Create Your Niche:

A how-to guide for wealth, purpose, and a life well-lived

By Mr. LaSalle

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Special thanks to Next Gen Personal Finance for providing ongoing, high-quality professional development and curricular materials for this “book.”

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<u>Chapter 1:</u> The Tale of 2 Premises

Welcome to the world of money! It is a fascinating and exciting place. Money motivated the Crusades, Christopher Columbus, and the car airbag. The quest for profits brought us the American Revolution and the Civil War. It helped take Albert Einstein's theory of relativity and turn it into the internet, GPS system, and a cancer-killing laser beam. Just like oxygen, money breathes life into all human ingenuity. The Egyptian pyramids, sonnets of Shakespeare, and Roman Senate never would have occurred without money. As time marches on, money continues to create a tidal wave that instills peace, motivates cooperation, and begins wars.

If money is the root of all evil, it is also the root of all good.

The world of money will force us to explore the Big Bang, parallel universes, the rivalry between the United States and China, man-eating robots, and medicine inspired by snake venom. When the super secretive Defense Advanced Research Projects Agency (DARPA), which is nothing more than a series of hidden government research labs, invented the internet no one expected it would lead to the invention of Google, Facebook, and cyber warfare. The resulting social media led to democratic uprisings in the Middle East and it helps the Center for Disease control (CDC) spot disease outbreaks minutes after they occur.

This is what money does—it funds, fuels, and propels human innovation.

Money is both a force of evil and good in this world.

Money touches us, for better or worse, all throughout our lives. No one has all the answers about money. If we did, no one would go homeless or hungry nor wonder why shopping sprees soothe stressful days at the office. Money has power of all of us, and most of the time people are clueless why.

If money controls you, you will be a slave to credit card bills and shopping mall splurges. If you control money, you will die having accomplished all your wildest dreams.

I couldn't find a good textbook or even series of books that captures how powerful, exciting and a little frightening money can be. What was my only remaining option? I decided to write my own book. I had a great statistics professor in college who typed up the textbook himself. It was very helpful for me to understand some very challenging stuff, so I thought I'd do the same.

Knowledge about money, how to spend it well, and turn money into more money allows you to finance all your dreams. This is what this book is meant to help you do.

As your teacher, I'll make it funny, weird and interesting. Your financial behavior, however, is the real test of how financially secure and independent you will be. You can memorize all the facts and stories in this book, but it's up to you, and you alone, to actually save each and every part of your paycheck, choose cheaper products over the luxuries, and invest.

This book provides the knowledge for wise financial decisions, but your behavior and whether you do or do not act appropriately on this knowledge, will determine how wealthy you will be.

You and I will always regret some decisions we make with money. Mistakes are natural. No sane person intentionally makes themselves miserable with a poor financial decision! (It appeared *at the time* fine to order pizza until you realized this would mean you would miss your phone bill.) I hope this book helps you grow from the errors you will inevitably make with money.

Each year I update this book because I get better at explaining how money works, managing my own money, and understanding how America and the interconnected, international monetary systems manage money.

But, before we talk about money, we must first discuss two different things. These two things are very important because they constitute the foundation of financial wisdom. Nothing about money will make sense without understanding these two things ahead of time. These two things are called **premises**.

If you need to understand something BEFORE you understand something else, then it is called a **premise.** A premise is like background information.

If you believe that your mom packed you a peanut butter and jelly sandwich for lunch today, then you also believe a whole host of other things:

1. Peanut butter and jelly is not going to kill me

2. Peanut butter and jelly is a food and NOT the name of two 2 hidden Russian spies hiding out in my kitchen

3. There will NOT be a zombie apocalypse during lunch time, so I can expect to eat my peanut butter and jelly sandwich.

Most times we never think of these things because they are so obvious: "Drink water," "Work hard", "You should not leave home without wearing shoes." These are the background thoughts you learned earlier in life that allow you to think more complex things today.

But, sometimes, the most obvious of sentences—the things that seem the most unnecessary to think of—are wrong. When the obvious premises you have accepted for a while turn out to be false, well, you might enter a state of extreme surprise. Anyone who has learned of a parent's divorce or a walked into a dimly lit living room for a surprise birthday party knows this.

"The world is not flat" is something you rarely think of, but saying it out loud just 1,000 years ago would get you killed!

Galileo Galeli, the dude who invented the telescope and launched astronomy, had to say, "I take it back! I was wrong; the world is not round. The world is flat!" to avoid being put to death.

He did not believe the world was flat but it was either that or get killed. (I think I'd do the same.)

What Galileo almost died for is the same thing that you don't even realize you are about to do. You are going to recognize the power and influence of questioning premises. To begin, we are going to discuss 2 premises that the whole book rests on.

I cannot turn you into a millionaire if you do not entertain these two things. Keep an open mind. For some readers, it will make you want to close the book, put it back on the shelf, and send me lots of nasty emails. As you read the paragraphs below, you may immediately start to doubt every fact being presented to you. These two premises, however, will make the whole world of money make sense. Think of it as the glue that holds the entire universe of money together.

Two Premises of Personal Finance

The Optimistic Universe		Wealth and Well-Being Work Together
Over long periods of time, human society and civilization get better and better. The world is less violent, more peaceful, more ethical, and more kind with every passing century. Sometimes, we do not even have to look at timelines going back 100 years at a time. Sometimes, we see the progress and improvement of civilization in 30-year increments or less. Humans can be vicious and cruel; we can do more hateful things than anything else in the animal kingdom. We can have a bad 5 years, 10 years or more. But, the piece of evil that lurks in all of us is small compared to the good.		Our job on planet earth is to find happiness. This does not mean just eating junk food and playing video games (although that is important). We are actually happiest when we discover our potential, leave an impact on the world, and be all-we- can-be. This is not easy! It takes hard work. Helping others, finding a good job, and pursuing our interests and passions take money! When we have enough money to reach our dreams, we are wealthy. In fact, the best way to make others and other countries wealthy is first by you becoming wealthy. Your wealth can make the world better. Money has actually done more good than bad throughout history.

The next two chapters explore these 2 premises in detail. It's okay if you doubt them. In fact, being skeptical of everything you learn is a good thing. But, for now, treat the next 2 chapters as fact because it will make the rest of the book easier. If you finish the book, then you can go back and disagree with these two premises.

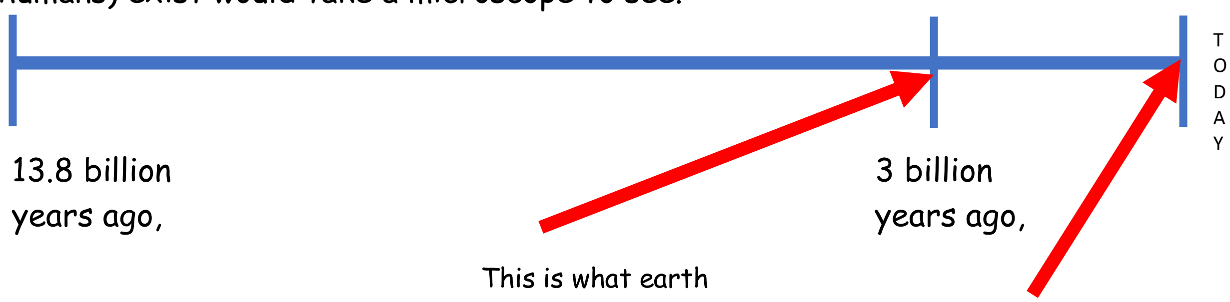
Chapter 2: The Optimistic Universe

The Universe

This chapter details the journey of the universe[1]. When humans come into existence, a lot of time passes before we create “human civilization” with the invention of writing around 3,000 B.C. Once we figure out writing and usher in “civilization,” thousands of years pass before we become “modern” with medicine, cars, human rights and courtrooms.

Humans make a lot of mistakes during our time on the planet, such as extreme violence and war. Such mistakes, however, are far rarer than the good things we do. The story of human civilization is mostly a good one. Let’s start at the beginning.

The Big Bang occurred 13.8 billion years ago. If we were going to make a timeline from the Big Bang to the point when life appears, it would be a microscopic dot. That’s right—on the timeline of the universe, the part where living things (including humans) exist would take a microscope to see.



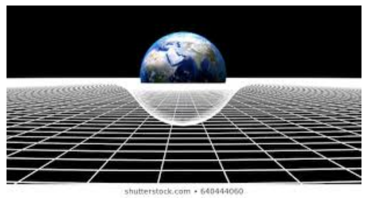

(Picture from Quora)

This is what earth looked like with boiling oceans and an atmosphere of poisonous gases. No living thing existed yet.

Imagine a microscopic dot to represent when life first comes into existence as bacteria, plants and animals. That’s how new life is in the history of the universe.

You might be asking yourself: How in the world can science give us this information?? Good question! Physicists, astronomers and mathematicians are able to measure the length, size and chemical composition of the universe doing some super smart things I barely understand. They argue:

1. Space and time are the same thing, apparently, which means if you can measure the space of the universe you can also measure the time it existed. (Or something like that.)



2. You can see the stars at night in the countryside but not in a big city. Why? Light, during the day, creates pollution blocking the night sky in cities. This (apparently) enables scientists to measure the distance light can travel. If we can measure "light pollution" on earth then we can measure it in space.

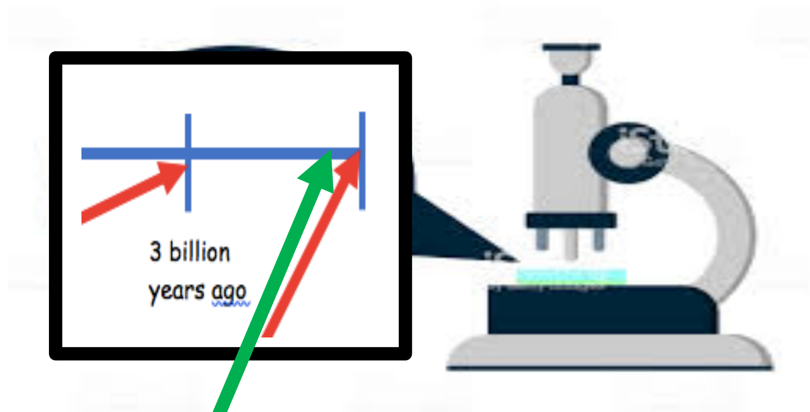
(Darkssky.org)

3. Really fancy and complex telescopes help us see parts of the universe. The color of stars and planets, resulting partially from air pollution, helps determine the time they existed. Time affects space which affects light which affects color.

Much smarter people than me use this information to prove the Big Bang and when humans came into existence.

Now, let's return to our timeline stretching back 13.8 billion years.

Imagine a microscope that focuses on the part of the timeline starting 500 million years ago. At this time earth's oceans stopped bubbling, toxic gas left the atmosphere, and the planet stopped resembling an extreme case of indigestion.

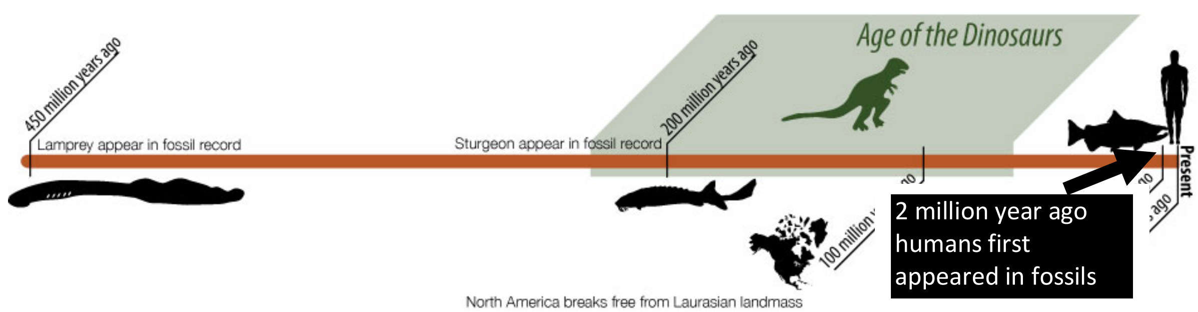


This is 500 million years ago on the timeline we were just looking at.

500 million years ago we finally have animals on earth. Most of them will go extinct. In fact, "mass extinctions," where 80% of the entire world's living organisms dies, happen about 5 times during this 500-million-year period. Wild, right?!

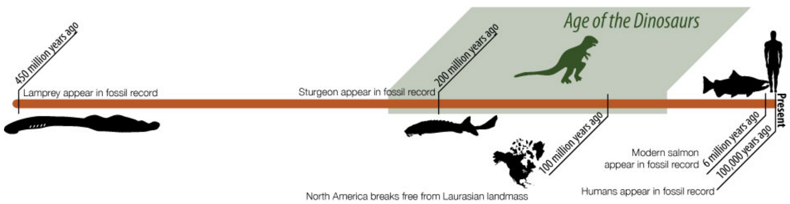
Humans came into the picture just 2 million years ago.

Last 500 Million Years



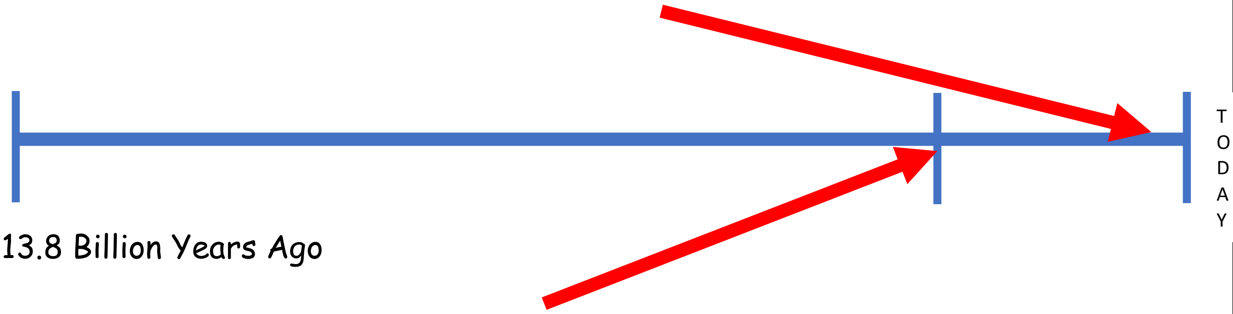
This diagram came from the Department of the Interior's U.S Fish and Wildlife agency but I altered this diagram to better reflect when we first found confident evidence of our "human" ancestors.

Lamprey, dinosaurs, and the continents break apart all before humans enter the scene.



<u>500 million years ago</u>

Again, to see the above timeline, you would need a microscope.



13.8 Billion Years Ago

Earth is formed

Across this vast amount of time, humans appear and finally leave Africa only 2 million years ago. We spend most of this time discovering fire, hunting wild animals, and fighting each other. Life as a caveman was NOT peaceful. It was violent[2]. Today, the average life expectancy of a person living in America is around the age of 80. As a caveperson, it was only 25 years! If you want to live a full and long life, be grateful we are no longer the hunter and gatherer cavemen and cavewomen of our ancestors.

Humans ended their nomadic lifestyle, built written languages and houses and invented civilization only 5,000 years ago. To review: The Universe exploded into existence with the Big Bang 13.8 billion years ago, life appeared 500 million years ago, humans appeared 2 million years ago, and only 5,000 years ago did we become "civilized" with agriculture, language, hunting tools, and peace treaties.

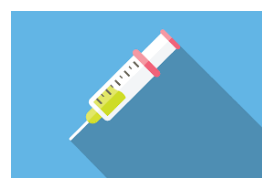
Life moves at accelerating speeds.

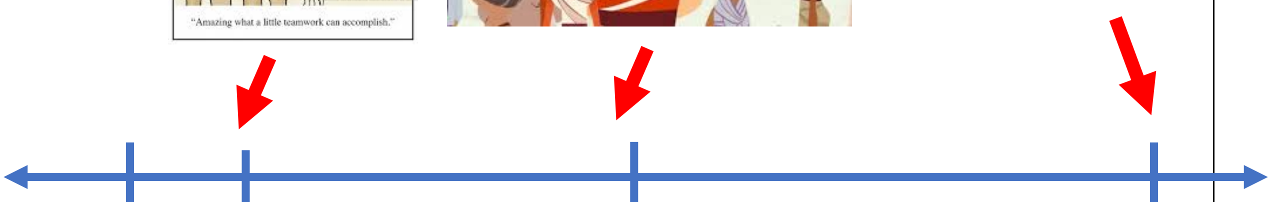
In those 5,000 years we accomplished an outrageous amount: robots and buildings, religion and science, medicine and helicopters. Literally everything, other than clothing and spears, was made within 5,000 years. That is fast!

The rate at which humans develop civilization is important. When humans figure out writing and start building cities, the speed at which humans invent, innovate and create is astronomical. This is the Optimistic Universe.

<u>Helpful information about timelines</u>

If you know anything about history, then you have experienced our super goofy timeline system. In super awkward fashion, we set a middle period of Ancient Rome as zero. Before 0, we call it BC or BCE (BCE is the "politically correct term") and numbers are higher as we move back in time (left). Similarly, as we move toward the present (right), we call it AD or ADE (ADE is the "politically correct term").





<u>3,000 BC</u> First evidence of writing in both Mesopotamia and China	<u>2,630 BC</u> Egyptian pyramids are built.	<u>0 AD</u> Ancient Rome (Jesus of Nazareth came into the picture around this time)	<u>2019 AD</u> Modern medicine, smart phones, and the relatively new belief that it's NOT okay to invade and conquer people who look different than you.

The "Optimistic Universe"

When humans enter the picture, unlike microbes or animals, we learn, develop and build a better world[2]. And, very importantly, we do it fast. It took humans so long to go from the Big Bang to the time of writing. But, in just 5,000 years we move from writing to modern medicine, super computers, and airplanes.

During this 5,000-year timespan, humans become increasingly peaceful and cooperative. The life of cavemen and women required constant warfare with animals and other tribes. Slavery, rape, torture, murder, and death by disease were MORE COMMON in ancient civilizations, such as Ancient Egypt and Rome, than in the Middle Ages. Those same atrocities became LESS COMMON in the 17th century, 18th century, 19th century, 20th century, and 21st century.

There has never been a better time to be alive than today and, very sadly, this fact is often not taught in schools or colleges.

Artwork depicting a human sacrifice in ancient Mesopotamia 3,000 BC when civilization apparently "starts." Would you really want to have lived then?
Picture from Ancient Mesopotamia *retrieved at: https://ancient-mesopotamian.weebly.com/*

In the year 2019, Jeff Bezos (founder of Amazon) and Elon Musk (founder of Tesla) are each creating companies to colonize the moon. Right now, we have the least amount of poverty, violence, and war than ANY OTHER PERIOD IN HUMAN HISTORY. Five-thousand years ago we were a tribal, war-torn world where we had kings and queens, and we enslaved other humans. Today, we have modern nation-states with democracies, advanced economies, and international governing boards like the International Criminal Court and the United Nations. Five-thousand years ago we believed the reason you were sick was because the clan on the other side of the river put a curse on you. Today, we have vaccinations by changing the genetic material of viruses so we can inject it into our blood to protect us from getting sick. That is progress!

Modern-day evils still exist but those who lament how humans used to be more peaceful in earlier times are <u>undeniably wrong.</u>

To be an **optimist** is to believe the future will be better. If you are an optimist about tonight's dinner, then you think it will be tasty and something to look forward to. If you think your own future will have success and contentment, then you are an optimist.

All the evidence in the world suggests we should be optimistic about being human and that we can keep making a better world. This is the Optimistic Universe.

Even the story of Genesis (the first story among Jews, Christians, Muslims and even Zoroastrians) watches God kick out Adam and Eve but continue to improve human society with the help of His prophets. We can continue to be optimistic. We will only get better at making the world more peaceful.

Life between 1910-2019, those 110 years, are the greatest century for all humans on record. This universe is an optimistic one.

Steven Pinker is one of the world's leading psychologists. He writes dozens of books, fills lecture halls with international audiences, and advises politicians. He teaches at Harvard University, has some wild hair, and is a leading scholar on human progress. Call him the Kanye West of psychologists.

He argues[3]:

1. Over 200 years ago, 90% of the world's population lived in extreme poverty. Today, it is just 10%! Wealth has not only increased in America and Europe but Asia and Africa too.

2. We spend more on helping others than we used to. (For example, 100 years ago, 1.5% of Europe's budget went to poverty relief. Today, it's 22%.)

3. In America, 30 years ago there were 60% more murders, 70% more poverty, and much more pollution than there is now.

4. Across the globe, within just the past 30 years, the percentage of humans living in extreme poverty declined from 37% down to 10%.

5. We have 1/6 the number of nuclear weapons and almost half as many wars raging across the planet than we did 30 years ago.

Life in 2019 is the greatest time you could have ever been born! We have less disease, fewer children dying of malnutrition, and even less violence and war than we did decades ago. In fact, life 100 years ago was better than life 200 years ago.

The Renaissance, Wild West, and the millennia as hunter-gatherers may invoke a romantic sense of peace and tranquility, but no evidence suggests that to be the case. The greater the distance into the past, the higher the chances of any early death from disease, slavery, violence, or poverty.

Our world has a long way to go to see an end to racism, genocide, violence, environmental damage and human suffering, but we are getting there! Allow yourself to be optimistic about this journey. There are many reasons humans have progressed, and the list below only covers 3:

The idea of "universal human rights" where all humans deserve humane treatment.	**Companies make more money, governments become more efficient and people become more peaceful when innovations, technology and inventions are all shared.**	**Human knowledge allows us to invent better and better things.**
		
In the times of Ancient Egypt, it was commonplace to invade neighboring tribes and regions for food, take neighbors as slaves and literally say out loud: "Clearly you deserve to be a slave because we just surprised and invaded your village so successfully!" There was a time when this was common sense.	America invented the first car and now dozens of countries have their own versions of cars. If you need to go to a hospital or want to find a better job, the car has allowed you to do that. If you want to drive to community college to save money or take a better job a little further away, cars let you do that.	We have medicines with fewer side-effects, cleaner forms of energy, and an internet that lets us share literature, scientific discoveries and new ways of thinking with everyone across the globe in an instant.

