful thing you can do is increase your time horizon. Time is the most powerful force in investing. It makes little things grow big and big mistakes fade away. It can't neutralize luck and risk, but it pushes results closer towards what people deserve.

- Become OK with a lot of things going wrong. 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. That's just how the world is. So you should always measure how you've done by looking at your full portfolio, rather than individual investments. It is fine to have a large chunk of poor investments and a few outstanding ones. That's usually the best-case scenario. Judging how you've done by focusing on individual investments makes winners look more brilliant than they were, and losers appear more regrettable than they should.

- Use money to gain control over your time, because not having control of your time is such a powerful and universal drag on happiness. The ability to do what you want, when you want, with who you want, for as long as you want to, pays the highest dividend that exists in finance.

- Be nicer and less flashy. No one is impressed with your possessions as much as you are. You might think you want a fancy car or a nice watch. But what you probably want is respect and admiration. And you're more likely to gain those things through kindness and humility than horsepower and chrome.

- Save. Just save. You don't need a specific reason to save. It's great to save for a car, or a down payment, or a medical emergency. But saving for things that are impossible to predict or define is one of the best reasons to save. Everyone's life is a continuous chain of surprises. Savings that aren't earmarked for anything in particular is a hedge against life's inevitable ability to surprise the hell out of you at the worst possible moment.

- 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. Uncertainty, doubt, and regret are common costs in the finance world. They're often worth paying. But you have to view them as fees (a price worth paying to get something nice in exchange) rather than fines (a penalty you should avoid).

  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. There is no single right answer; just the answer that works for you.

- Important financial decisions are not made in spreadsheets or in textbooks. They are made at the dinner table. They often aren't made with the intention of maximizing returns, but minimizing the chance of disappointing a spouse or child. Those kinds of things are difficult to summarize in charts or formulas, and they vary widely from person to person. What works for one person may not work for another.

- 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. So no one should be surprised that the majority of those trying to beat the market fail to do so. (The statistics show 85% of large-cap active managers didn't beat the S&P 500 over the decade ending 2019.)