The first section of this book argued that the reader needs to accept two premises. If you accept these two premises, the steps to managing money and becoming a millionaire become much easier. This chapter explored the first premise--the Optimistic Universe--which is summarized below:

<u>The Optimistic Universe</u>

Over long periods of time, human society and civilization get better and better. The world is less violent, more peaceful, more ethical, and more kind with every passing century. Sometimes, we do not even have to look at timelines going 100 years at a time. Sometimes, we see the progress and improvement of civilization in 30-year increments or less. Humans can be vicious and cruel; we can do more hateful things than anything else in the animal kingdom. But, the piece of evil that lurks in all of us is small compared to the good.

Chapter 3: Wealth and Well-being Work Together

Hedonism

Does the following scenario describe you at least a little bit?

> You spend your day lost in thoughts, looking forward to the next "thing." You look forward to your next meal, TV show, or text. As soon as it's over, you are a little bummed. On Monday, you think about the weekend. Even when Friday hits, your mind is on a more exciting event a few weeks away.
>
> You tell yourself, "I'll finally be happy as soon as I get that good report card, that promotion, or when I finally date that person I've had a crush on for weeks." Then, almost immediately after you reach that goal, you tell yourself: "I'm a little bored. Actually, what will really make me happy is…" But then that thing comes and you want more.
>
> Your brain has a coding error. You are convinced that "if I get X I will be really happy." But X comes, times passes, and then you think "Now, if I get Y then I will *really* be happy." Y comes, time passes, and once again you yearn for more. You are just never satisfied.

Psychologists and religious figures have compared this never-ending loop of thinking to a treadmill. Running on a treadmill burns calories and strengthens the body, but the runner never gets an inch closer to anything. The human search for happier experiences, successes, and material things does lead to emotional bumps in well-being, but does such a person get any closer to real, everlasting happiness?

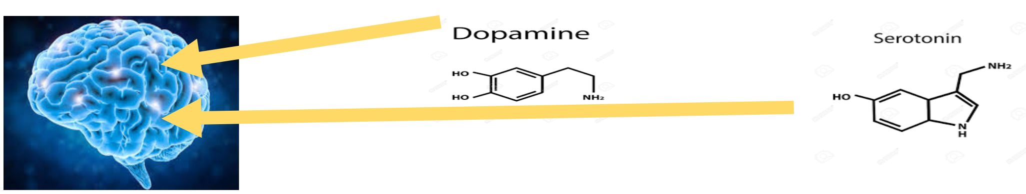
Is this mental treadmill—our circular attempts to feel happy—making us increasingly more content or tricking us desiring more and more different things, thereby delaying true happiness?

Scientists coined this puzzle the "**hedonic treadmill**[4]" for our never-ending ability to satisfy our desires.

Hedonic treadmill	Hedonic = simple pleasure	"Chris Brown is a true hedonist. He loves his mansions and fancy cars.
	Treadmill = a stationary running machine	"I burnt 200 calories on the treadmill today."
"**Hedon**" means "simple pleasure"		**hedonism is** the pursuit of simple pleasure.

When the school week or the work week ends, the world's tired and exhausted students and employees often find themselves ordering their favorite foods and putting on a great Netflix movie. Or, they dress up, go out to a great dinner with friends and play video games until the early hours of the morning. This is **hedonism,** the pursuit of simple pleasures.

Anytime you feel "happy," such as taking a bite out of a cheeseburger or hugging your older brother, your brain releases chemicals called serotonin and dopamine. That is what makes you feel happy.



If the ordinary pleasures of life do not produce serotonin or dopamine, then a doctor may prescribe antidepressants or anti-anxiety medication.

Hedonism, the pursuit of simple pleasures, is both healthy and good in moderation. The expectations of ordinary life often feel burdensome, and taking time to enjoy the pleasures of life make life worth living. Such behaviors do not make us smarter, our community better, or living up to our potential. That is okay – if we work hard, we can play hard.

Imagine yourself on the treadmill trying to get enough hedons so you are finally happy. As life continues, all your goals are reached—a strong friend group, college degree, quality job, marriage, and more. Still, though, almost as soon as you achieve these goals, the mind desires the next thing. Unfortunately, humans have a bottomless pit for hedons; ordinary people keep chasing after happiness but never quite get there. The theory postulates that just like calories stop burning once the treadmill is turned off, happiness stops if the pursuit of pleasurable things and events also ends.

<u>An artist's depiction of the hedonic treadmill</u>

Picture from: https://theatlanta100.com/lifestyle/wellness/2016/04/20/getting-off-the-hedonic-treadmill

Can human beings leave the hedonic treadmill, or slow it down, and still find lasting happiness? Can everyday people stop obsessing about future goals to find inner peace? If so, how? Or, should we embrace the hedonic treadmill by turning up the speed to the max?!

Modern day psychologists, politicians and philosophers debate these questions but most of the answers were written down thousands of years ago. Confucius, the Buddha, Greek philosophers, and even Moses, Jesus and Muhammad taught how to master our hedon-dependent brains.

To begin a journey into these answers, consider the following thought-experiment:

The Hedonist's Helmet[5]

Imagine you are having the worst day of your life. Lucky for you, Amazon lists a brand-new invention called the Hedonist's Helmet. It looks like an oversized, electrical hat that plugs into an outlet. As soon as you strap this device to your head, you automatically feel happy. It's that simple—helmet goes on and presto! You are outrageously happy!

In fact, it's the strongest sense of well-being you've ever felt! With the helmet on, you feel like it's your best birthday every moment of use. But, the device comes with a catch: Once you wear it, you cannot take it off. (Imagine the helmet also infuses nutrients into your blood so you do not starve.)

Why are you unable to take it off? The answer is simple – you are so happy, so at peace, that the furthest thought from your mind is removing the device that creates this pleasure. It's the strongest addiction known to humankind.

Would you buy the helmet?

When philosophers and psychologists ask people some version of this question, almost all respondents say they would NOT use or purchase this helmet.

Why? Why would most people, who say they desire lasting happiness, refuse to purchase the Hedonist's Helmet?

Most people say they would rather experience *real* life, no matter if it involves pain and misery, rather than a fake and happy life. At one level, this makes sense because the Hedonist's Helmet never permit the user to experience actual life. In the real world, you actually go to prom, learn from bad breakups, earn a promotion at one job and get fired at another. However, isn't this decision to avoid the helmet also ironic? By avoiding the helmet, you are choosing a life of LESS happiness.

The conclusion: hedonism is not the complete theory of happiness. We may be on the hedonic treadmill, but we get sources of happiness in other ways too.

What is it, other than the pursuit of simple pleasures, that motivates humans to live life?

The answer: purpose.

Purpose: More than Hedonism

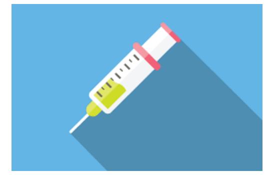
Humans wish for more than hedonism. Pool parties, social recognition, pizza Fridays, and fancy romantic dates provide some sources of happiness, but they are fleeting. After a short period of time, we become hungry for more. What is the solution?

Many ancient civilizations arrived at the answer within only hundreds of years apart from one another. We will start win Ancient Greece

Let's go back to our timeline. In the microscopic dot on the Timeline of the Universe, life emerged, humans spent millions of years as caveman, and then created civilization just 5,000 years ago.

Aristotle, one of the great Greek philosophers, appears on the bottom of the timeline on the next page. True happiness, he reasoned, could not simply be the maximization of pleasure. Just like you would not buy the Hedonist's Helmet today, Aristotle too realized that well-being involved more than just the accumulation of pleasures. Aristotle posited 2 levels of happiness: Hedonism and eudaimonia (you-day-moan-ya). Hedonism is the pursuit of simple pleasures. **Eudaimonia**[6] is joy in discovering your purpose in life.

Timeline of Human Civilization



<u>3,000 BC</u>
First evidence of writing in both Mesopotamia and China

<u>2,630 BC</u>
Egyptian pyramids are built by enslaving Hebrews and other enemies. Somehow ordinary Egyptians thought this was a good use of their government

<u>0 AD</u>
Ancient Rome (Jesus of Nazareth came into the picture around this time)

<u>2019 AD</u>
Modern medicine, smart phones, and the relatively new belief that it's NOT okay to invade and conquer people who looked different than you.

<u>340 BC</u>
The Greek philosopher Aristotle writes *Nicomachean Ethics* where he talks about 2 types of happiness: hedonism and eudaimonia

The Greeks believed that everyone had an inner, core spirit. This central personality within us needed to be both discovered and nurtured. Like a seed blossoms into a strong and powerful tree under the right conditions, your life's purpose would, too, emerge under the right conditions. Today, we might call this daimon your "purpose or" "potential."

Hedonism	**Eudaimonia (you-day-moan-ya)**	
Hedon - simple pleasures	*Eu* – happy (think of 'euphoria') *daimon* – inner spirit or purpose The word "demon" comes from "daimon"	DEMON = Bad DAIMON = Good

One person's inner spirit may evolve into a doctor. Another person's inner spirit may want to parent 4 children, organize political protests at night, publish poetry on the weekends, and start a successful YouTube channel on how to sell collectibles. To the Greeks, a greater source of joy occurred when you discovered and unlocked that inner spirit or "daimon." (Think "demon" but a good one.)

One person's possible eudaimonia			
Writing speeches for a presidential candidate	Hosting your own podcast	Taking Tango lessons	Finding a cure for skin cancer
			
8am to 12pm	12pm to 1pm	1pm to 2pm	2pm to 5pm

Another way to think about eudaimonia, are the following terms:

- Reaching goals
- Living up to your potential
- Solving the problems and tackling the issues most important to you
- Becoming all-you-can-be

Too much hedonism could turn you lazy and selfish. Too much eudaimonia would not allow you enough time to relax and recharge. The Greeks believed you needed to balance both hedonism and eudaimonia, and they were not alone. Ancient China recognized balance was needed between order (purpose) and chaos (pursuit of pleasure).

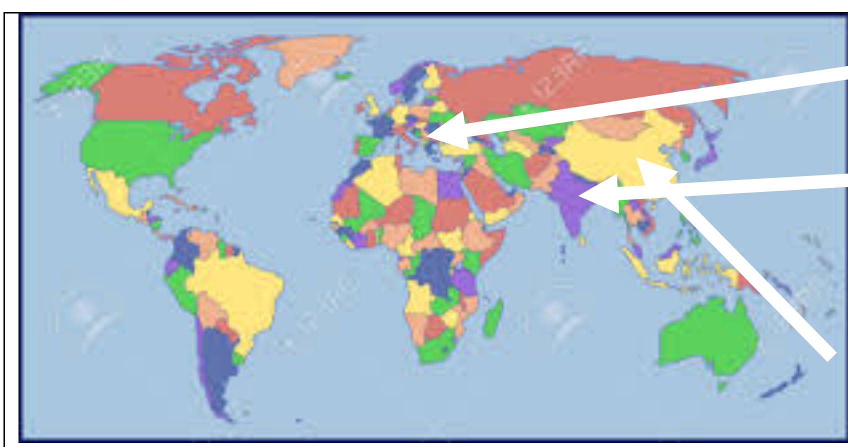
The yin and yang, often associated with China, comes from Daoism. This belief system recognized the balance between different forms of gratification. The yin and yang provide insight in political structure, family formation, and the balance between simple pleasure and purpose.

The Greeks and Chinese were not the only ones who figured this out. Three hundred years earlier, Siddhartha Gautama walked outside his palace in ancient India to see ordinary people plagued by disease, death and old age. Saddened by his discovery, he began to contemplate the causes and sources of misery by meditating under the Bodhi tree for 7 weeks, according to legend. Among the many ideas and beliefs he would teach, one core tenet he argued was our obsession with getting what we think will make us happy will only stress us out more. To free ourselves of the hedonic treadmill, we must follow the 8-fold path:

Eightfold Path

- Right speech
- Right action
- Right thought
- Right livelihood
- Right understanding
- Right mindfulness
- Right concentration
- Right effort

Similar to, but still different from, eudaimonia's "discovering your true self"



Aristotle is teaching about eudaimonia

The Buddha is doing his thing 300 years earlier.

The Yin and Yang make its debut in the *Book of Changes* 300 years before the Buddha

I am no authority on religions. Perhaps the balance between hedonism and eudaimonia can be found among the people of North America, Central America, South America and Africa around this time too. What we do know, however, is that this ancient wisdom existed across the planet among many cultures for thousands of years.

Wealth and Well-being Work Together

While ancient civilizations may have deciphered more about the human condition then they receive credit for, have they figured out the formula for happiness fully? Is eudaimonia the true source of happiness? What is the actual purpose of life?

I have absolutely no idea the answers to these questions, and if you ever figure it out please email me.

Perhaps giving up your worldly belongings, dedicating your life to service, and mediation are the keys to fulfillment. Maybe not. Until you are ready to make that journey, start to build wealth.

Money will not guarantee everyday will be great, but it will help you have an increasing amount of better and better days. Why? Money is freedom to make the decisions that are best for you. This does not mean buying the most stylish sneakers is the best antidote to an F on a college paper, but maybe paying for a tutor is. Money allows you to chase the simple pleasures in life (hedonism) and discover your purpose (eudaimonia).

The diagram on the next page illustrates the ways that money can promote both hedonism (pleasure) and eudaimonia (purpose).

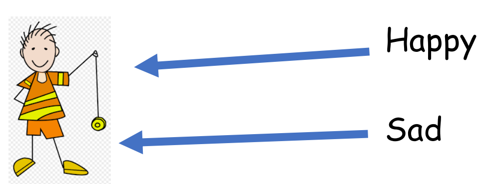
How money helps

Hedonism	Eudaimonia
- Subscribing to Netflix, Amazon Prime, or Hulu (or all 3) - a vacation to Disney Land - A Saturday shopping spree after a really bad week	- $5,000 to be an EMT who rides in an ambulance and provides the first response when 911 is called -$500 for a guitar -$5,000 to become a financial planner

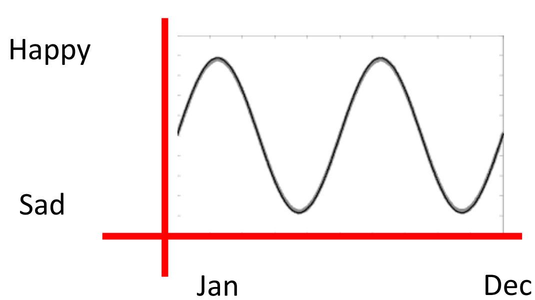
As discussed in chapter 1, the universe and the world may be getting better and better, but life can still blow. As you get older, people will *still* be jerks. Friends will talk behind your back. You will work hard without any praise or recognition, and less qualified people will get better jobs than you. Your life will be filled with love, epic parties, and sweet successes. There will also be days where you find yourself lonely, crying and binge-watching TV late into a Saturday night.

If you are curious, bold, and learn from your mistakes then you will have the wisdom to put your money toward better and better ideas.

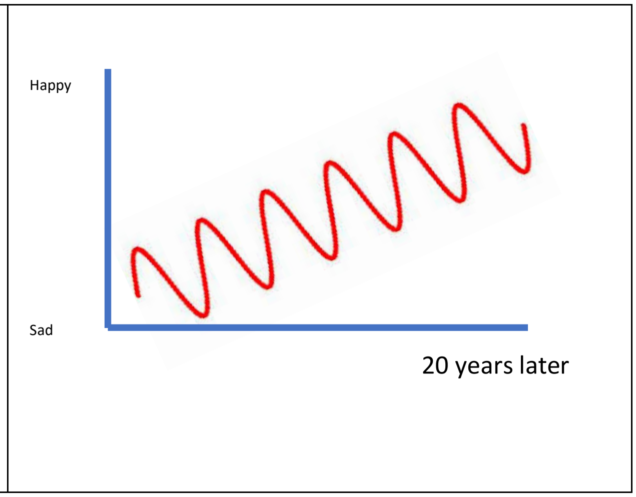
When you feel down, you feel sad. When you feel lifted or upbeat, you are happy. Imagine a yo-yo that represents your brain. When the yo-yo is up, you are happy. When it is low, you feel sad.



If we were to make a graph that illustrated your emotions each day for a year, it would look like a yo-yo. See below:



The yo-yo is your well-being. Imagine walking up a hill playing with a yo-yo. The yo-yo will move up and down, but it is also gradually going to get higher and higher from the ground. A graph of a yo-yo's distance from the ground, as it is used by a person walking up a hill, is represented below:



If the yo-yo is your well-being, then the hill beneath you is your wealth. When you have more and more money saved, then you have the freedom to make decisions that are good for your mental and physical health.

If you do not like your neighborhood or job when you are 15 years old, there is little you can do. Your wealth at age 25, however, may be small but it's enough to move to a new neighborhood or travel for a new job. Imagine you are good at saving your money, here are just some of the options available to you:

Your age	Ambitious but realistic savings account balance by this age	Thing you can afford to increase your happiness
10 years old	$5	A slice of pizza for you and your sister
15 years old	$100	Average cost of a pair of jeans plus a shirt, or 3 one-on-one dance lessons with a private instructor

20 years told	$500	Average cost of a guitar or a computer program to learn to code better. This is also a month's cost of enrolling in boxing, jiujitsu, and Thai kickboxing classes.
25 years old	$5,000	A car to get you to a better job in a different city that will last about 5 more years.
30 years told	$10,000	Night classes for your first year of law school or 6 months of expenses so you can start your own business as a fashion consultant.

Wealth gives you more sophisticated and healthy ways to improve your happiness. Wealth may not give you happiness directly, but if you know yourself well then it provides the tools to make better and better decisions for your well-being.

Wealth helps, and does NOT hurt, the well-being of others

Your path to financial independence does NOT come at a cost to society. The better you are with your money, the better society becomes. If you invested $10,000 right after college and did nothing else, you might very well have $250,000 for your retirement. That is a quarter of a million dollars! You are literally 25% of a millionaire; you are a quarter of the way there; you are "3 more to go" before having $1 million. This would not only make you wealthy but improve the world too.

During those decades, your money is NOT just sitting in some bank. It's funding government experiments on reducing climate change, serving as a loan for a poor immigrant family to start a hotel business, and being borrowed by Apple to create programing jobs for the next version of the iPhone. Those jobs and opportunities may lead to other jobs and opportunities for other people, which could lead to higher salaries and donations to charity.

Your wealth leads to others wealth!

The more money you make, the more money the government has to print, and the more you actually give back to the government in taxes. The government uses those taxes for teachers, police officers, pool guards, firefighters and to sometimes give bonuses to bring a new taco business across your street.

As you read this book…

1. America is the world's leading producer of gas. (Yep, we now beat the Middle East.)

2. America patents more inventions than any other nation.

3. America has 20% of the world's top 500 companies. China has Alibaba, an ecommerce business like Amazon. Japan has Honda, Toyota and Mitsubishi. Millions of new business are registered across the world each day, and 20% of the best ones are in the United States. That's not just first place; that's a blowout!

America would never have accomplished those 3 things without ordinary Americans spending well, saving intensely and investing regularly.

America still has many, many problems. If we do not draw attention to current-day racism, sexism and corruption then the country will not improve. Money can be used to fund terrorism, cover-up crime and bribe people and institutions. Money also allows us to plan for the future, achieve all our hopes and dreams, and improve the entire world.

Let's take Bill Gates as an example. He founded Microsoft and his total worth is around $103 billion. The diagram on the next page indicates how his wealth improved society rather than detracted from it:

Bill Gates has funded research in vaccine treatments for Polio, a disease that leads to paralysis and death. By 2020, it is expected the disease will be wiped from the planet.

The Bill and Melinda Gates Foundation has $50 billion for the purpose of ending poverty and human suffering.

Bill Gates

$103 Billion

Bill Gates live in Seattle where Microsoft and the Bill and Melinda Gates Foundation has their headquarters. Both organizations create a combined 130,000 jobs. Those people, who may have moved to Seattle, want to go to gyms, restaurants, and put their children in daycare and schools. This, in turn, leads to even more jobs!

With over $100 billion sitting in bank accounts, the banks know that Bill Gates is NOT going to show up one day and want all of this money back in an instant. So, banks take that money and lend it out to people who want to start their own business or get loans for houses, cars and other things.

His wealth led to more wealth. Think of wealth like a garden.

Wealth and a Garden

You may only have some dirt and seeds for tomatoes, so that's what you grow. Big things usually start small.

Tomatoes grow, you eat them, and you replant the seeds for more tomatoes

The roots attract worms from nearby dirt, and the worms create little pathways that allow more water to flow to the roots. Then, some nearby bugs and ants start to eat some of the fruits. Birds may eat some of the bugs, and bird droppings act as a fertilizer. Some nearby seeds fly in from the wind, land in your garden, and grow. Seeds have landed here before, but finally the climate is right for them to develop. Bees sense the nectar of blooming flowers, attracting more animals and insects. Now, your garden resembles a mini oasis!

personal finance is a lot like this garden. Wealth begets more wealth, just like plants beget more plants. The rainforest did not appear like that one day; it was the result of millions of years where animals and plants realized working close together benefited everyone. That's why everyone moved in together.

The complex environments of the earth have enabled grasshoppers to develop legs that inspire human engineers, bonobos to become the most peaceful species of the universe, and rare-earth metals to power electric cars, smart phones, and internet towers.

If we do not use money for evil, it can often allow others to flourish. Mastering personal finance is a tool to not only help you reach your wildest dreams but a way to give back and make the life of others better too.

One of the reasons this can happen is that human civilization moves toward peace and prosperity over time—we call this the Optimistic Universe. We do sometimes find ourselves embroiled in international wars and plagued with greed. Humans who realize wealth and well-being work together, however, learn from their mistakes, wish to leave the world a better place, and see cooperation, rather than conflict, as a way to make all parties better off. Money can be a tool for all people of this planet to reach their potential. Understanding this is the first premise toward understanding the principles of personal finance.

The second premise, as discussed in this chapter, is summarized below:

<u>Wealth and Well-Being Work Together</u>

Our job on planet earth is to find happiness. This does not mean just eating junk food and playing video games (although that is important). We are actually happiest when we discover our potential, leave an impact on the world, and be all-we- can-be. This is not easy! It takes hard work. Helping others, finding a good job, and pursuing our interests and passions take money! When we have enough money to reach our dreams, we are <u>wealthy</u>. In fact, the best way to make others and other countries wealthy is first by you becoming wealthy. Your wealth can make the world better. Money has actually done more good than bad throughout history.

Chapter 4: The Super Power of Personal Finance

Why this super power is needed

Financial stress has the health effects of a disease and is the leading cause of divorce. The "average" among us lives paycheck-to-paycheck with $15,000 in credit card debt and $30,000 in college loans. Mostly without retirement plans or even $400 saved for emergencies, we fail financial literacy even with a median family income of $60,000. In other words, even when we make good money, we never can let money make our lives better. Financial stress breeds black markets, bribery and black mail. The pain of an empty pocket throbs hardest when we do not know how to put more in it.

Knowing how to manage your money, generate more money and make sure you never stress out about money is more than just a survival skill, it's a super power.

If you know how to make money, turn money into more money, and never let your bills, debt, or loans bother you, your potential will know no ceiling. (How you balance hedonism and eudaimonia will be up to you!) We need clean forms of energy that do not force us into unholy alliances with dictators. The human brain remains mostly a mystery, with Alzheimer's disease and strokes becoming a growing threat to the elderly.

To become a music sensation, a world-class negotiator, or a master assassin you will need training at music conservatories, business schools and non-governmental organizations. Money is always involved. If you want to live up to your potential, you must understand how money works. Put simply, personal finance is a super power.

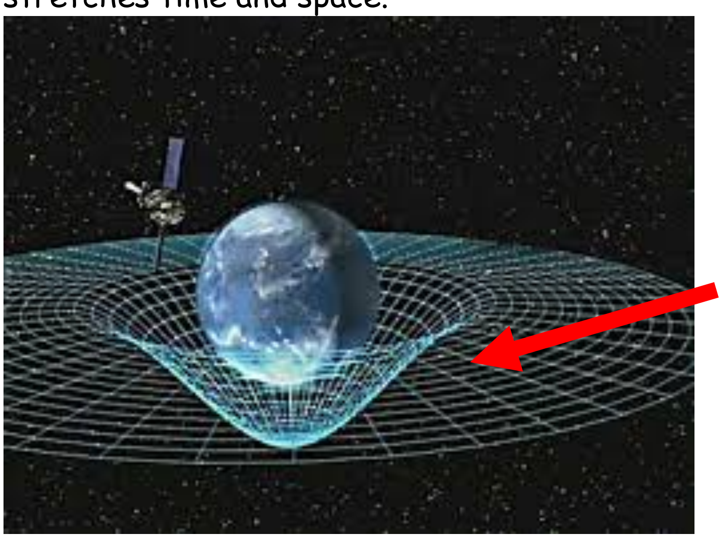
Personal Finance as Super Power

Super heroes come in many forms:

Batman is a superhero by his intellect, experiences, and commitment.	The Green Lantern, guards the universe with a powerful a ring that he has earned.	La Borinqueña can fly, has super strength and can control storms.
		

Personal finance lets you control space and time. Everyone has heard of Albert Einstein but he is going to make your power super cool.

Albert Einstein argues space and time connect. Imagine a net the universe sits on. If a planet stretches this invisible net, it stretches time and space.



If you can control the space, then you pretty get to say what goes where. If you control time, you pretty much determine when things happen.

The gravity of planets, suns, and blackholes create space and therefore create time.

Imagine that personal finance allows you to control this.

Imagine an arid, dry desert. Next, visualize a rich forest filled with lumber. Then, think about a bustling downtown area with free housing for the homeless and free workspaces for struggling businesses. With your superpower, this change can occur. With the snap of your superpower finger, the desert transforms to forest and then into one block of homes for the previously homeless and a second block of shops for nearly-bankrupt businesses.

Personal finance does just this. What you wanted to occur in a space can change to what you think it to be in an instantaneous moment.

One Example of How Personal Finance Controls Space and Time

A lifeless climate can become a wildlife preservation or a bustling community

While this is a cool way to control space and time, why not get even more bold?! You are a superhero, of course.

Imagine if…

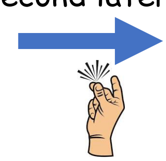
You went into African villages and set up renewable energy plants, which created thousands of jobs, connected small African nations to global trade, and produced energy for the world.

You ended the civil war in Syria, a Middle Eastern country, by creating access to affordable houses, schools, clean water and food so no one had any reason to have any enemies.

You turned the plains of Oklahoma into a multi-cultural oasis where thousands of writers, poets, artists, and researchers could live and collaborate on ideas.

With this super power, a seed would grow into a tree in an instant.

1 second later

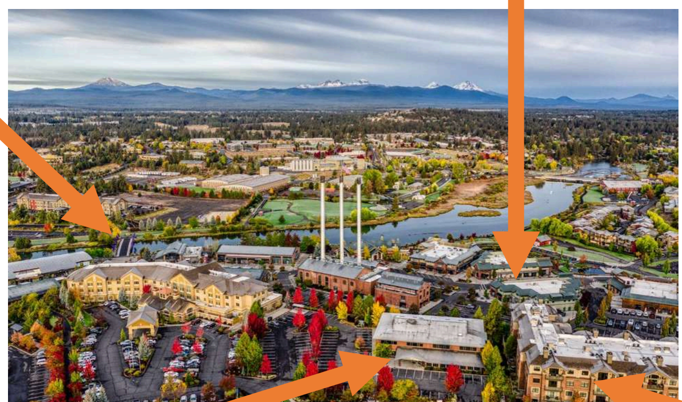


The squalor of Philadelphia represents too common a view for most cities:

And, with just the snap of a finger, you made it like this:

Largest water park. Poor families go for free, but every ticket sold to a wealthy family goes to support a housing shelter for the homeless

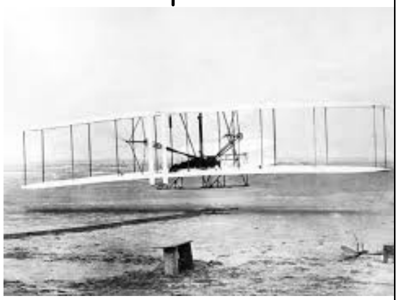
The world's leading psychiatric hospital. All of the world's most dangerous psychopaths, killers, and criminals can be treated for their psychological disorders humanely and effectively.



The world's leading disease research center.

A factory that makes candy that actually has the same nutritional value as vegetables.

Now that's a cool superpower! This is exactly what personal finance allows you to do. When you know how money works, you know how to takes crazy ideas and turn them into reality. Don't believe me? Take a look at the real-life examples below:

The creation of the airplane[7] 	No matter how hard governments across the world tried to build an airplane, it just seemed impossible. The American government even tried to pay the head of Smithsonian Museums to build an airplane. After he failed, the *New York Times* said "We might be a million years away from flying." Only *weeks* later, the Wright Brothers were able to invent a flying airplane. Orville and Wilbur Wright used the money they saved and earned from designing and fixing bicycles to fund their experiments and, eventually successful, version of the airplane.
Man-eating war tanks and flyable birds[9] 	The United States has the world's most advanced military. We send troops to keep peace throughout many unstable areas of the Middle East. We provide the standing army for Japan, and we make up the majority of forces for the United Nations. To keep our place as the #1 most advanced military, the government has spent trillions of dollars in a top-secret military technology laboratory where new death-machines are developed, known as DARPA discussed in Chapter 1. We now have: (1) computer chip implants that go in the brains of birds so we can control how birds fly, and (2) tanks that power themselves off the dead bodies of fallen soldiers. It's so creepy because it's actually true. Tax dollar money goes to the government to fund a secret defense agency to make America the strongest, safest country in the world.
The internet 	The government created the internet by paying hundreds of scientists to develop a way for government agencies to communicate immediately with one another. Without the government spending billions of dollars in this successful research project, smart phones, Netflix, and modern home security systems never would have happened. For the last several years, the entire stock market has been driven upward by Amazon, Apple, Google, AT&T and many others that rely on the internet for all its purposes.

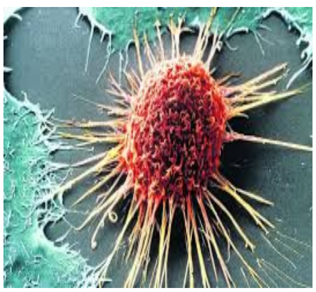
This is what money lets you do! You can control space and time. While you cannot do it with the snap of a finger, you can do it gradually. Money fuels all the wildest discoveries, inventions, and innovations of the world. Here are some real-world examples of people who, when receiving or earning money, changed the world forever:

Person	How did this person get the money	What he or she did or is doing.
Oprah Winfrey	Oprah earned her wealth after starting very successful talk shows, magazines, and multiple brands. Her powerful way to communicate, teach and inspire audiences has made her a multi-billionaire. Her businesses have made the lives of ordinary Americans better and she now also donates to end poverty in Africa.	
Elon Musk	Elon Musk's multiple businesses make him America's top engineer. He has rightfully earned lots of money, but he has even more money coming in from loans and grants from banks and governments. Elon Musk's companies refine electric cars, ways to travel to Mars, linking the brain to computers, and hyper-speed travel where humans travel through tubes from place to place. We may be able to harvest minerals and metals from space (so we do not need to drill in and damage the earth), pollute less and fix the damage of Alzheimer's Disease, brain injuries and strokes. This is because of the wealth he has created for himself and his companies.	

Oprah first earned her wealth before donating. Elon Musk innovated off the money governments and businesses gave him to generate new inventions. Both used money in different ways to accomplish great, wild and powerful things. And this leads us to you.

Imagine if you could do all of these things in just one year of your life:

Kill all cancer cells in your body or a loved one's body.



Enough money allows you access to the top cancer treatment in the world. Even more money lets you test new ways to improve this.

Become a master of mixed-martial arts and armed weapons, and lead a paramilitary team across enemy lines to end all dictatorial, autocratic, and cruel government regimes.

Enough money allows you to train and master combat, train a team of similar experts, and research how to topple the terrible and corrupt governments and leaders that still exist in this world.

Create your own research laboratory, manage a team of fellow scientists and explorers, and solve some of the biggest mysteries of the current era: Is there extraterrestrial life? How do we achieve world peace in our lifetime? How do we make sure technology does not kill us all? How do we design delicious foods that are also nutritious?

Enough money allows you to hire the best minds, invest in your own education, and try prototype after prototype, experiment after experiment, blueprint after blueprint, theory after theory until the truth is discovered!

Wealth as One Way to Talk about your Super Power

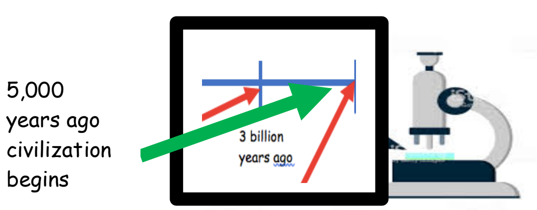
You COULD be like Oprah and amass a huge fortune and then use your fortune to lead a huge change. You COULD be like Elon Musk and accept money from governments and businesses to try out your crazy ideas.

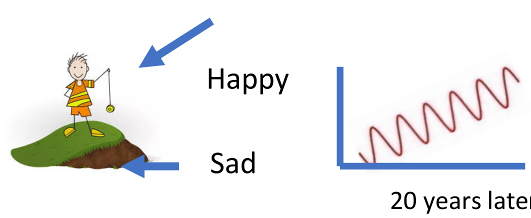
Whatever your path to greatness, money must be mastered. Money is a super power, and when we measure this super power we call it "wealth."

Imagine an invisible force that grows bigger and bigger as soon as a new invention, belief-system, building or innovation enters the world. Each time the world births this new commodity or idea, the planet gets a little richer, world poverty goes down, and we get a little more world peace. Wealth leads to more wealth, and everyone wins.

Wealth is the secret sauce of the Optimistic Universe. Wealth allowed humans to accomplish so much in just 5,000 years of human civilization

Wealth grows when a country, town, or single person value both wealth and well-being





Imagine your super power turns the prairie fields of Oklahoma into a summer camp for refugees from Palestine. Look at all the great things that happen:

Resulting Great Things

7) Everyone has more money, so the government can collect more in taxes and use that money to expand financial aid for low-income students across the state

1) Jobs are created and kids have positive learning experiences from the camp

6) Now that a college is being constructed, clothing stores, more restaurants, and technology stores will want to serve the growing population.

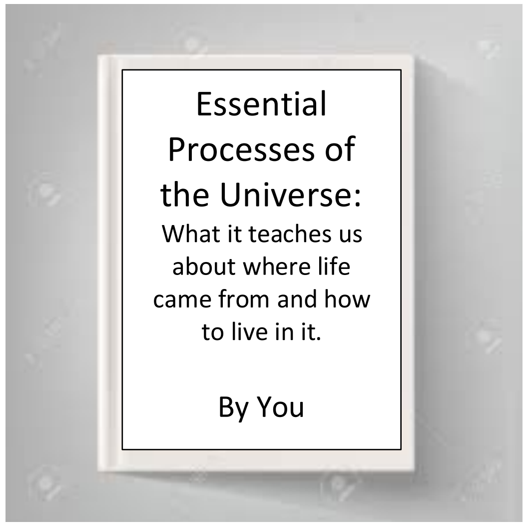
2) Parents can take college classes during the summer or pick up a second job because their kids are at camp

5) Because more and more houses are being built, a local not-for-profit organization might build a university for students to go to school. In fact, there is a shortage of engineers in the state of Oklahoma so this particular university is going to specialize in a great engineering department.

4) Because hotels and restaurants are being built, some families will realize that the area outside of the camp might be a nice place to own or build a house.

3) People who live near the camp might create restaurants and hotels when families come to visit the kids in camp

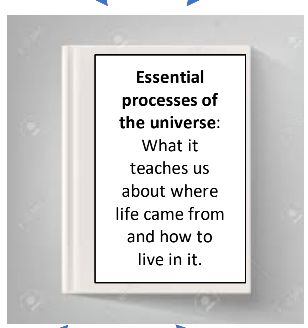
With the creation of our Oklahoma refugee camps, wealth grows as people want to cooperative and offer services and products to fill a growing population's needs and wants. But similar things would occur if, say, you wrote a new book that changed the way we thought about the universe.



If you publish this book, look at all the possible ways wealth is created.

Your book will also be widely criticized on social media, which will motivate other publishing companies to pay for books by your rivals to offer better and different theories of the universe.

Amazon, Tesla, Space X, Samsung and many other companies believe they can build a new wave of satellites, GPS systems, and related technologies from your book. This, in turn, creates thousands of jobs trying to create this technology.



Your book will be read, so hotels, book stores, and universities will pay you to speak, give lectures and explain your ideas.

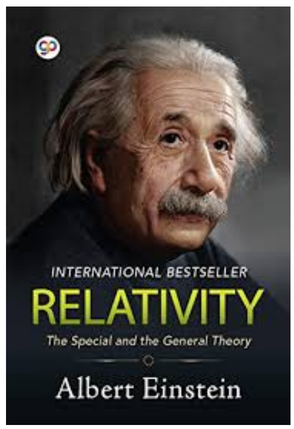
Congress reasons your ideas represent important contributions to how NASA and other government agencies build technology and interact with space. Congress assembles a task force of the top minds, including you, with a budget of $1 billion to study space in greater detail.

Here is a real-life example of how this happened.

Not only did Albert Einstein contribute to science, he allowed the entire world to make more wealth! There would not be as many American dollars, European "euros," Mexican pesos, or all other currencies in circulation and banks without this nerd.

We can track drug cartels, sex traffickers and kidnappers, and crime lords who hide money in off-share bank accounts. We can discover the outbreak of diseases and civil wars minutes after they happen. Einstein actually made it harder to become a successful terrorist.

Einstein's "theory of relativity" allowed scientists to invent the electron microscope, satellite, and the particle accelerator.



We may see an end to cancer in our lifetime, unlock new and safer forms of energy outside of coal and oil. Laser beams created the modern home security system, the use of barcodes, GPS and the smartphone. All of this from Einstein's theory of relativity

Electron microscopes, satellites, and the particle accelerators allow humans to study and begin to cure cancer, examine the history of the earth, and create laser beams.

Let's review: Personal finance is a superpower. It controls space and time. You can use the space around you and plan to turn it into something greater in time. Imagine a mystical forcefield traveling outward affecting the lives of nearby people in better ways. We call this "wealth."

Wealth powers the Optimistic Universe. If you value wealth and well-being, you can help make the world a better place.

We must be careful! As a more famous superhero said:

"With great power comes great responsibility"	

A Modern Example

Personal finance and money have been on both the good and bad side of human history. For example, "pensions" were created during the Middle Ages. After the fall of the Roman Empire, Europe broke up into many of the nations that exist today: France, England, Germany and Russia. For the next several hundred years these countries would be in constant war with one another for land, colonies, resources, gold, and for the religion they supported. To incentivize their people to join their nation's armies, they offered a **pension**.

Many adults are obsessed with the TV show, "Game of Thrones" where everyone spends 8 seasons invading, killing and making alliances. **Pensions** helped make this normal back in the 1500s. Why else would you care so much about a King's piece of personal property?! Why else would you actually care that some cousin from some neighboring land arrived in boats and said "Mine now!" **Pensions** gave motivation to march into battle.	

A **pension** is a paycheck from the time you stop working until your death. Soldiers serving in the king and queen's army (who survived) would get a steady paycheck, guaranteed, from the time of retirement to the time of death. This is a very motivational reward, especially if your only other option was farming fields as a peasant. Fighting for a rich family in robes suddenly became more appealing if the alternative involves planting seeds in a field ever fearful they would be invaded.

After a predetermined amount of years in the classroom, many public-school teachers can receive a pension check every month from the time they retire until they die. The longer you work, the higher the paycheck amount.

That's right—the way we compensate teachers is the same way we compensated knights and soldiers in Medieval Europe.

Pensions have been a helpful way to compensate hard workers. What we need now is a personal finance solution to solve the problem in Sudan.

One of the most tragic episodes of recent history is the series of civil wars in Sudan. In fact, it's earned the distinction of a **genocide**. A genocide is when a country tries to entirely destroy a specific group of people.

<table>
<tr><td rowspan="2">Genocide</td><td>Gen = genetic</td><td>"genes" are the genetic material of your cells

"genus" is how we divide animal species</td><td>"I have a <u>gene</u> for blue yes"

"The oak toad and the southern toad are part of the same toad species but have a different <u>genus.</u>"</td></tr>
<tr><td>Cide = murder</td><td colspan="2">"Suicide" is the murder of oneself

"Homicide" is the murder of another person</td></tr>
</table>

An Example where the Super Power is Still Needed: Darfur, Sudan[8]

From 1955 to today there have been 3 civil wars with only short-lived breaks. Sudan was previously a colony of Britain. Like most former colonies, its path toward peaceful and successful independence has been tough.

The civil war involved kidnappings, rape, torture, and home invasions on both sides. Two million people died, which was 4% of the entire population. Imagine if 1/25 people you knew died. That's what it was like.

The violence was especially heinous in the Darfur region of Sudan where the Sudanese government and a group of fighters known as the "Janjaweed" attempted to exterminate Africans part of the Fur, Zaghawa, Msalit and Muslim ethnic groups.

Sadly, one of the main causes of the Sudanese conflict and genocide in Darfur was access to clean water. One of the most brutal examples of human violence occurred because the two sides could not find and afford enough clean water.

In America, a gallon of water from a grocery store is a $1. A gallon of tap water from your faucet is less than a penny! Yet, the way the world is organized, it was so rare in Sudan that it contributed to one of the worst examples of human violence.

Cartoon created by the late Don Addis

Sadly, we see this in history all the time. Two different neighbors separated by national or ethnic identity get along in harmony for years, even centuries! Then, when basic resources become scarce it becomes easy to hate those who you THINK have more.

War begins when ordinary people cannot feed their family and they think the special groups, the government, or the elites receive unfair advantages. Jealousy and inequality breed violence.

Perhaps the Darfur Genocide would never have occurred if we could make Sudan's natural resources work for everyone.

Israel is one of the world's leaders in recycling water and desalinization technology, in which salt is removed from ocean water.

If the universe evolved differently, and Sudan had the resources to study this technology, perhaps the Sudanese Civil Wars never would have occurred.

https://www.fromthegrapevine.com/innovation/5-countries-cutting-edge-water-technology

Muslims, Christians, Jews, Hindus, Buddhists, and Sikhs will paint the other side as primitive, misinformed, and even immoral. Read any newspaper and humans never seem to escape conflict: Republican versus Democrat, democracy versus fascism, capitalism versus communism.

Once the enemy is demonized, it seems almost irresponsible not to invade and take their resources. Usually things go fine. We all want to love our neighbors.

But such things are hard when there is not enough water.

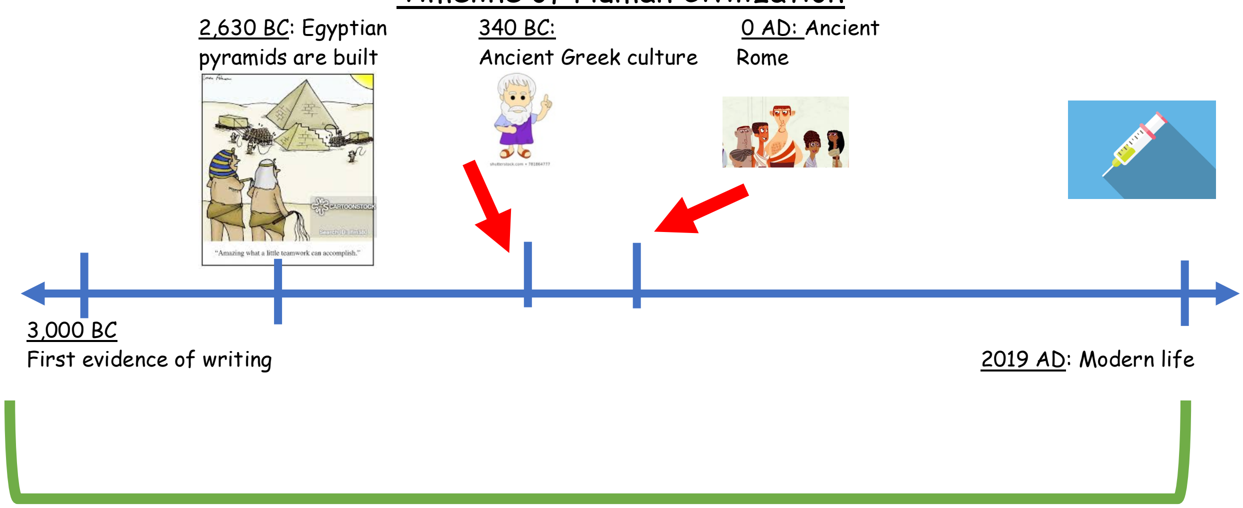
Chapter 5: Avoid Debt and the Devil, except in 2 cases

Every superhero needs a villain

With personal finance as a super power, who is the villain? Batman impedes the Joker's anarchy. Wonder Woman fights Ares. Who or what represents the foe you must vanquish with your super power of personal finance?

This enemy is particularly evil. This particular entity destroys the future of ordinary Americans. It dissolves the unique spot of space-time normal humans attempt to carve for themselves throughout their lives. An enemy so vicious that its origin knows no chemical property. To understand this cryptic evil-doer, start at the beginning of civilization.

Timeline of Human Civilization



Religion started before all of this. Religion began even before we figured out writing. Religion provides us some rich clues about our enemy.

When humans entered existence 3 million years ago, we spent this time moving out of Africa and spreading across the globe.

We figured out fire, the wheel, and hunting. During this time, we invent better languages to express more complex ideas. We tell stories of how we arrived on earth. We feel compelled to explain and to cooperate on questions of good and evil. We vanquish enemies together and invent friendships and family structures. We got really good at it. When you have no knowledge of electricity, describing thunderstorms as anger from the Gods was the best you could do.

Along the way, we come up with a character. His name is the Devil[10].

Most religions have an under-world residing, evil-doing, and often fire-wielding deity. Most religions and ancient civilizations told the story of something that fed on our ignorance and temptation. We could never escape the devil because we always left it food. These similarities between the demons of various religions and cultures explain the root of mankind's worst behaviors. They explain how control over your own personal finances is the best antidote to the evil deeds of these evil doers.

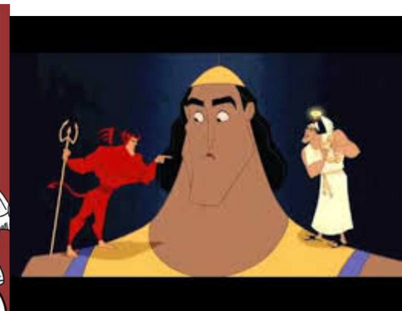
The Devil may not actually be real, but human civilization certainly invented him as a character to explain the terrible things we saw.

Nergal Ancient Mesopotamian god of the underworld	Chernobog A devil and demon in ancient Icelandic and other Slavic groups
 Folklore say he was so bored that he decided to attack Babylon for fun	 Only hundreds of miles away, Europeans feared something similar from the north.

Other names for Nergal and Chernobog include: Satan, Set, Hades, Lucifer, Pluto, and the Prince of Darkness. This colorful group of not-so-cuddly demons often is simply called "the Devil." Your personal finance super power was designed to keep the Devil at bay when he comes near.

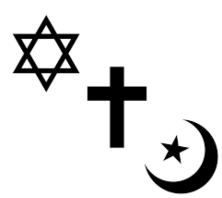
Personality of "the Devil"

The Devil represents a frightening and captivating character that has made its way into cartoons, movies, and comic books. Think back in your memories. The cartoon devil tempts your favorite character's conscience with hedonism.

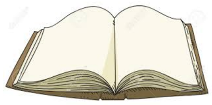



Christianity, Islam and Judaism mention the devil in each of their religious texts.

Keep in mind that Jews, Christians and Muslims (those who practice Islam) are all mostly the same religion. While almost every continent has seen these 3 religions fight, murder and pillage one another, they actually all speak of the same one God. Together, these 3 religious groups make up 60% of the world's population. They all share most of the same stories, beliefs, and religious texts.



Judiasm



Torah

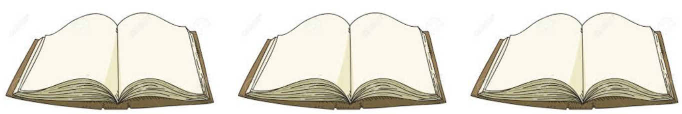
Judaism's core religious text is the Torah. It contains the 10 Commandments, the story of Adam and Eve ("Genesis"), Noah's Ark and more.

Christianity

~~Torah~~ Old Testament

New Testament

Christianity keeps the Torah and adds on another collection of stories, laws, and beliefs after they accept Jesus of Nazareth as a prophet. They rename the Torah as the "Old Testament" and the new book is called the "New Testament."



Old Testament or Torah

New Testament or Gospel

Still accepted by Muslims

The Quran

Followers of Islam or Muslims accept the Torah and the New Testament as religious texts. They also believe the prophet Muhammad was the greatest and last of God's prophets. The newest set of rules and beliefs is called the Quran.

The point: Most of the world's monotheistic religions not only shared the exact same God but also share most of the same stories and beliefs! It makes civilization's centuries of wars between these religions seem kind of silly and unnecessary, right? The Devil is a common character among all these books. He feeds off our lust, selfishness, and hate. When we were cast out of the Garden of Eden, he first showed himself as a snake. He has never stopped shaft-shipping and tempting us.

As a reminder: Just because many cultures have always had a character called "the Devil" does mean he is real. Heck, everyone knows who Garfield is and no one worries about leaving out their lasagna because he might eat it.

Just because I believe Santa Claus exists in stories does not mean I actually believe Santa Claus is real. The Devil, even if fake, like Santa Claus represents a way human explained evil to one another.

Trickery and Temptation: What all "devils' in religions seem to have in common

Remember how personal finance can turn a dessert into the up-beat, downtown, place-to-be on a Saturday night?

One Example of How Personal Finance Controls Space and Time

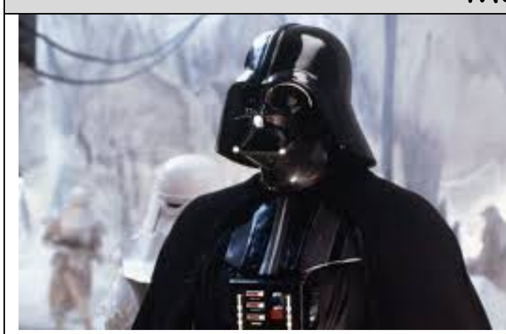
A lifeless climate can become a wildlife preservation or a bustling community

The Devil goes in reverse order:

Something wonderful becomes terrible

the Devil makes his appearance in popular culture too:

Modern Day Devils



Let's talk about the shared characteristics of the Devil:

Characteristics of the Devil[11]:

1) **The Devil is a tempter**. He offers you things that sound too good to resist for a deadly, dangerous price. Often times, you get whatever you desire but for the price of your "soul." While we don't know what it means to sell a soul or what would happen if you did, the point is that you are getting something you really want but at a price you should not pay. The devil is tempting you in ways you should not indulge.

2) **The Devil is a shape-shifter**. Almost half the entire globe is familiar with the Garden of Eden where God, in theory, created Adam and Eve to begin the human species. This story, Genesis (meaning "beginning"), is part of the Jewish Torah, Christian Bible, and the Muslim Quran. In the story of the Garden of Eden, the Devil takes the form of a snake and tempts Eve with the forbidden apple from the Tree of Knowledge. As a result, Adam and Eve are kicked out of the Garden of Eden. (Indian and Eastern religions may not have "Adam" and "Eve" but there always seems to be two people, a creative force, and an evil force.)

3) **The devil is super smart, poised and logical**. The Devil is almost always very intelligent. Lucifer was God's favorite and most wise angel. It was when the angel Lucifer believed he could rule heaven and the universe better than God that God cast him toward the center of the earth to take over Hell and become "The Devil." While the logic and intelligence of the devil seems appealing, it's always to trick and deceive you. He is so smart that he always ends up with the better deal. Jews, Christians, and Muslims teach of this story. Darth Vader, Thanos, Rick Sanchez—villains tend to be super smart, and their arrogance makes them think they can make a better world often by enslaving humanity.

4) **Most importantly, the Devil tricks you into a bad deal because he is so persuasive and smart**. Selling your soul or doing what he tricks you to do always ends up bad for you and great for him. He gives you a bad bargain. Think of any of the movies or cartoons you have seen where someone says they would sell their soul for something, and the Devil appears. If you believe your soul exists, you wouldn't want to sell it! What a terrible deal. No matter what you would be promised (even limitless riches), you wouldn't want to sell your soul for it. But, this is what the Devil tries to get you to do.

In Ancient Egypt, Set was the god of the underworld. Before he was sent to rule over Hell, his origin story describes him as a smart and powerful God who believed he could be a better ruler than Osiris.

Set: The Legend of Egypt's Devil

Osiris turned the Egyptian dessert into a powerful kingdom. Osiris created crops, irrigation and the military. But, as time passed, he grew complacent and traditionalist. He did not push or think Egypt needed to be changed anymore.

Set brought the sun up each and every morning. "Why does Egypt even need Osiris, anymore?!" He reasoned. Set could rule the world even better by himself, he reasoned. He could offer the change Egypt needed.

Set throws a party and invites Osiris and the other gods. This allows him to capture Osiris, chop him up and disperse the pieces of his dismembered body across Egypt. Set takes the throne, and Egypt suffers

Horus is the son of Osiris and grows up in hiding given the death of his father. During Set's rule, Egypt walls into ruin.

Drought, murder, war and invasions plague Egypt during Set's terrible rule. (Clearly, he was not the wonderful ruler he thought he would be.)

Horus eventually fights and defeats Set, banishing him to the underworld.

We've seen these characters before. The murdered king, the jealous relative, and the savior son is a common narrative among most civilizations.

The point: No one needs to actually believe the devil is real to accept that the Devil represents the collection of human flaws that destroy societies. The Devil is tempted by power, thinks he is cunning and smarter than God, and tries to get more than he deserves. As you have already started to see, this is what the Devil tries to do to ordinary people like you and me.

<table>
<tr><th colspan="3">Modern Day Devils</th></tr>
<tr><td></td><td></td><td></td></tr>
<tr><td>Darth Vader wants to conquer of the universe</td><td>Rick Sanchez wants to go unpunished for living life like a party all the time.</td><td>Thanos believes his conquest of all worlds is moral. He is a delusional psychopath. He thinks the world is better under his control.</td></tr>
<tr><td colspan="3">Fun fact
Lucifer means light-giver. (Luc- = Light) And "light" has often been associated with knowledge. Lightbulb symbolizes an idea.

So, when our ancestors were giving names to people in these ancient stories thousands of years ago, they too realized the characteristics of the Devil.</td></tr>
</table>

The Devil and Personal Finance

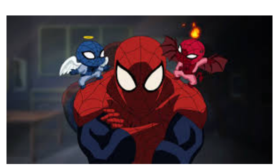
If you save your money, you might be able to provide cancer treatment to a loved one, which can run between a quarter to a half a million dollars! That's good. But, isn't it also concerning that the cost of cancer treatment, in the world's most powerful democracy, costs between $250,000 and $500,000?!

Money will allow you to go to law school, take a vacation when you are stressed, and take dozens of trips to the hardware store as you try to patent and sell your original inventions.

Unfortunately, countries without money and the freedom to use money lead to terrorism, civil war, and genocide[12]. The strength of America's economy allows us to have the world's best colleges and social workers, but it's also one of the reasons we were one of the last modern democracies to abolish slavery. As you learn about personal finance and influence space and time, the Devil will be tempting you:

The ability to control space-time	Versus	The Devil
Help yourself: Treat yourself on a bad day, save for college, achieve long-term goals, and plan to reach all of your wildest dreams in the future		**The tempter:** Spend your money on those nice shoes, instead of saving for college. Credit cards are so easy! Just swipe.
Help your loved ones: Take a friend out to dinner on a bad day and buy a beautiful home in Florida for your grandmother.	You 	**The shape-shifter:** Swipe this Old Navy card. Go on a shopping spree. You deserve it. Just put those bills in a drawer until later.
Help the world: Create a cancer research center and end homelessness		**The (seemingly) smart and logical**: "Your mom won't even notice her money is missing. You are only taking a little bit."
		A deal that is too good to be true: Pay the police to ignore your robbery and everyone gets a little of the money. The bank has too much money as it is.

Perhaps you see why so many movies, cartoons and comics find the main character torn between doing good and a devil.

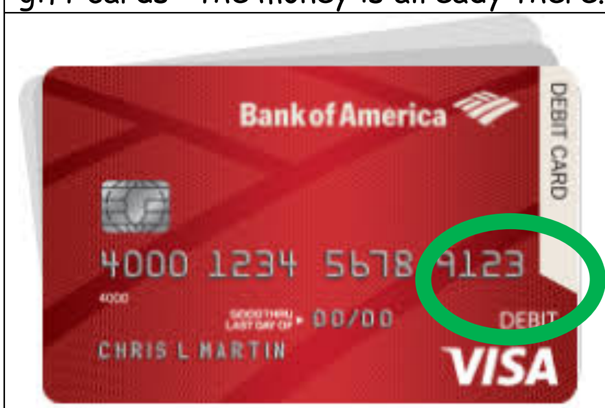


What are credit cards, loans and debt?

Credit cards, loans and debt are all bills or money that a person owes and must repay. A person who receives a loan for $20, swipes a credit card for $20, or gets a letter in the mail that says "You have $20 of debt to a business," means this poor soul used money he/she does not have otherwise.

You have probably gone shopping with family, and seen someone pull out a wallet with multiple cards:

But not all cards are equal. There are two types of cards: Credit cards and debit cards. **Debit card** access money you already have, while **credit cards** access borrowed money that come at a cost every time you use.

<table>
<tr><th>Debit cards</th><th>Credit cards</th></tr>
<tr><td>When you swipe this card, the money comes right out of your own bank account! You can only spend as much money as you have in your bank account. If you have $100 in the bank, then you can only use the card for $100 worth of purchases. Want to use it for more purchases? Put more money into your bank account. Think of debit cards like gift cards—the money is already there.</td><td>When you swipe this card, you are using money you agree to borrow from the bank. The bank gives you a limit (say, $10,000). You can spend as much as your limit but you must pay the bank back.</td></tr>
<tr><td>
</td><td>
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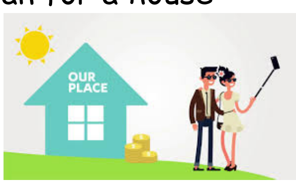
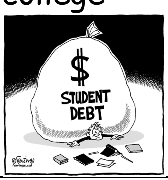
</table>

You may ask: *What's the big deal? I can get paid $100 and spend the money with my debit card OR I can use a credit card a few days before my paycheck and pay the bank right back? It's pretty much the same thing, right?*

WRONG. VERY WRONG. This is the Devil talking, even if you do not realize it.

Banks charge you $0 for using a debit card. They give it to you for free because you are agreeing to put your paycheck in their bank. Sometimes, banks give you a tiny, tiny bit of money (0.01% interest rate which equates to pennies) as a very small "thank you" for banking with them. But, credit cards charge **"interest"** and a lot of it! We will talk more about interest. In fact, interest is so high on credit cards that you will not get higher interest than almost on anything else! Look at the diagram below:

Things that charge interest	Range	Interest Percentage*
A loan for a house 	Least	4%
A loan from the government to go to college 	Middle	5.05%
Credit cards 	Most	22%

* These percentages come from analyzing many examples of credit card offers from banks, trends in mortgage rates, and government policy. A trained economist or financial planner may disagree with my exact percentages, but not by much.

Even if you have no idea how bad 4% and 5.05% interest loans are, 22% is way higher than those other two!

Interest is a percentage of money you need to pay extra. So, if you have a credit card bill for $100 with interest then you know you are going to pay MORE than the $100. This is the cost of borrowing money you do not have. Banks want to make money off you. If you get a debit card, they are holding onto your money and paycheck. BUT, if you get a credit card they are lending you THEIR money and it's for a price.

<table>
<tr><td>Debit Card</td><td rowspan="2">They look the same! One is great and the other is the devil!</td><td rowspan="2">
</td><td>Free to use! You can spend every $1 you put in it.</td></tr>
<tr><td>Credit Card</td><td>You are charged an outrageously higher price! 22% interest. This is a bad deal!</td></tr>
</table>

This book will discuss many ways to make money and most ways return a generous 6% a year. (We will learn that the "stock market" returns 6% a year in future chapters[12]). That's actually a great amount!

But, let's assume you have a credit card that increases its bill by 22% each year.

Imagine you put on a magic helmet and it can tell you your future.

$ 100	**TODAY**
$ 78	**NEXT YEAR**
$ 69	**TWO YEARS FROM NOW**
$ 54	**3 YEARS FROM NOW**

This magic helmet would be revealing a terrible report card. No one would sign up for that?

This is what the Devil does to you. The Devil promises you things now at the cost of losing lots of money each year.

Invested money generally makes 6% a year. This is what it would look like if you saved and invested money in the right places right now. This is a healthy health report on your financial super-power:

$ 100	**TODAY**
$ 106	**NEXT YEAR**
$ 112	**TWO YEARS FROM NOW**
$ 119	**3 YEARS FROM NOW**

Do not be tricked by the devilish credit card. Your money is best used elsewhere than paying the credit card bills.

Credit cards debt will tempt you like the Devil

There are dozens of different offers of credit cards. Some offer you 0% interest for a year, then your remaining balance gets hit with 25% interest per month. Other cards may charge you 30% interest but give 1% cash refund. This means if you take out a $100 loan, they will give you $1 (that's 1% of $100). If you pay your loan back before the month ends, then you made $1. But, if you do not pay it back, you owe 30% interest or $30. Worded differently, a $100 credit card purchase will give you $1 extra and charge you $30, costing you $129.

Other credit cards give you store discounts, flight miles, and points that resemble Dave & Busters. Almost any store you walk into will sell you a credit card at checkout because they make a huge profit on your debt:

The Home Depot credit card

The Forever 21 Credit Card

There are different schools of thought on credit cards. Some people think you should be very calculative and use whatever reward system is available. But, what I recommend is what one of the leading financial planners argues:

Never, ever take out a credit card. Yep, never do it. If you cannot afford something right now with your savings, then don't' get it. If you want it, save up for it. Maybe take out one credit card when you are 18, make one purchase a year, and pay it off the next day. But, that's it! Stay away!

"Credit cards are the devil!"

This is what Dave Ramsey, one of the nation's leading financial planners recommends – and he used to be bankrupt himself.

<u>To review</u>: How are credit cards like the Devil? Look at the diagram below.

Characteristics of the Devil	Characteristics of Credit Cards
Temptation	Credit cards can be used to fund Caribbean vacations, a car or going out to eat every day! But, the interest is so high that you are losing tons of money! Credit cards are tempting you.
Shape-shifter	Credit cards may offer you points that you can use on airlines, cash back, or offer you other rewards. The temptation of credit cards can come in many forms, but do not be tricked.
Super smart and logical	Credit cards SEEM to be wise. If you get points, rewards or other gifts the more you use them, then why not get a credit card? If you are going to pay that phone bill anyway, why not get some free stuff as well? BAD IDEA. The interest is higher on a credit card than anything else.
The Devil tricks you into a bad deal	The temptation is so strong, but it's always a bad deal. Credit card interest is so high that it's higher than the amount of money you would gain using the stock market and other really profitable ways to generate wealth. Easy

	access to cash to finance temptations comes at a cost. Credit card debt is easy to rack up, hard to pay off, and is always a bad deal

Let us try this little thought experiment. We've talked about the stock market a little, but only a tiny bit. We are going to talk more about it in upcoming chapters. The Stock Market, as I will tell you over and over again, is the single greatest generator of human wealth in the history of civilization[13].

The stock market is one really good way we can measure how much progress society made since we invented civilization 5,000 years ago.

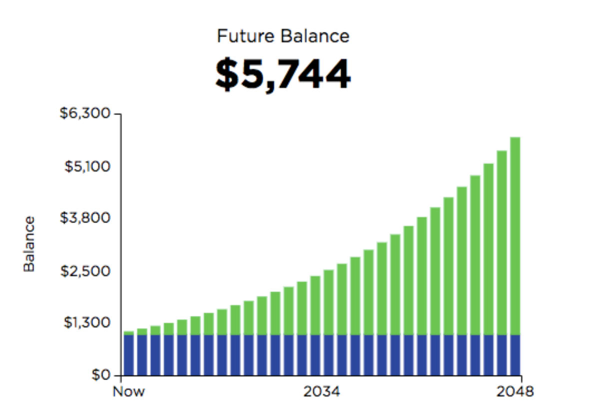
The most appropriate way to think of the stock market is generating 6% extra on your money every year[14]. Credit cards, on average, charge you an extra 22% a year. Let's assume you have two options:

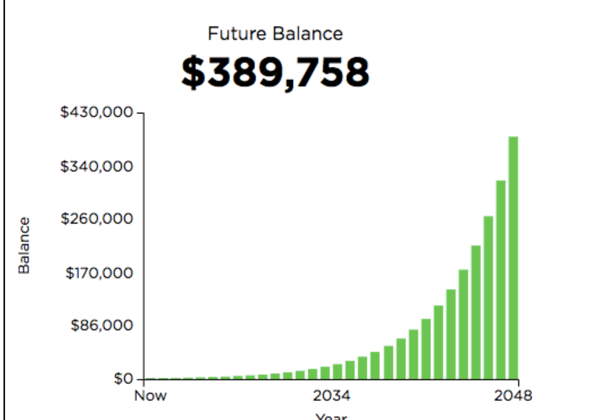
A) You invest $1,000 in the stock market for 30 years. You do not touch that money and you just let it grow 6% every year.

B) You spend $1,000 with a credit card. You do not pay it back but instead let your bill grow 22% a year for 30 years.

Let's see how much money you either have or owe in those 30 years.

In option A, you have almost $6,000. In option B, you owe almost $400,000. If you have debt, it will grow faster than any money you invest. Do not get credit cards.





Debt can sometimes be good, especially in these 2 cases

Credit cards and debt are not the same thing.

Credit cards can build up your "credit score," which lets you get loans for a house later in life, but be careful! If you make one purchase a year on your credit card, pay it off quickly, then your credit score can go up. That's all you need. Your credit score is important. A higher score can save you tens of thousands of dollars on buying a home, getting a loan for college, getting a car lease, and so much more. You won't be able to get a house if your credit score is bad. (Who would give you a mortgage if your score is terrible?)

There are actually 2 great times to take out loans in your life: a house and education.

Why? These are precisely two purchases where your wealth will increase faster than the interest rate.

Over the last 30 years, many $50,000 houses became worth $400,00. Even if you had to pay $2,000 over 15 years in the interest of the loan, you would end up having a house worth $350,000 more than when you bought it.

This

Becomes this,

Another great time to take on debt is for college or post-high school education. When you graduate high school, you will likely have no money saved. Maybe your parents will help you, but you will get a job or continue going to college. You can get loans that pay for college expenses, an apartment, and books. On average, college is worth it for people. The loans lead to a higher salary in the work force because of the degree. However, if you can earn scholarships and go to a cheaper or free college then you are in an even better situation!

Sometimes housing and education do NOT work. In fact, the Housing Crisis of 2007 was when we really thought property was a good idea when it wasn't. The student debt crisis may be our next folly.

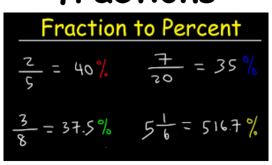
Avoid credit cards, but debt can be a good time to take important risks.

Chapter 6: Millionaire Math Part 1

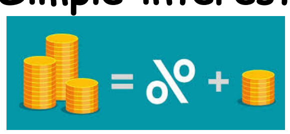
The journey to millionaire status involves only three mathematical concepts: calculating percentages from fractions, simple interest and compound interest. For those with serious math anxiety, this must be a relief—the path to wealth requires just three math formulas. In fact, I actually believe that these three math formulas power the Optimistic Universe.

That's right, I believe 3 math formulas explain the Big Bang, the 2-million-year journey from caveman to modern human, and all the innovation and progress within the 5,000 years of "civilization." (Please note: no one yet agrees with me, yet, in the power of these 3 math calculations.)

Calculating percentages to fractions

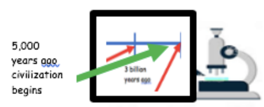


Simple interest

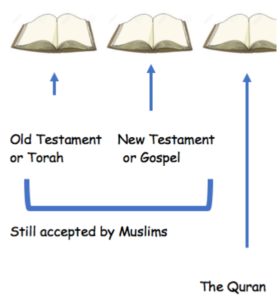


Compound interest

=



Human progress



The growth of all ideas

Economic development

The Big Bang

In fact, I will be so bold as to argue that your ability to manage your pursuit of hedonism and eudaimonia comes down to these 3 math formulas:

Fractions converted to percentages

Simple interest

Compound interest

Hedonism	Eudaimonia
	

These very calculations will prove to be indispensable in times of home ownership, stock market investing, basic budgeting, weighing job offers, and the analysis of competing financial aid offers. This chapter will only focus on simple interest.

Do you have a family member who has the ability to repair most things while keeping a few prized tools in a workshop or garage? These 3 math formulas are like those tools, and the workshop garage is your brain.

A phone’s calculator, these 3 formulas, and just a little bit of math can resolve most real-life situations that involve personal finance. Even if the thought of actually choosing to do math in the future seems magic and made up then the math in this chapter will, however, *prove* that the steps to wealth maximization are neither magic nor made up.

Readers of this book, up until now, may STILL distrust banks, the stock market, and anything to do with money. The math is meant to prove to you that turning money into more money is as guaranteed as the water cycle which turns rain into more rain.

To begin this journey, we will start with some basic terms before discussing simple interest.

Three basic terms: assets, principal and interest

"Assets," "principal" and "interest" represent 3 terms that hold a lot of importance when it comes to understanding the logic and math behind wealth generation.

Assets are anything that can be exchanged for cash--essentially anything with value that people would pay for. The following is a list of just some assets a person may own:

Assets
-A house -A famous painting -Stocks, bonds and mutual funds (we will learn more about this later) -A signed baseball card -A poodle that TV producers want to use for a show called, "Sebastian: The Tap-Dancing Dog" -A hotdog that Lil Wayne almost chocked on

All of those things can be exchanged for cash. In fact, the government would consider the owner of such things to be a legitimate millionaire—the $1 million resides not in some bank but in the potential to exchange these belongings for money to then enter a bank. This explains why finance experts have two categories for assets: Liquid assets and illiquid/non-liquid assets.

A **liquid** asset is an asset that can quickly be exchanged for cash. For example, a signed headshot of Drake will sell almost immediately on eBay and thus represents a liquid asset. An **illiquid/non-liquid** asset could be a famous painting or a house because it takes a while to find a "broker" or the person who can legally connect you to a buyer. Just like "liquid" things can move quickly, of "liquid assets" as objects that can quickly turn into cash. Look at the diagram below:

Assets
Anything that can be exchanged for cash.

Liquid assets
-A beach house in a college town

- Stocks and mutual funds (more on this later)

Illiquid/Non-liquid assets
- A famous painting by an artist most people never heard of.
-A rare toy train or other "collectibles"

When you take cash and you want it to grow, that starting amount of cash earns the name principal (spelled with a -pal at the end and not -iple). Even if you take an asset (a house) and liquidate it into $100,000, that $100,000 will be called "principal" if you try to turn it into more money.

Principal, spelled the same way as the head of a school, also means the amount of money you start out with when making an investment. At first, principal seems like a weird word to use with money. But, the meaning of this word should make sense soon.

Prince/princess, principal, and principle deal with taking power:

Prince/Princess	Principal	Principle
The son/daughter of royalty who will one day inherit the crown	The leader of a school	An idea or belief that guides someone
		

If all these words deal with power, "principal" is the lump of money that has the power to turn into more money.

A Matter of Principal	
If you have $1 and start a Penguin Zoo business that leads to $5 million, that first $1 gave you the power and ability to become a millionaire.	**The first $1 = principal** 
The first $50 = principal 	Imagine you need $50 for a Mother's Day gift, so you take out a loan for $50. The bank agrees to give you that loan as long as you pay back the $50 plus an extra $10 by the end of the month. That's $60 in total.
Imagine you have $1,000 and use it as a down payment on a $50,000 house. Not only can you live in the house, but you own it as long as you pay off the remaining $49,000 over the next 15 to 30 years. Your $1,000 initial payment gave you the power to own a house even though you do not technically own it yet.	**The first $1,000 = principal** 

Principal is the amount of money you start out with that will either grow bigger or smaller in time.

Principal (finance)	Prin- = power or authority	The principle of "do no harm" is something all doctors must swear by, and it's called the Hippocratic Oath.
	-Cip- = take	The slaves were emancipated, meaning that they finally had taken back control over their own freedom.
The **principal** of your investment is how much you put into it in hopes that you will get a much larger amount back.		

Assets represent anything that has value and can be exchanged for money. When you have that money and attempt to turn it into more money, then that starting sum is called principal. **Interest** is the extra money you earn on the principal.

<table>
<tr><th>Principal</th><th>Interest</th><td rowspan="3">Interest is usually a percentage. You may get a credit card that charges 22% interest, or you may purchase a bond where you receive 2% interest (more on that later.)</td></tr>
<tr><td></td><td></td></tr>
<tr><td>The amount you start with (and hope becomes bigger)</td><td>The extra amount you earn</td></tr>
</table>

Easy Steps to Calculate Interest

There is never one correct way to do or think about math. Even in elementary school, you started to see that there were multiple correct ways to solve math problems. This section goes over the steps quickly and simply. The steps may not make conceptual sense, but that is what the last section of this chapter is for. Take your time and read the steps and practice the 2 problems below. Even if it does not seem clear why the 3 steps are the way they are, just try out the two practice questions. After you try out these steps, then we will delve into why these steps are the way they are.

3 Steps to Calculating Simple Interest

(1) Convert the interest percentage to a decimal by moving the decimal over two places to the left: 50% = .50, 25% = .25, 5% = .05, 54.8% = .548.

(2) Add 1 to the number. Why? 1.0 = 100%. When calculating the money you get back, you always get all the money you lent out (100% or 1.0) plus the interest rate.

(3) Multiply the principal by this number.

Look at the example question below:

Nadir borrows $20 with 50% interest to own: (1) his own cricket, and (2) multi-colored hats he can put on his cricket. How much does he owe?

Steps	**Example**
Convert the interest percentage to a decimal by moving the decimal over two places to the left	Nadir's loan has 50% interest, so that's.....**0.5**
Add one to the number	**1.5**
Multiply the principal by this number.	Principal X 1.5 $20 X 1.5 $30
ANSWER	$30

If you want to do any practice problems, try the following below. The answers are on the next page.

Below are two practice questions with answers and explanations for those answers below. Try to see if you can get the right answer:

<u>Practice Questions</u>

1. Kimmy wants a loan of $4,000 for a kangaroo. Elmer agrees to lend her the money for 20% in interest. How much does Kimmy have to pay? _______________

2. Datrell gives Shenita the $20 so she can buy some new Hello Kitty socks. He charges her 21% interest. How much must Shenita give back? ______________

Answer to Question #1

Steps	Example
Convert the interest percentage to a decimal by moving the decimal over two places to the left	Kimmy's loan has 20% interest, so that's.....**0.2**
Add one to the number	**1.2**
Multiply the principal by this number.	Principal X 1.2 $4000 X 1.2 $4,800
ANSWER	$4,800

Answer to Question #2

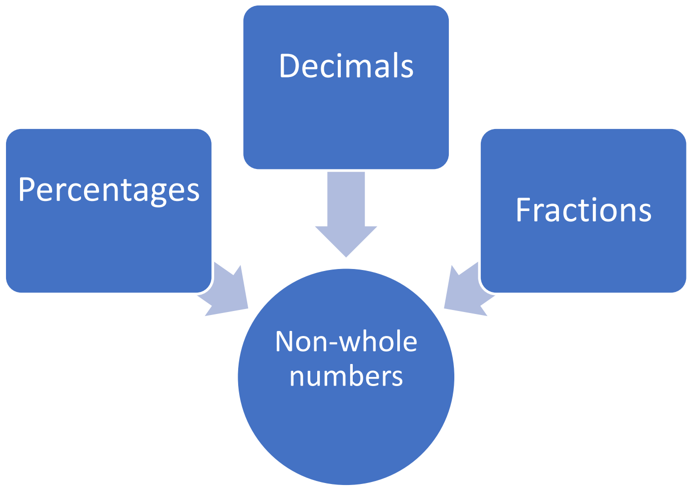
Steps	Example
Convert the interest percentage to a decimal by moving the decimal over two places to the left	Shenita's loan has 21% interest, so that's.....**0.21**
Add one to the number	**1.21**
Multiply the principal by this number.	Principal X 1.2 $20 X 1.21 $24.20
ANSWER	$24.20

How to Conceptually Think about Interest

Memorizing the 3 steps is good, but imagining how principal and interest combine to bigger and bigger amounts of wealth is even better! If you ever want to learn more about finance, it all builds from just those 3 steps. Each step is explored in more detail below:

Step #1: Convert the interest percentage to a decimal by moving the decimal over two places to the left: 50% = .50, 25% = .25, 5% = .05, 54.8% = .548.

Decimals, fractions and percentages are three different tools to help do the same thing: represent parts of numbers—0.25, $\frac{1}{4}$, and 25% all mean the same thing. They are all "one quarter" of a total. You can shift between decimals, fractions and percentages at any time but people tend to have their preferences for when they use one method of another. For example, you are probably more like to say "Can I have ½ of that slice of pizza?" rather than say "Can I have 50% of that slice of pizza."



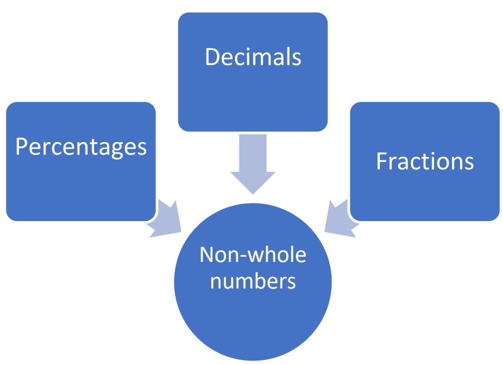
Every single number has a decimal to the right of where it ends.

1489		1489.0
2345%	Can be written as	2345.0%
16		16.0
4%		4.0%

After you place a decimal point at the end of the percent move it to the left of two numbers.

55% →	55.0 →	.550 →	.55
	Place a period at the end of the number	Move it to the left of 2 numbers	Get rid of any extra zeros.
1,210% →	1,210.0 →	12.100 →	12.1
	Place a period at the end of the number	Move it to the left of 2 numbers	Get rid of any extra zeros.

What allows us to change a percentage to a decimal by following just these two easy steps? It's because fractions, decimals and percentages are just different languages to represent parts of a whole.



Step #2: Add one to the number. Why? 1.0 = 100%. When calculating the money you get back, you always get all the money you lent out (100% or 1.0) plus the interest rate.

100% just means "all," "entire" or "whole." If you have 100% of your eyeballs, you have all of your eyeballs, which is 2. If you have 100% of your fingers, then you have all 10 fingers or two entire hands. 100% of an apple is 1.0 apples. (100% = 1).

Below is a picture of 100% of my all-time favorite cartoon character, Samurai Jack


picture retrieved from Google Images via https://samuraijack.fandom.com/wiki/Samurai_Jack_(character)

How many Samurai Jack's is 100% of a Samurai Jack? Just one! Let's play with this picture a little.

This is 100% of Samurai Jack  This is 1 Samurai Jack	And, this is **100% more** of Samurai Jack.  If 100% of Samurai Jack is one whole one, then <u>100% more</u> is 2 in total.

Why are these two pictures different? If 100% means "all" or "entire" then <u>100% of</u> Samurai Jack is just 1 of him and <u>100% more</u> is another "entire" Samurai Jack, which is 2 of him.

If you have 100% of $5, then you have $5 because you have all or the entire $5. Imagine you give someone $5 and say, "I'll give you this $5 bill now but you'll have to pay me 100% extra in a year." How much will you get back? Think about it a moment and then look at the diagram below.

This is 100% of $5 (it's all of it!) 	If you give $5 to someone and "get 100% more" in a year then you "get an <u>entire $5</u> more." You get $10 

As you will remember, when you attempt to turn principal into more money you bet two things will bereturned to you: (1) the principal you initially put in and (2) the interest.

Principal	Interest
	
The amount you start with (and hope becomes bigger)	The extra amount you earn

If you get 100% of your principal back plus the interest, then we can add it up.

Assume you lend out $200 with 4% interest to a friend and your friend is about to repay you.

100% of your principal	+	Interest percent 4%	X principal	=	Amount of money you get back
1.0 of your principal	+	Interest decimal 0.04			
1.0	+	0.04			
	1.04	→	X 200 →	=	**$208**

Concluding Thoughts about Interest

The way to lose money and gain money comes down to interest. A credit card allows the consumer to borrow some principal and then pay it back plus interest. (This allows the credit card company to make money.) Taking your own money and investing it gives you back the principal plus interest. (This is how you make money.) The stock market, bond market, and housing market puts these 3 simple steps at the core of everything.

Chapter 7: Measure your Super Power: Net-worth and the Markets

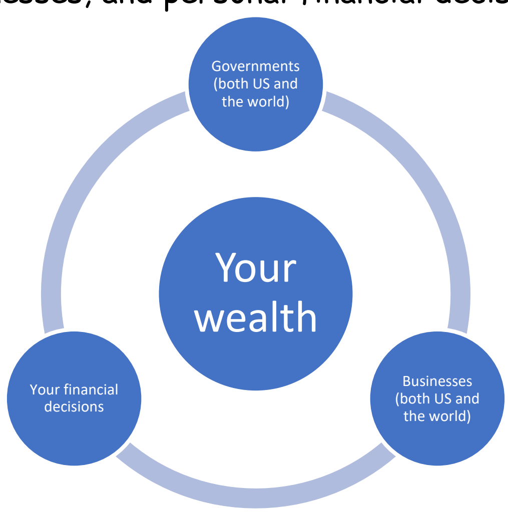
Markets and Net Worth

Every superhero maintains some special ability at the cost of a tragic flaw. In times of stress, Bruce Bannon becomes the Hulk. Ironically, his rage sometimes prevents him from returning to human form. Batman pursues justice so intensely that he will never kill, which allows the Joker to continuously escape his mental hospital and create chaos in Gotham City.

Just like the superheroes, those who know how to create wealth must know how their strengths connect to their weaknesses.

The Hulk	Iron Man	Wonder Woman
		
His anger is a source of strength. Too much anger, the Hulk can be manipulated and tricked.	Tony Stark's brilliance allowed him to invent the Iron Man suit, but his arrogance let it fall into the wrong hands.	Wonder Woman pursues truth and justice above all else. Life is complex, however, and sometimes the long-term outweighs the short-term.

Any person's money-management strengths and weaknesses come down to a balance between governments, businesses, and personal financial decisions.



The ability to generate wealth will open up limitless doors, but such an ability should be controlled and grown at correct speeds. Your wealth requires the American government, American businesses, and your own ability to make good decisions. (As you will see multiple times in this book, both American businesses and the American government become stronger when other countries' governments and businesses become stronger too.) The better the world is, the better your wallet.

If the protesters from a bloody revolution occupy the capitol, do not expect paychecks to arrive on time. If a zombie-pig disease wipes out all American meat-preparation businesses, expect the prices of other groceries to skyrocket. If credit card bills exceed income, expect repo people to take your car, house, and tax-returns from you. Government, businesses, and your own personal financial decisions interconnect and each should be monitored.

How can government, business and an average American's wallet develop cooperatively? (There is the Devil out there, of course!) Greed and bad deals hide out and prey on the untrained eye. Everyone benefits when everyone attacks bad money management together. To develop a financial lens, to monitor the financial health of yourself and the world, focus attention on **just** two things for now: **net worth** and the **markets.** "Net worth" and "markets" represent just two indicators of a growing but stable personal finance super power.

Net Worth and Markets: Think of a Doctor

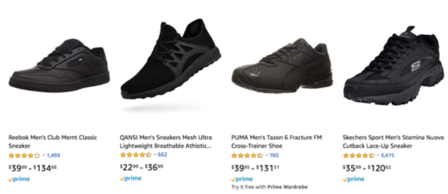
Doctors seem to begin every consultation the same way: thermometer in the mouth, light in your ears, and a squeeze of the throat. Even a visit about a headache begins with thermometer, light, and squeeze. Why this relentless and stubborn ritual every time? The answer: Diseases and injuries leave markers in the bloodstream and glands. Ears, throat and body temperature help measure and track diseases and injuries that could exist elsewhere in the body. Net worth and markets serve a similar function for financial health.

If "money doctors" existed, these two measurements, "net worth" and "markets," determine your financial strengths and weaknesses.

The Market

What is a **market** or the **marketplace**? It's exactly what is sounds like. Visualize a busy area of businesses and activities, a place where adults and kids like to go blow some money. Markets can be casinos, grocery stores, and malls. Any common area can serve as a central place for consumers to swipe their cards and spend their cash for products or services.

Think of a marketplace. Imagine a very public location, maybe a park or common area in a downtown city where different businesses compete for your dollar.



While many markets exist in physical locations, many exist only on the internet. Take Amazon. Amazon.com allows anyone to search for sneakers. Type in "black sneakers" and a variety of options appear from different companies. Reebok, Qansi, Puma, and Skechers use Amazon as a marketplace to solicit your money. Your computer screen becomes a market when you type "black sneakers" into Amazon.

The government has a role here too[15]. The government protects the marketplace. The government ensures businesses cannot discriminate against you based on race, gender or ethnicity. The government inspects products and services for safety and negative environmental effects. In fact, the government even offers free products and services for those who cannot afford any of the options in the market place.

Sometimes the market or marketplace is simply called an **"industry."** These are categories of businesses. Markets and industries are infinite and always changing. There is <u>not</u> a master list. If you can think of a broad category of businesses then you have yourself a market or industry. Some examples are on the next page:

Examples of markets or industries	Businesses
Prescription drugs (or "pharmaceuticals")	Rite Aid and CVS are competing to get the most customers.
Jeans Clothing	You could say there is a "jean" industry (Levis versus Gap) or maybe you want to just say there is a "clothing industry" where some clothing stores are fighting with other clothing stores. Either way of thinking is acceptable. There is no clear line between one market and another.
Fast-food delivery Textbooks TV streaming services	Each of these is a separate industry. Then again, maybe they also belong to the "college student industry."

The government has many different agencies. Many agencies monitor, inspect and regulate the various activities of the market. One reason that America is the #1 destination for immigrants is that the world knows our government ensures quality control over things that could otherwise harm human beings. Look at the diagram below:

<u>A shopping mall is a market that is made up of lots of smaller markets</u>

The Bureau of Consumer Protection makes sure that your toasters, cars, and washing machines do NOT start fires, produce hazardous materials or harm you in other ways.

The Food and Drug Administration (FDA) makes sure that edible goods from businesses are safe for consumption.

BUREAU OF CONSUMER PROTECTION

FDA U.S Food and Drug Administration

The Department of Energy makes sure that companies cannot create too much pollution as they create and transport their goods and services.

With all of this going on, how do we measure it? What is the money doctor's version of an ears-nose-throat test? Simply put, we want the long-term performance of the stock market and the housing market to go up AND we want the long-term performance of the bond market to stay flat.

Different types of Markets

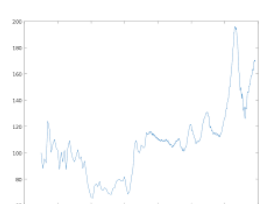
As the diagrams in this chapter have illustrated, there are infinite numbers of markets and industries. For now, focus on 3 major markets that reflect the health of American businesses and government: The bond market, the housing market, and the stock market.

A Brief Explanation of the Housing Market

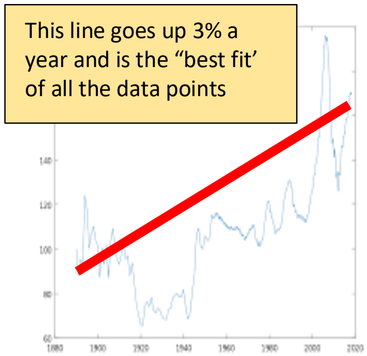
Home ownership represents a key tenet of the American Dream. Most Americans dream of owning a home. Part of that reason is due to the cooperation between construction companies, energy companies, and the American government. When Americans own homes, they tend to invest in their community, support local businesses and government services, and become involved in neighborhood schools. Property values of houses tend to increase, on average, 3% a year. This is no small amount!

0% interest	0.01% interest	2% interest	3% interest	6% interest
How much extra you get when you stick your money in your mattress	How much extra money you get when you put your money in a bank savings account (very, very little)	How much extra money when you buy a certificate of deposit or other fixed-income investments (more on this later)	How much extra money your house is worth, on average, each year. This is also how much bonds return (more on this later too)	How much extra money your stocks are worth, on average, each year

The graph to the right represents the average increase in value of American properties. Some years, house values go way up. If college graduation rates increase, then more people can afford and want a house. Some years, house values go down. Wall Street foolishly designed a lot of home loans that automatically skyrocketed in value at the same time. When this happened in 2007, thousands of Americans could not afford their homes, so they abandoned them. This caused home prices to decreases.



*graph of the Case-Schiller index that measures property value



Right now, it is NOT necessary to understand what makes home prices go up and down. What is important is that American property value, despite small ups and downs, consistently goes up. In fact, it averages 3% a year. A line of "best fit" shows just this.

This 3% increase is a good thing! It means that American homes are steady and reliable investment. But, home ownership is only one way to measure financial health.

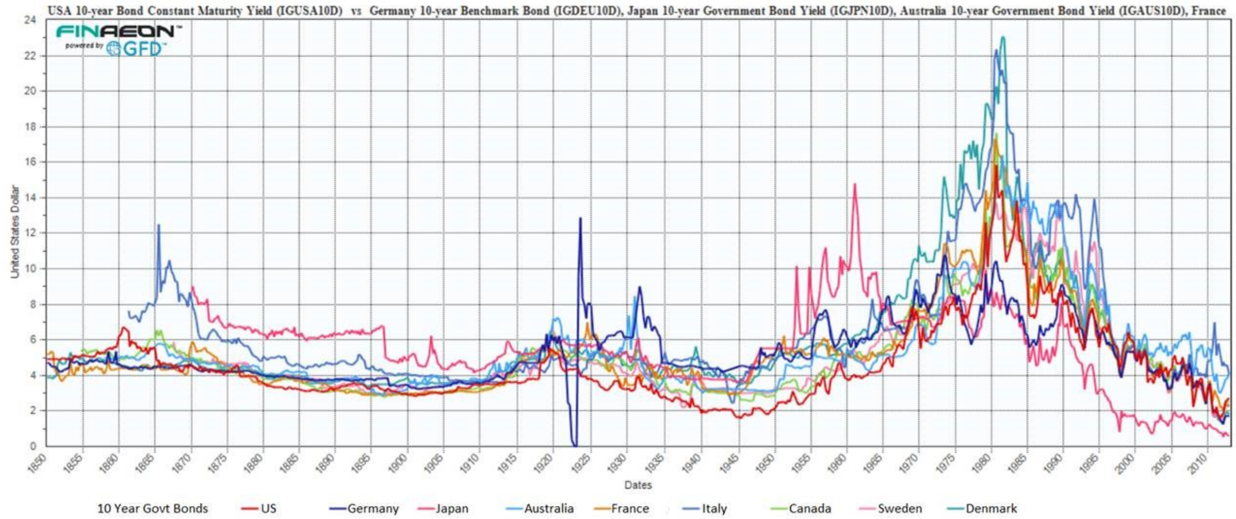
A Brief Explanation of the Bond Market

When you take out debt, a credit card, or loans from a bank then YOU OWE THEM the amount you borrowed plus interest. When a government, company or bank borrows FROM YOU, then you get your money back plus interest.

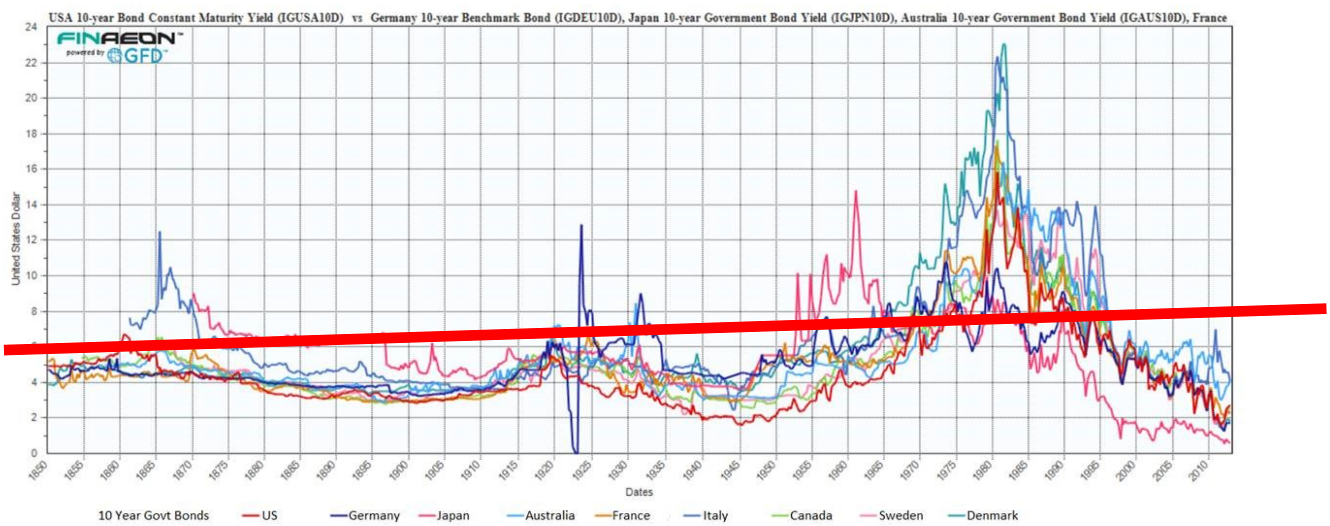
Bonds are loans you give the government, company, or bank with your own money . The government borrows money FROM YOU and then you get back it back with interest. It's almost a guarantee. Let's say you saved up $5,000 for a house, but you do not want to buy a house for another 5 years. Instead of letting that money sit in a safe somewhere, you decide to buy a bond from the U.S Treasury, Facebook or Citibank and earn some interest. A five-year bond from the U.S. treasury could give you $5,150 (assuming 3% interest).

The government sells bonds because it will use your money for public projects, such as building parks, highways, hospitals, and airports. If you buy a government bond for $1,000 with 3% interest, the government could use your $1,000 to, possibly, build a bullet train from Philadelphia to Washington D.C. When you get your $1,030 back, that money may have come from the sale of tickets on that bullet train.

All the bond market does is measure the health of the United States government. We will talk more about bonds in later chapters, but all you have to know is that you want your bonds to pay you what you agreed. This is what the bond market looks like. The lines represent the interest rate.



Don’t let the bright lines confuse you. Each line represents the bond interest rate of a different country and they are all very similar. The line appears very volatile (it goes up and down; think volcano, it erupts and then calms down, erupts and calms down). But, in reality, if we were to draw a line that averages all of the points, it’s very straight with a slight upward tilt.



This almost straight line is a very good thing! This means that all of the governments are very stable. Even if the newspapers hate the president, two hurricanes strike the coast or a civil war breaks out, an almost straight line means the government is doing just fine. If we keep a relatively straight line then governments, banks, and companies will pay you a consistent interest rate if you buy a bond from them.

Bonds give you some extra money but not a lot. As a result, there are certain times in your life when it's good to buy bonds.

Good times to buy bonds
- You have retired and you want a steady stream of income until you die - You are a few years away from college - You are saving up for a major purchase a few years down the line, and you do not want your money just sitting in a savings account.

A brief explanation of the stock market

"**Stocks**" or "**shares"** of a company pretty much mean the same thing. A stock is simply a part of a company that you own. If you own 10% of a company worth $100, then you have $10 in total. That is because 10% of $100 = $10. But, if that same company becomes very popular and is worth $5,000 then you have $500 in total. That is because 10% of $5,000 = $500.

If you buy a bond, you know exactly how much you are going to get in a year. A stock is more-risky because you do not know how much the entire company is going to be worth. Will the new business, Strange Carl's Meatball Hut, be the next McDonalds or go bankrupt? With a bond, you know exactly how much you will get in the future. With a stock, you do not know how much you will eventually receive but it has the chance to be much, much higher.

The diagram below illustrates the unpredictability of stock prices:

Name of company	**How much 1 "share" or 1 stock at the company's height**	**How much 1 "share" or 1 stock of the company now costs**
Whiting Petroleum	$320	$5.34
Amazon	$1.73	$1,745.72

We will learn much more about "stocks" and "shares." All you need to remember is that they are parts of a company.

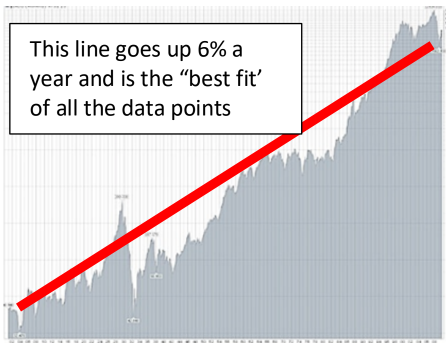
<u>Good times to buy stocks</u>
- You will not need the money for a while
- You are saving for retirement
- You are saving up for a second house that you will get decades in the future

If a stock is part of a company, then the "stock market" is the combined worth of all stocks from all companies that ordinary people can buy each day. On a given day, one company can lose money and another company can gain money. Look at the stocks of some popular companies at the end of the day on July 15, 2019. Each "share" is how much you could buy that stock for or sell for cash. You buy and sell stocks on the stock market."

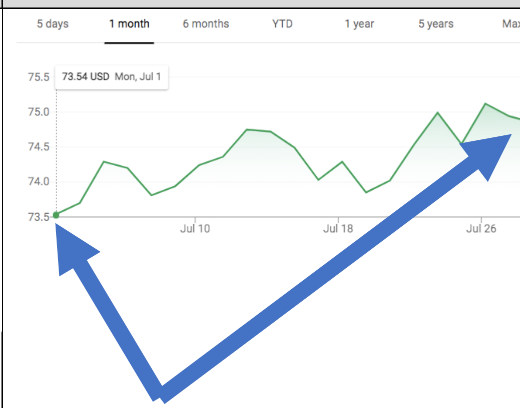
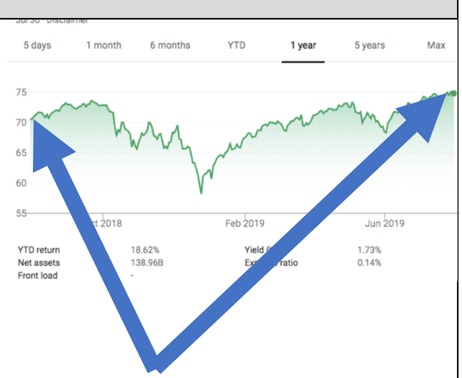
1 share of Netflix = $366.60, which is LESS than the previous day.	1 share of Amazon = $2,020.99, which is MORE than the previous day.
1 share of Tesla = $253.50, which is MORE than the previous day. 	1 share of Facebook = $203.91 , which is LESS than the previous day.

In the picture above, both Amazon and Tesla became more valuable companies on July 15. Since the entire company went up in value, so did the individual shares that make up the company. On this day, Facebook and Tesla went down. Who knows what will happen tomorrow?!

There are about 1.45 billion shares of stocks being bought, sold or traded in a given day. While some shares are worth less and some are worth more, the average of all stocks sold in a given day goes up over time. But, over the long run, the stock market goes up!

<u>The entire American stock market</u> 	Each peek on the graph represents a year in the stock market's history, some years are higher and some years are lower. This means sometimes the average of all stocks of a company are worth less than they were one year and sometimes they are worth more. But, if we were to draw a "line of best fit," we would see that the stock market averages a 6% increases each year. Again, some years might be lower than the previous year. One year the stock market might go up 20%, the next year it might go down 15%, and the year after that it goes up just 0.5%. But, on average, it goes up 6% a year.

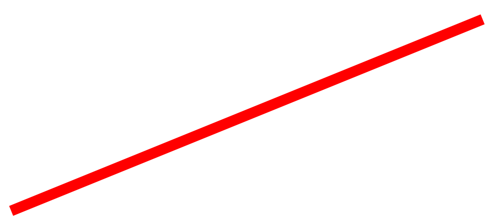
Look at 3 pictures that depict the stock market. They all describe the same, American stock market but on different time intervals: a day, a month, and a year.

Stock market in one day	Stock market in one month	Stock market in one year
 Beginning and end points for the day	 Beginning and end points for the month	 Beginning and end points for the year
It went down	It went up	It went up

Not only does the stock market change each day, month and year but it changes value every minute! If all of the sudden, at 8:35am, we find out that two Middle Eastern countries have declared war on each other, we expect it will become more expensive for those Middle Eastern countries to produce oil. (Who has time to run a company during a war?) This might lead all of the gasoline and oil companies on the stock market (such as British Petroleum) to decrease in value in the morning. But, by lunch, the Norwegian prime minister got on the phone with the two leaders of those Middle Eastern countries and convinced them to not go to war. By afternoon, the stock market is back up! This is called **volatility**, which means that it changes values very frequently. Think volcano. One moment it's a calm mountain, and the next it erupts.

The stock market consistently does well over the long-run (30 year periods) but it is a very bumpy ride each year because of the volatility.

This chapter began by discussing "markets" as a way to measure the health of a personal finance super power. To review, the US Government's health is measured by bonds. Bonds can be issued by banks, businesses or the government and the interest rate on bonds stays the same. The health of US businesses is measured by stocks, and the stock market may be volatile but it goes consistently up over time.

Health of the US Government	Health of US businesses.
	

Your Net Worth

Net worth is how much you are worth after you consider your debt or money you owe. If you have $10,000 in the bank but you owe $50,000 in student loans and $10,000 in credit card bills, your net worth is -$50,000. Look below at the formula:

Net worth = how much money you have – debt

Let's say you have $40,000 in the bank, a car you could sell for $5,000 and $10,000 worth of electronics without any debt, your net worth is as follows:

Net worth = how much money you have – debt
Net worth = 40,000 + 5,000 + 10,000 – 0
Net worth = **$55,000** ☺

Net worth can be negative, which means the amount of debt is higher than money you have earned. Let's say you have $10,000 in the bank for emergencies and $20,000 in student loans, your net worth will be negative.

Net worth = how much money you have – debt
Net worth = $10,000 - $20,000
Net worth = **-$10,000** ☹

As discussed in chapter 5, college and buying a house represent two great times to be in debt. Negative net worth has a place, but it should generally be avoided as much as possible.

You cannot be wealthy or a millionaire if your net worth is negative. Many Americans live in huge houses, drive fancy cars, and eat out constantly. Many of those Americans do these things on credit cards. If they miss payments, repo people will take their belongings. Perhaps they will declare bankruptcy. Worse, maybe they will have to spend the last 10 years of their old age selling all their belongings, giving up all their bank savings, and live out their final days in a government-provided low-quality, free nursing homes. We call these people "posers."

A positive and high net worth can come in different forms. A lawyer may earn $100,000 and save 10% diligently. A social worker may earn $50,000 a year but save 20%. Both will be millionaires in the exact same amount of time. Your path to a millionaire status and wealth requires a positive and high net worth for most of your life.

Assets are anything that can exchanged for money: a house, pool, famous painting, gold coin, a real sword from World War II, stocks, bonds and more.

Consistent Negative Net Worth leads to Bankruptcy

Maybe you lose your job, have a medical emergency or gamble away all your money at a casino. Or, perhaps you just spend more than you make. With $0 remaining in a checking or savings account, a credit card is an easy temptation because it's instant money with delayed pay-back. A negative net worth is the same thing as being in **debt**, and when debt becomes too high, with the help of a lawyer, you can declare **bankruptcy.** That means you have no money, a lot of debt, and it's impossible for you ever to pay back your debt. When you go bankrupt, the government and banks forgive most of your debt.

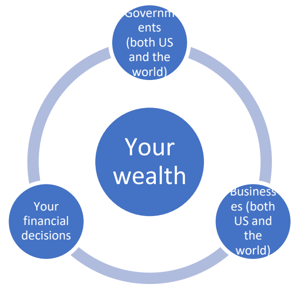
That means the banks say, "You have no money. You don't owe us any more money and you don't have to pay us back." That's great! In America, bankruptcy was created to save people who cannot escape their debt. However, there is a HUGE downside to this. Once you declare bankruptcy, the government knows this forever. Your interest rates on all credit cards and loans will be extremely high. If your credit card before bankruptcy as at 10% (meaning that $500 sofa would cost you $550), it may be something like 30% now (that $500 sofa will cost you $650). If your college loans had a 15% interest rate (so $40,000 loan became $46,000), after bankruptcy your 30% interest rate would mean you are paying $52,000. That's $12,000 more!

Why have a chapter on this? None of the stuff matters in this book if your debt exceeds your wealth. If you owe someone or an organization more money than you have invested or saved, then you are broke.

If you go to college, chances are you will have to talk out loans. At this time, and for the years in your life paying them back, you will have negative net worth. You will have liabilities, or debt, that exceed assets or wealth. But, overtime, you want your net worth to be going up.

Putting this all together

The beginning of this chapter introduced the following diagram:



Your wealth, and the super-power of personal finance, depends on 3 forces to be in balance. First, you need the government to be stable. This allows healthy marketplaces to form so businesses can compete for your money and the government to pay for police, firefighters, teachers, bridges, hospitals and many other things with the use of tax dollars and government bonds. If the government is stable, we see a stable interest rate for the bond market.

The second thing you need is for companies to compete with one another. Some companies will go bankrupt and others will grow, and this makes the stock market very volatile. One day a bunch of companies made money, so the entire stock market went up. Another day a bunch of companies had a catastrophe so the entire stock market went down. On the third day an equal number of companies did bad and good, so the stock market hardly moved. This is volatility, and it happens all the time. But, over 30-year periods, the stock market goes up and up. If companies are healthy, we will see a gradual increase in the stock market.

Last, you need to make sure that you have a positive net worth where your assets are greater than your debt. Having a negative net worth can, temporarily be wise if you are using your money to buy a house, which increases in value over time, or to go to college or trade-school so that you make higher salaries in the future. However, other forms of debt, such as credit cards, drive your net worth down due to the huge amount of interest you will pay.

In summary, the path to wealth involves these 3 lines:

The Bond Market	**The Stock Market**	**Your Net Worth**

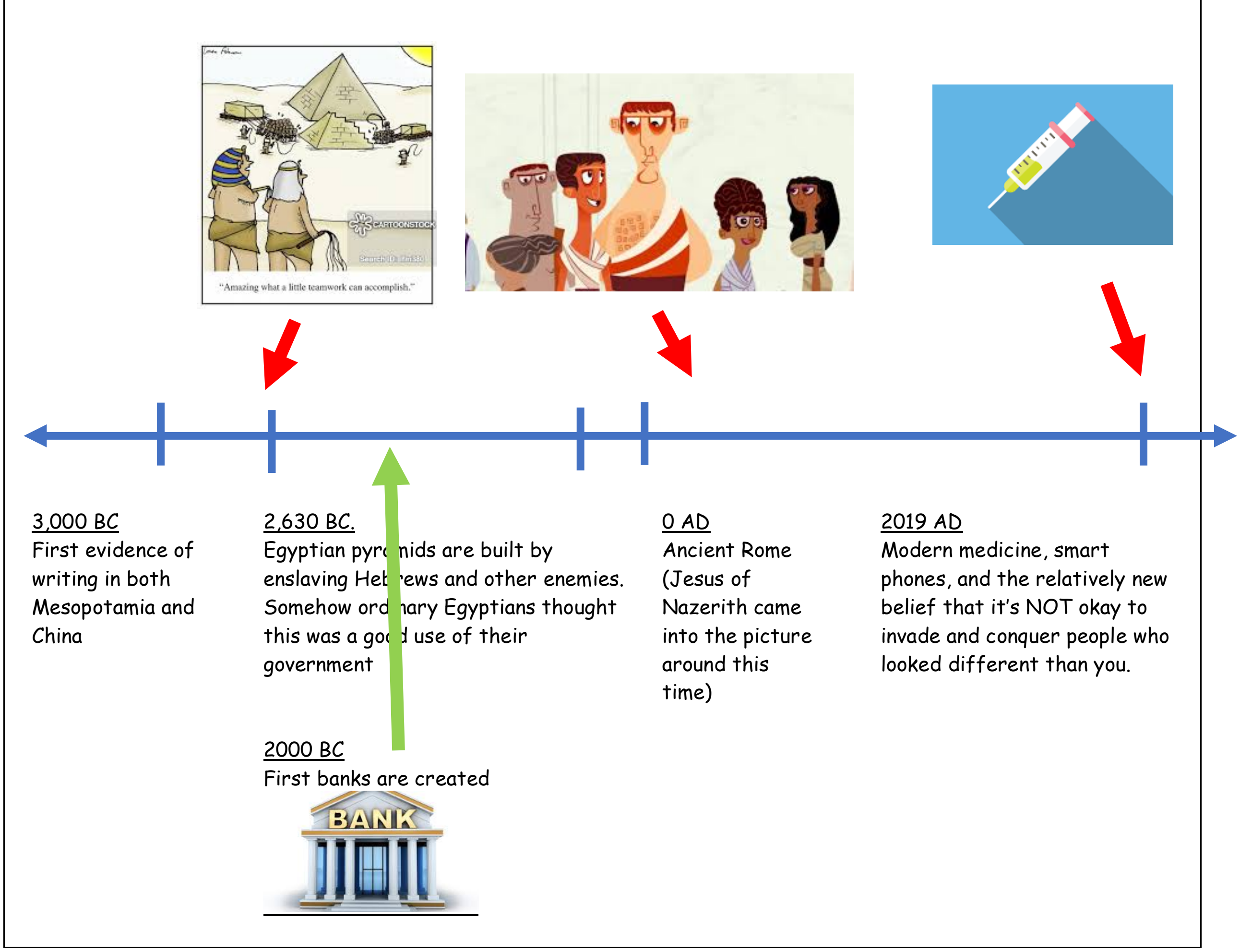
Chapter 8: Bank Accounts

The Necessity of Bank Accounts

Wealth requires bank accounts. Banks have engaged in many bad practices, but they play a necessary role in wealth generation. Any person who thinks that money should be hidden in a shoebox or in a mattress will never, ever be financially secure. The world needs banks.

Once humans invented writing, the creation of banks soon followed.

Timeline of Human Civilization



Why do banks have such an early appearance in civilization? The ability to save, invest, and take out loans allowed different cultures and tribes to trade and do business with one another. Even if waring kingdoms hated one another, they could trust banks to ensure successful trade and commerce between them. (If the business relationship fell apart, the bank would lose money too.)

Banks allowed ordinary people to create and sell food and weapons under an ever-expanding Roman Empire. Banks put cheap land and lumber into the hands of American settlers moving westward. Europe established colonies with banks, and new countries declared their own independence with the help of banks. (If a country can pay its own citizens with its own money, who needs a foreign ruler?)

Even to this day, we have large international organizations that act as banks to promote economic development and peace across the world, such as the International Monetary Fund and the World Bank:

International Monetary Fund	The World Bank
	

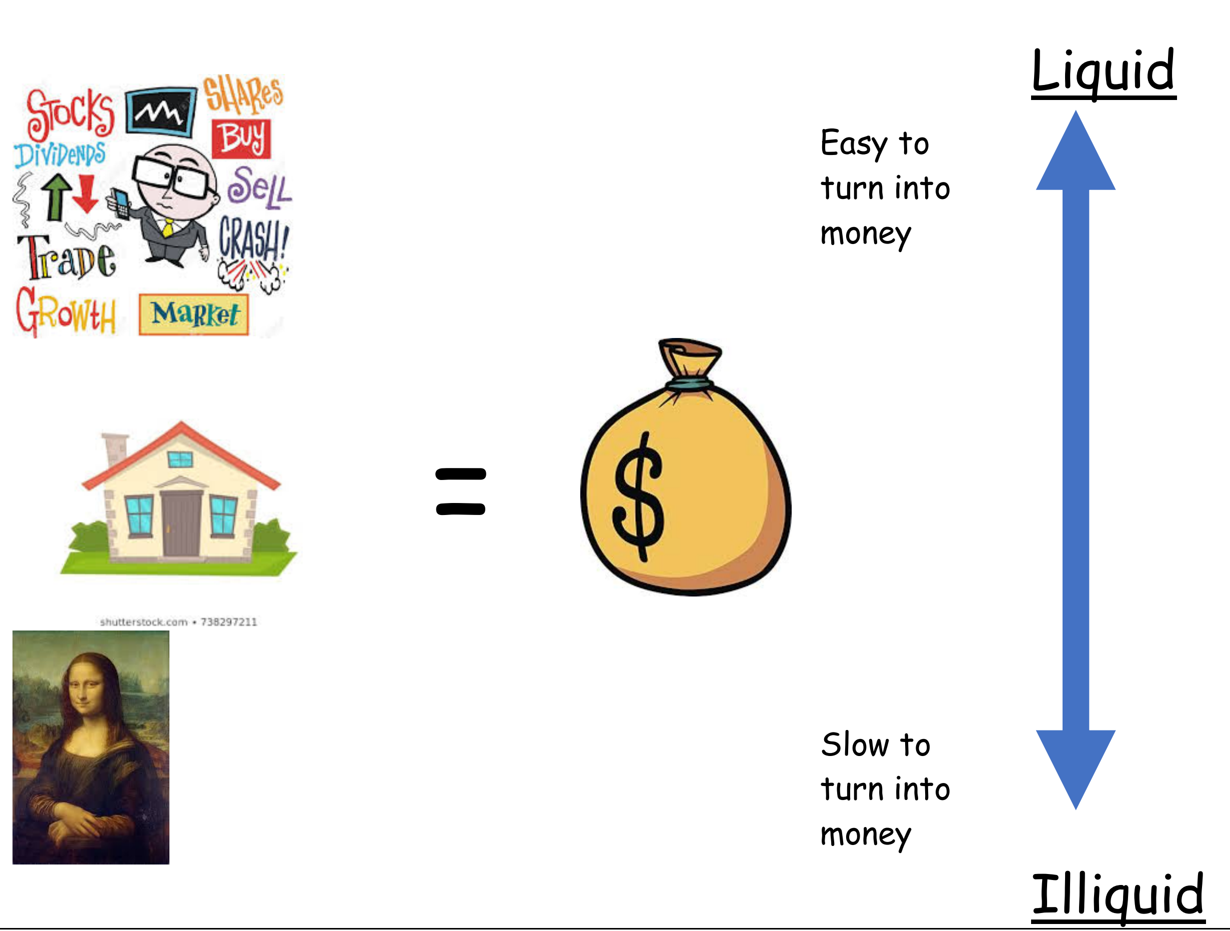
The point? Banks do more good than bad, and they play a necessary role in each individual's pursuit of wealth.

This chapter will explore 4 major types of bank accounts that each and every person should know: checking accounts, savings accounts, retirement accounts, and brokerage accounts.

Assets and Investments

Chapter 7 explored assets, which is literary anything that can be exchanged for cash, such as houses, stocks and famous artwork. Assets can be divided along a continuum: things that can be exchanged for cash quickly (liquid) and things that take time to be exchanged for cash (illiquid or non-liquid)

Assets



Investments refer to any asset expected to increase in value over time. Pay attention to the word “expected.” No investments are a guarantee. Decades ago, Sears earned the attention of investors as one of the most profitable American companies. When big department stores offered everything in one spot, before the world of online businesses, Sears produced the infamous Sears Catalog. Families would eagerly await the newest edition and plan out their purchases. From clothes to household gadgets, Sears resembled Amazon before the internet.

A sample cover of the Sears Catalog

At the height of Sears's dominance, a share or stock went for $150. (More on that in upcoming chapters.) Now, Sears stocks trade at $0.28. Fifteen years ago, a $1,500 invest in Sears (10 shares) would leave the investor with just $2.80. That is a huge loss.

While some investments succeed and others fail, the name "investment" refers to anything people expect to go up in value. This is why everyday people assign the term "investment" to non-assets. A college degree, exercise, and mental health may all be called "investments" even though you cannot transfer your college degree, physical health, and mental well-being to someone else. Therefore, the United States government coined a specific term to refer to investments that can be legally traded and purchased.

A **security** refers to the legal name for something expected to increase in value that can be bought and sold in the United States. Only a security represents something that: 1) ordinary people hope goes up in value, and 2) can be legally bought, sold and traded.

In order to create a security (such as when Sears wanted to start issuing stock), the Securities and Exchange Commission (SEC) must investigate, evaluate and approve the investment. The SEC is run by a team of lawyers, bankers and finance experts in 11 different cities with a headquarters in Washington D.C.

Securities and Exchange Commission headquarters	
	

4 Major Types of Bank Accounts

With an understanding about assets and investments, the 4 major types of bank accounts will make more sense. Each has a unique purpose, and the path to wealth requires all 4.

Without bank accounts, cash would sit in a safe or under your mattress unable to grow in value. Recall in Chapter 1-3 how so much good in the world occurs when people earn money, the government prints it, and banks lend it out. Diseases have been cured and new inventions have been created because the government has lent out your deposited money (and paid you interest on it). Banks offer 4 major types of accounts that this chapter will explore in detail: checking, savings, brokerage and retirement accounts.

(1) Checking Account

Checking accounts allow ordinary Americans to deposit and later withdraw their paychecks and other sources of money. With a debit card, the account holders can make regular purchases throughout the day that automatically "debits" or "deducts" money from the bank account. One advantage behind checking accounts come from the convenience of storing and debiting money free of charge. You may not be making any money by keeping cash in a checking account, but it does not cost you anything either.

The 3 key advantages of a checking account are described below:

1. Convenience. Taking a paycheck to the bank, depositing it, and then mailing out checks for your water bill, phone bill and everything else can take up a lot of time. A checking account allows your paycheck to be directly deposited into your bank, and many businesses will take your monthly bills right out of the account.

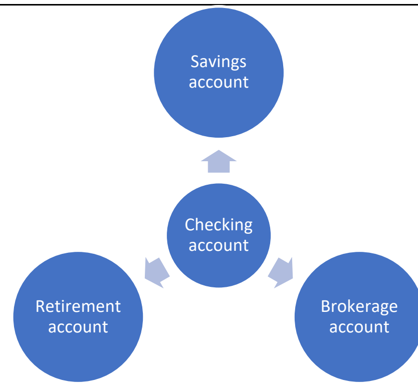
2. Protection. Criminals love to rob people for cash because cash cannot be traced. If cash is lost or stolen, it is very hard to get it back unless you know who took it. However, banks are legally required to reimburse you for money that is hacked or stolen out of your online account (as long as you notify the bank relatively soon.) Additionally, the government insures each bank account up to $250,000 in case of a political or economic crisis. If Wells Fargo goes bankrupt, a person who had $200,000 across 5 accounts (that is $1 million in total) will get 5 checks form the US government for $200,000 totaling the $1 million that person is owed.

3. Central hub of all accounts. Just like an airport connects airlines from around the world, the checking account serves as the conduit for all your financial activity. If a passenger wants to go from Philadelphia to the suburbs of Boston, this traveler must land at the Boston airport before catching a train outside the city. If someone wants to take money from a savings account to purchase a house, the money must go through a checking account first. The checking account is a central hub that all of your other financial activity is linked to. For example:

    a. Do you want to use your savings account to pay for college textbooks? First, you must transfer your savings account funds into your checking account. Then, you swipe your debit card at the book store.

b. Do you want to buy some stocks in Netflix? First, you must move money from your checking account into a "brokerage account" (see below) to purchase those stocks.

c. Do you want to take out a college loan? Once the college financial aid office approves your loan, the money will be sent to your checking account.

	
Penn Station, one of the largest transit areas in New York City, connects trains, buses, subways, and taxis.	Similarly, a checking account represents a hub by which all other financial activity must pass through.

Checking accounts have disadvantages too, which will help illustrate the need for the other 3 accounts. The two disadvantages of checking accounts include: temptation to spend and very low (or zero) interest:

1. <u>Temptation to spend.</u> Your entire paycheck goes right into this account, and a debit card gives you access to every dollar. Diligent budgeting and saving becomes necessary because the temptation to swipe grows stronger with each advertisement. Every dollar can be accessed in an instant, which creates a temptation to spend it.

2. <u>Very low (or zero) interest</u>. Other bank accounts provide better interest rates. Banks never offer high interest rates for checking accounts because account holders receive free debit cards, free paycheck deposits, and other basic services when enlisting for a checking account. Essentially, the bank

holder receives near zero interest for free services. It is a good deal but a checking account alone will not make anyone wealthy.

(2) Savings Account

A **savings account** is a bank account specifically for building up a reserve of money to be used for planned, down-the-road purchases. The most common savings account purposes include future houses, college, and new cars.

A savings account is <u>not</u> linked to a debit card. To access the money a savings account first requires the money to be **transferred** to a checking account, either by phone or a smartphone app, and then the money can be used with a debit card. Under current federal law, savings account owners can only transfer money from a savings account to a checking account 6 times a month or less. If transfers exceed 6 times, the account incurs a penalty fee. Why? The government wants to encourage good savings habits and punish someone who dips into their savings account too frequently.

Savings accounts, like checking accounts, pay very little interest. While no one gets rich by keeping their money in a savings account, it is the ideal way to save to later become rich.

The differences between checking and savings accounts are mostly psychological—while the government punishes those who dip into a savings account too often, it only takes seconds to transfer money between these two accounts. Both accounts pay zero to very little interest. Checking and savings accounts serve different functions but they operate very similarly. Therefore, the difference is mostly psychological because bank-goers believe “checking account is for purchases” and “savings account is to build up money for a later purchase” even though it’s very easy to move money between the two accounts.

A savings account does not guarantee anyone will be a good saver. All it provides is a separate place to deposit money and an extra step before it can be accessed. <u>You just have to make sure you train yourself not to touch your savings account even though you can!</u>

(3) Brokerage Account

Checking and savings account deal with cash. Paychecks and cash can be moved between these two accounts. Investments and, more specifically, securities require different types of bank accounts: brokerage and retirement accounts.

A **brokerage account** holds onto stocks, bonds and other securities (See Chapter 5 to review those terms). Assume that a construction worker wants start investing. This first begins by calling a bank to open up a "brokerage account." Money can be transferred from his/her checking account to a brokerage account. When the money arrives in the brokerage account, 10 shares of Apple can be purchased. Anytime the construction worker logs into his brokerage account online, he can see the cash value for his 10 shares of Apple.

(4) Retirement Account

Retirement accounts purchase investments that cannot be touched until retirement. A brokerage account allows someone to purchase and sell those investments at any time; this brokerage account holder does not have to wait until retirement to access those investments. A retirement account, however, functions as a brokerage account unable to be accessed until later in life.

If a retirement account is just a brokerage account with less freedom, why would anyone want a retirement account? The answer: extra benefits.

Below are the 4 main advantages of retirement accounts over regular brokerage accounts:

1) <u>Less or zero additional taxes</u>. Brokerage accounts are taxed twice. First, taxes come out of each paycheck automatically. When money travels from a checking account to a brokerage account, and the brokerage account purchases stocks and bonds, taxes are again collected when those securities are liquidated. This is a capital gain tax (more on this in Chapter 22). When someone turns their assets back into cash, such as selling a stock that went up in value, taxes must be again paid on that earned cash. With retirement accounts, you do NOT pay the extra tax. It is only taxed once.

   Congress currently has the capital gains tax rate at 20%. Assume you have

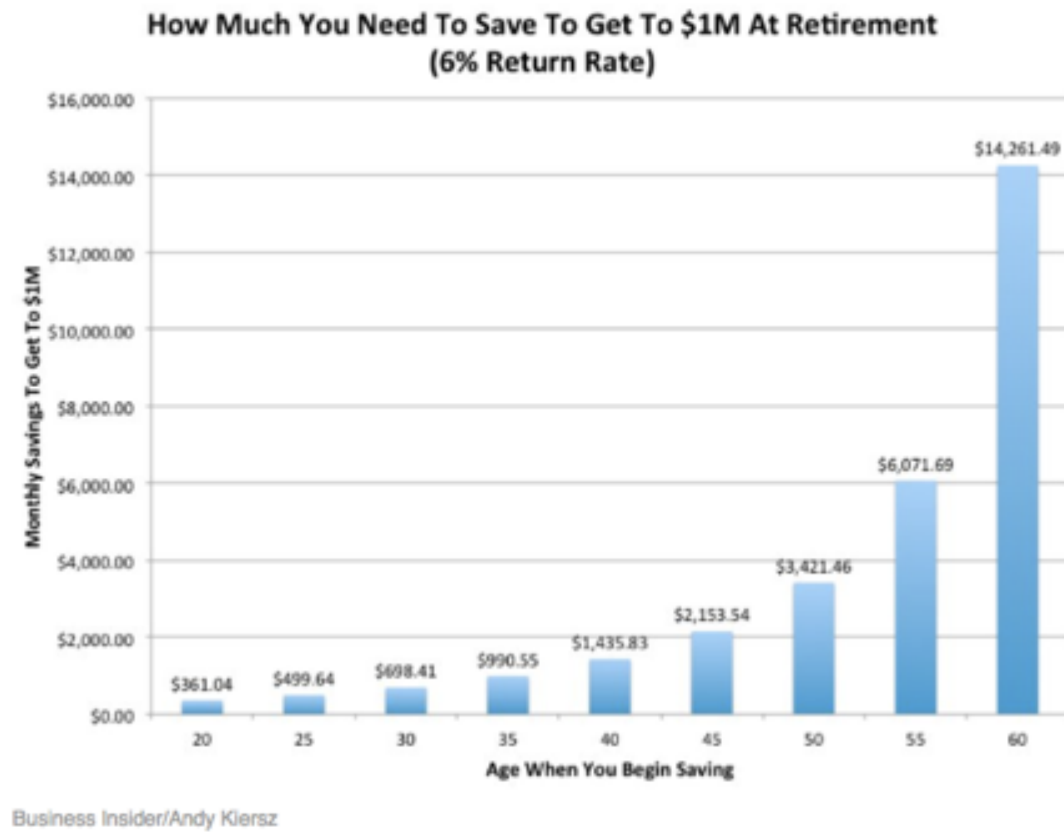
$1 million in investments. If you had this money in a brokerage account, you would get $800,000. If you had this money in a retirement account, you get to keep the $1 million. You save $200,000 just by choosing a retirement account over a brokerage account.

2) Extra growth. This is an oversimplification, but every $1 you put in your retirement account at the age of 18 is equivalent to $25. So, if you put $100 on your 18^{th} birthday into a retirement account, it will be about $2,500 when you retire. A 2016 used Nissan Versa car goes for $8,000. Instead of spending $8,000 for that car, investing that money into a retirement account will produce $200,000. Crazy right?! Almost all finance experts agree that retirement accounts lead to greater wealth than buying a house or doing anything else.

   As discussed in Chapter 3, assume the stock market produces an average return of 6% a year as has been the historical case. To receive $1 million by the age of 65 (average age of retirement), only $361.04 needs to be deposited into a retirement account starting at age 20.

   Retirement accounts are unquestionably the best generator of wealth.

   Examine the diagram on the next page. As stated in Chapter 7, assume a 6% increase in the stock market each year. (Some years it is above that, and other years it is below that, but over 30 years it averages out to 6% a year.) Someone who wants to retire with $1 million would have to put away over $1,000 a month at age 30 or $2,000 at age 45. It is only $361 if someone starts contributing to a retirement account at age 20.



3) <u>Income when you are no longer working</u>. While anyone could set up a brokerage account and only plan to use the money during retirement, the temptation will always be there to take it out early. The government and your job will do nothing to stop you. A retirement account must not be touched until you stop working or else the bank will charge a penalty fee. (If you die early, this bank account goes to your family.)

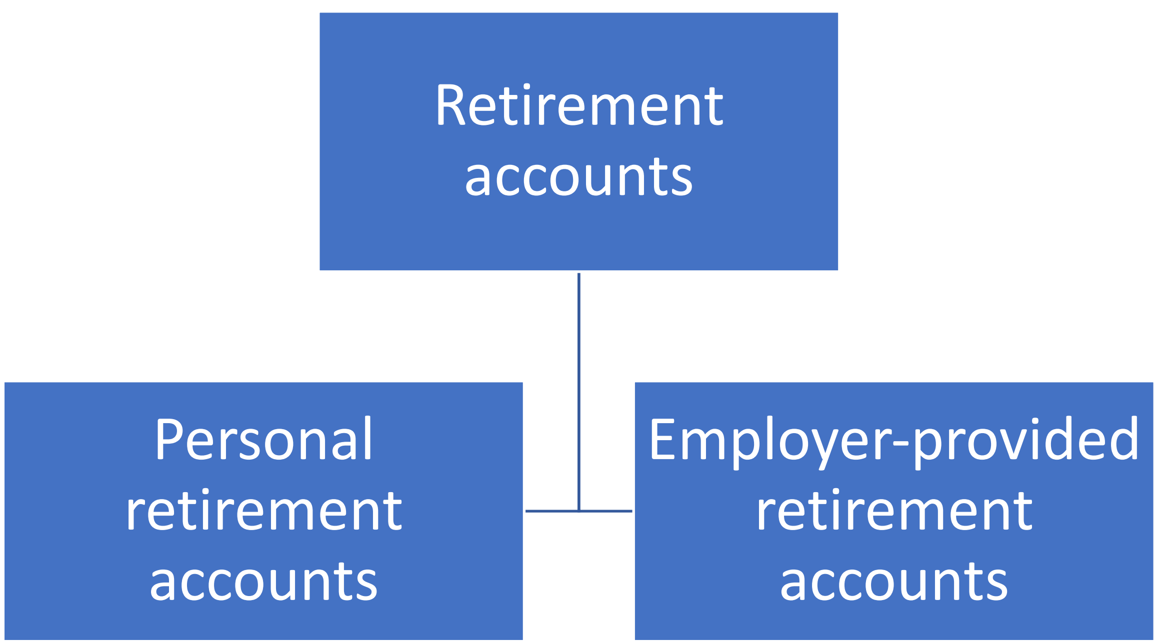
4) <u>Employer matches</u>. This will be discussed more below, but retirement accounts offered through a job often come with employer matches. For example, a business may match your contributions up to a certain percent. Assume a paycheck of $1,000 every two weeks. A job that matches 5% means that 5% of your paycheck ($50) goes into a retirement plan and then your job puts in an extra $50. Employers will not do this for brokerage accounts. **Employer matches** function as “free money” since they are putting in additional funds into your retirement account beyond your salary.

Reviewing the 4 Major Bank Account Types	
<u>Money that holds onto cash</u> ♦ Checking account (debit card connected to this) ♦ Savings account	**<u>Money that holds onto investments</u>** ♦ Retirement account ♦ Brokerage account

Different Types of Retirement Accounts

As said earlier, retirement accounts are the single, greatest path to wealth. Before buying a house or buying furniture for an apartment, start with a retirement account.

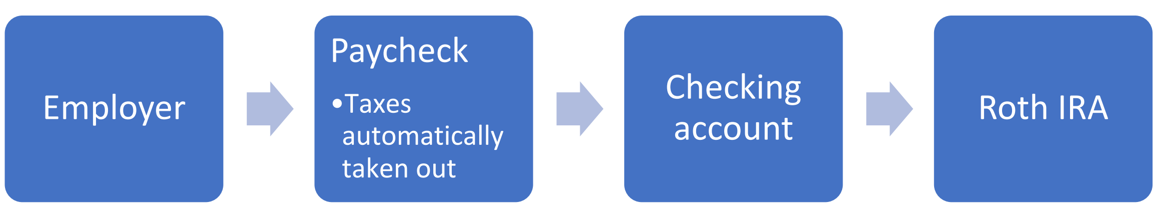
There are two major categories: **personal retirement accounts** and **employer-sponsored retirement accounts** (sometimes called employer-provided retirement accounts). A personal retirement account is one that you set up and have complete control over with your bank. No matter where you move, your job, your marital status or anything at all, your personal retirement account is yours and does not change. An **employer-sponsored retirement account** is one that your job gives you. You can have both a personal and an employer-based retirement account. In fact, you should!



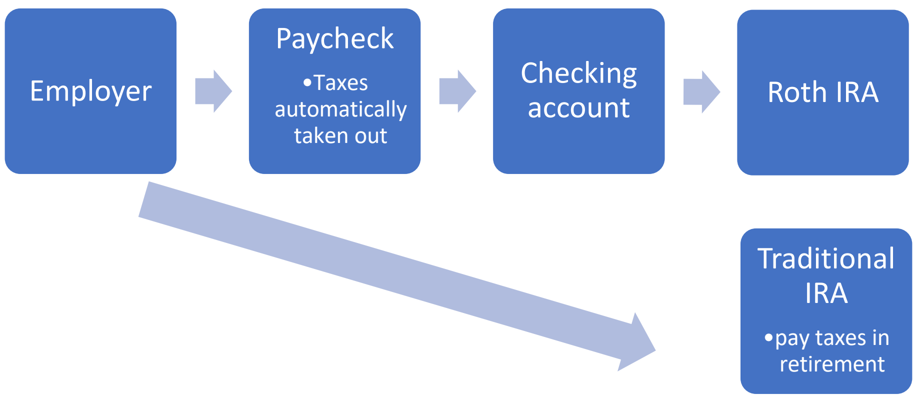
All of this means that any ordinary American can call up a bank and say: "Please open up a personal retirement account for me." This also means that any ordinary American, who has full-time work, can and should allow the employer to set up a second retirement account. With each pay check, the employer will transfer money from your paycheck to go into the employer-sponsored retirement plan. Then, this employer adds in a little extra. Usually the better the job, the better the employer contribution. For example, many teacher employer-provided retirement accounts are pretty bad. (They tend to offer a 3% match by the employer.) Google, Amazon and Spotify, on the other hand, offer 10%.

Different Types of Personal Retirement Accounts

Roth IRA (individual retirement account) – This is the single greatest retirement account on the planet! The account holder pays taxes as usual, and money goes from a person's checking account to the roth IRA account. The full amount of the retirement account becomes accessible upon retirement. The maximum amount a person can put into a roth IRA is $5,500 to $6,000 depending on age. (The name comes from a deceased Senator, William Roth, from Delaware who wrote the law that created the roth IRA.)



Traditional IRA (individual retirement account) – Money goes into this account before it touches your checking account because it usually goes straight from your paycheck right into a traditional IRA account. When you retire, taxes are taken out before it goes to your checking account.



Which is better: a Roth IRA or a Traditional IRA?

This question does not have a clear or simple answer, and many financial planners debate this very issue. The answer requires an understanding of taxes. (More on this later in the book.)

In America the more money you make, the higher your tax rate. A teacher who $45,000 a year will lose about 22% in taxes. A lawyer who makes $200,000 a year will lose about 33% in taxes. When most people retire, their income drops to $0 because they have completely stopped working. However, some people who retire will take this time to write books, start a small business, or do something else for both money and fun. A traditional IRA is best if you know you will not make much money in retirement. Therefore, your tax rate is lower and you lose less on taxes. A roth IRA is best if you think you may still make money in retirement so you pay your taxes now.

I firmly believe a roth IRA is best simply because no one knows what their life will be like decades later. Pay the taxes now and be done with it. Many financial planners agree with this[13].

Different Types of Employer-retired Retirement Accounts

Pension – After working a certain number of years at a job, your job will mail you a monthly paycheck of a certain amount until you die.

401(k) Plan or a **403(b) Plan** – A job sets up this retirement account where a percentage of your paycheck automatically goes into this account. The employer will add extra money to this account by providing a match up to a certain percentage. Assume an employer match of 10%. This means for every $1,000 paycheck, the worker puts 10% into the 401(k) or 403(b) account, which is $100. Then, the employer puts in 10%, which is another $100. Usually businesses offer 401(k) accounts and nonprofits and government agencies offer 403 (b) accounts. Why these weird numbers and letters? It refers to the specific section of the tax code that allows such plans to exist.

Pensions always beat 401(k) or 403(b) plans because pensions will not dry up, but a 401(K) or 403(b) plan can. Just like a savings account, a 401(k) or 403(b) money can be used up. When it is all spent, it is gone. However, a pension check comes from retirement until your death.

Imagine a school teacher who needs to work 30 years to receive a pension, and she works from age 25 to age 55. Now imagine this retired teacher goes on to live until age 100. In this example, she will have worked 30 years but will receive a pension for 45 years. This is both legal and possible. In fact, many people often receive pensions for more years than the years they worked.

Sadly, pensions represent such a good deal that they are hard to sustain. Pensions, consequently, have grown less frequent in America. It is hard for both businesses and government agencies to operate services and provide pension checks for workers longer than the amount of time such people were ever employed. It is very likely pensions will go the way of the dinosaurs in the future.

Summary

This chapter has explained the important role banks accounts play in personal finance. Bank accounts can be divided into 4 major categories: checking accounts, savings accounts, brokerage accounts, and retirement accounts. Below are two visualizations to help keep track of the differences:

4 Major Types of Bank Accounts	
HOLDS ONTO CASH	**HOLDS ONTO SECURITIES**
Checking account	Brokerage account
Savings account	Retirement account

Or

4 Major Types of Bank Accounts	
CAN ACCESS AT ANY MOMENT	**SHOULD NOT BE TOUCHED UNTIL THE FUTURE**
Checking account	Savings account
Brokerage account	Retirement account

Retirement accounts deserve special attention, especially personal retirement accounts and the roth IRA, because they are the most stable and fastest way to generate wealth.

Chapter 9: Live below your means

The Monk and the Minister

Imagine this scenario[16]:

> Two close childhood friends grow up and take different paths. One becomes a humble monk and the other becomes a rich and powerful minister to the king.
>
> Twenty years later they meet. As they catch up, the minister, in his fine robes, takes pity on the monk. He says:
>
> "You know, if you could learn to cater to the king you would never have to live on rice and beans. Sure, I hate my job but I can afford anything I please."
>
> To which the monk replies: "I love my job. If you could learn to live on rice and beans you would not have to cater to the king."

This simple parable captures the internal dilemma we all face: How should we live? Should we be the monk or the minister? Should we make ourselves miserable for money or settle on scraps for personal freedom? This mental struggle represents exactly why the field of personal finance appeared. The monk and the minister represent two extremes: work hard at a miserable job to afford all the comforts of life. Or, learn to appreciate the simpler things to take a job that brings happiness and fulfillment.

The minister

The monk

-Work an undesirable job to relax in the nicest house, next to the greatest beach, nearby to the tastiest restaurants.

- Have a perfect job and love going to work each day but have little money left over.

Assume a miserable Wall Street executive earns a salary of $5,000,000 a year at the cost of stress and grey hair. For this beleaguered soul, each morning will begin with painful dread knowing work is about to begin. On the other hand, after clock out, money will be no obstacle to eat, travel, and live based on any possible desire.

The average teacher makes less than $40,000 a year. Imagine a super nerdy and weird teacher who seems to spend way too much planning lessons and activities for the next day. (For my students, simply imagine me.) For this passionate person, excitement and eager anticipation, not a sigh, greet each new day. A salary of $40,000, however, means this teacher may grow bitter unable to afford lavish vacations, Apple AirPods, and other creature comforts.

Chances are, you will end up somewhere between these two. In fact, you will likely move between both extremes several times in your life. Anyone who works JUST for money is a fool, and anyone who does not pay attention to their income is naïve.

The median or “middle” American jobs pays $45,000 a year[17]. The average teacher, financial planner, business manager or owner, and novice government employee begins close to this mark. If/when you switch jobs, you will likely return to this mark. Even if you earn entry-level lawyer and doctor salaries (between $110,000 and $200,000) switching jobs may put you at $45,000 for a year or two. Most Americans will not only change their careers between 5 and 7 times in their lifetimes, but they will return to college for an additional degree, certification or training 5 times[13]. The point: switching between the monk and minister may simply be inevitable.

There will be times in your life where you feel complete contentment--having a lot of money will seem unnecessary (the monk). You may find a job you love, be engaged to the man/woman of your dreams, and enjoy spending your evenings savoring these moments. Then, there will be other times in your life where you want to provide for sick family members, buy gifts for your children, and be able to purchase a summer beach home because you, your spouse, and your kids suffer from too much stress.

To be a money expert is to know where you are on this spectrum and how you should live your life accordingly. Would living more like a minister or a monk make you happier at this time in your life? Personal finance allows ordinary people to answer that question and act on the answer. There will be times in your life where you need to cut luxuries and save more for big upcoming purchases. (You may do this the 5 years before you buy your first house.) There will be other times in your life when, at no fault of your own, you find your marriage failing, job unfulfilling and friends having moved further away. In that situation, you may need to rely on more money to move to a new city for a new job, start dating again, and visit your friends when you need a vacation. There will be times where money can fix a problem and times where money will not do a darn thing to fix your problem.

If you are always excited about your money, then you are always excited about your future.

Live like the Monk most of the time so that you can live like the Minister some of the time

Money creates the ability be where you want, do what you want to do, and protect yourself from problems, haters and anything you stress out about. Better health, more happiness, more control, and more direction are just some of the possible good results.

But, this does NOT mean you will always be able to select the perfect college, vacation, or possession at first. To make high-end purchases at the right time requires cheaper purchases most of the time. In fact, for every perfect purchase you must choose the cheaper options 100 times before that. This is the first rule of wealth generation: Live below your means.

Live Below Your Means

"**Live below your means**" is a phrase that means to choose cheaper and more affordable items on most things you buy so that you have money left over after a paycheck. An entire paycheck could go to eating out 4 times a week, a fancy car, and a nice apartment in a downtown area. By "living below your means" you, instead, eat out once or twice a week, drive a used 5-year old car, and live in a nice but cheaper apartment in a more affordable (and less poppin') part of the city. It is impossible to save, invest and generate wealth without living below your means.

"Means" means ability. If someone says, "I have the means to get from San Francisco to New York in just 6 hours," they are saying they have the ABILITY to travel between such locations in 6 hours. Live below your means is essentially stating "live your life on LESS than you have the ability to do so."

Assume you are Average Andrew

Andrew is an average American. The average person will likely be a teacher, government employee or small business employee making $45,000 a year. After taxes, this will likely mean Andrew receives a check for $1,400 every two weeks. So, by the end of February Andrew has $2,800 in the bank.

After rent, groceries, gas, car insurance, and other expenses, Andrew has $1,000 left over as the end of the month.

This means Andrew has two options:

(1) Andrew purchases a nicer apartment, a fancier car, hits the clubs on a weekday, or eats at Wawa every day for lunch.

(2) Andrew saves or invests that money. Andrew can do this because $1,000 of left-over money means Andrew is living below his means.

Option #2 is the clear winner

You can only save money if you live below your means. The only way you can save money is if you are NOT spending all your money. If you live below your means, you are actively choosing cheaper things so you can take that money you would have spent and put it in the bank.

If you want to live like the Minister but enjoy your life like the Monk, "living below your means" gets you there.

Delay of Gratification

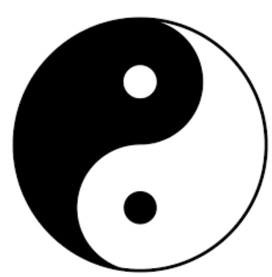
Remember the Hedonist's Helmet from Chapter 3?

When someone secures the Hedonistic Helmet around the head, instant happiness occurs. Whatever joy humans get from simple pleasures ("hedonism"), such as eating good food and relaxing, that feeling is produced by wearing the helmet.

Even if this invention existed, no one would buy it! Life is more than simple pleasures. Finding your passion, discovering your potential, and taking risks in the real world may be more important than feeling relaxed and happy each day. (We call this "eudaimonia")

In fact, the struggle between living a good life and living a relaxing life are often in battle. This eternal battle has many names:

Hedonism versus Eudaimonia
Yin versus Yang
Chaos versus Order
Pleasure versus Purpose
Monk versus Minister



None of these battles are identical but they involve the push and pull between our different human desires.

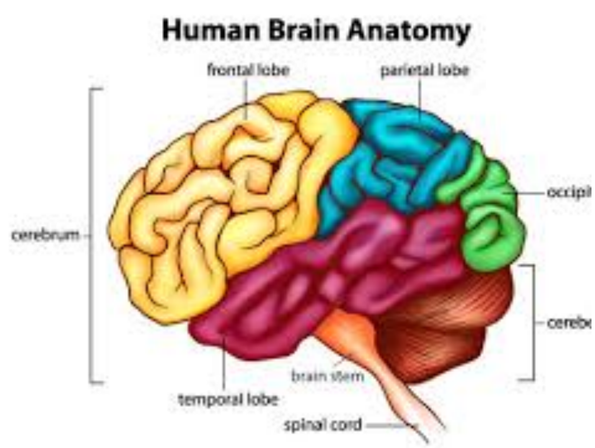
This battle is hard. Resisting hedonism and finding your purpose may involve many unpleasant things, like:

- Sacrifice
- Loneliness
- Change
- Making and accepting mistakes

How can we hack our brains to make us feel happy by putting ourselves in sometimes unhappy situations? That sounds like a strange paradox.

Every single time a human feels happy, specific chemicals float around inside the skull. A bite of a cheeseburger, a Netflix new release, and a compliment from a coworker all cause your brain to produce happiness chemicals. How else would your brain know to feel happy?

The brain is an organ, just like the heart and lungs. The brain creates the feeling of pain, sadness and happiness. Rocks do not have brains and cannot feel these things and the majority of zoologists, people who study animals, believe that insects and most underwater animals lack brains that can feel pain, sadness or happiness.

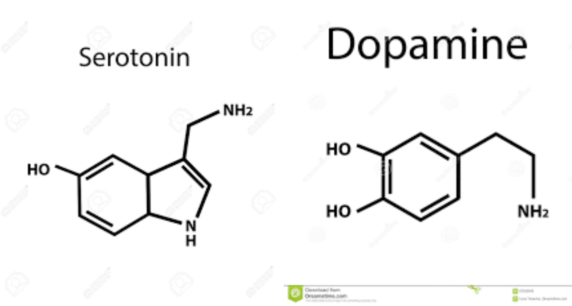


The chemicals that are naturally made inside your skull make you feel different emotions and feelings. When you get an encouraging or funny text from a friend, the brain releases a squirt of happiness chemicals to actually feel happy. In a way, the Hedonist's Helmet exists already. It exists in your head, and you need to hack it.

These chemicals can be classified in many ways. Here are two possible classifications:

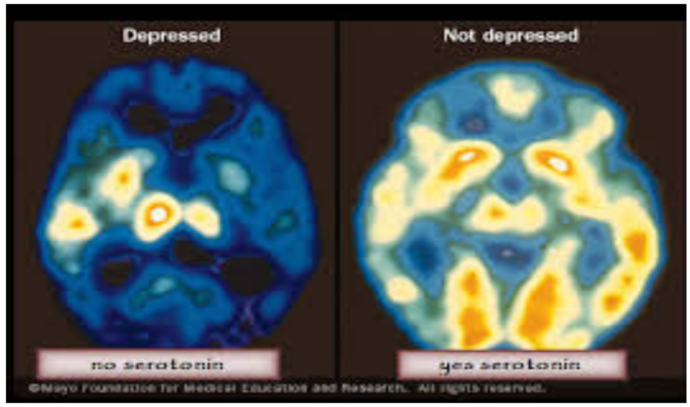
1. Neurotransmitters. Neurotransmitters "transmit" or communicate information to your brain, namely to feel certain emotions. (Other neurotransmitters tell your body to burn fat, build muscle, feel nervous, or hundreds of other things.)

2. Hormones. Hormones are any naturally produced chemical by the body to control other parts of your body. Estrogen and testosterone regulate sexual desire, energy level and physical development. Melatonin creates sleepiness, and cortisol produces stressfulness. Adrenaline provides focus and will even shut down parts of the body to pump oxygen into the brain. Your body is one big drug factory.



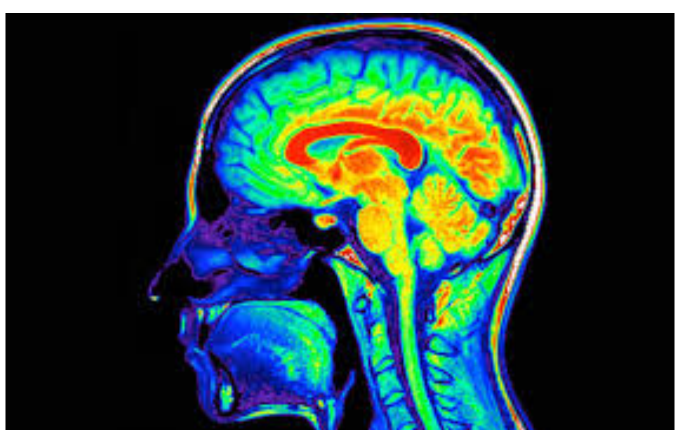
The specific name for the brain chemicals that make you happy are "serotonin" and "dopamine." Scientists have even uncovered the chemical formulas for these two chemicals.

Scientists see the effects of these chemicals by comparing people who suffer from depression. Many times, too many or too few chemicals create mental illness.

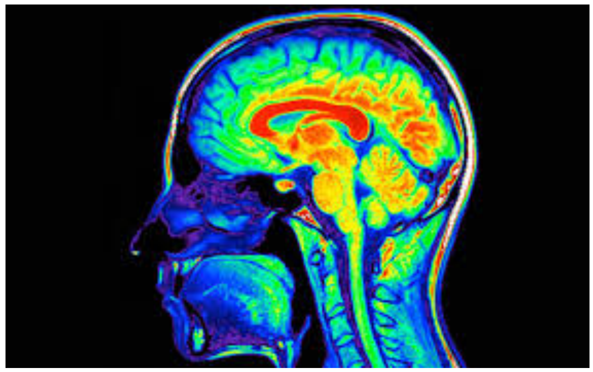


These two chemicals interact in a special way to enable someone to live below their means, and do it happily. This special interaction enables you to avoid tempting purchases and still feel good about yourself. This is called: **"delay of gratification"**

Neuroscientists, people who study the chemical interactions of your brain, conducted a really bizarre experiment. The researchers took drug addicts, dependent on cocaine and other damaging drugs, and watched what their brain looked like under an fMRI machine. This machine measures oxygen, serotonin, dopamine and other neurotransmitters. When a drug addict took the drug, the brain lit up. No surprise there.



Here comes the strange part: When the drug addicts were put under the fMRI machine and told, "you will get your drugs in 5 minutes" the brain looked the exact same:



What?! The brain acted the same way when it was on drugs and when the drug-addict was told it was about to receive drugs. Why?! The brain feels the same level of pleasure on drugs and when the future of drug use seems certain. Maybe you've felt this way on your birthday—you are just as happy staring at all your unwrapped gifts as you are when they are unwrapped and you are playing with them.

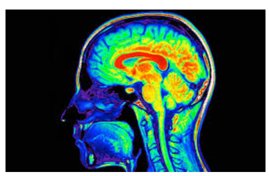
This phenomenon can be found among those in training. Professional athletes, writers, and researchers spend hours a day getting ready for their big moment. Soccer players spend hours running drills. Professional writers spend hours a day writing and re-writing drafts of a manuscript even before a publishing company agrees to look at it. Professional researchers spend hours observing, collecting data and theorizing before a government body or company wants to even meet him/her.

Such focused and attentive people actually experience similar serotonin and dopamine levels during those hours of preparation and training compared to the moment they finally reach their goal. Why does the brain produce serotonin for people exhausting themselves in pursuit of the prize at similar levels to receiving the prize? The answer: your brain has more confidence in yourself then you do, and we call it "delay of gratification."

Delay of gratification is when someone puts off or "delays" doing something satisfying and this often means the person feels satisfied in the moment too.

You could watch TV and order Chinese food right now and enjoy a hedonistic afternoon. But, instead, you are reading this book. You could feel gratified right now with video games and ice cream but, instead, you are delaying gratification. You can relax later, after you have read this book and completed some other productive things today.

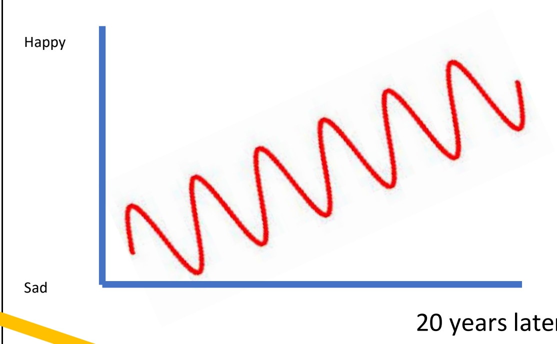
The strange thing is, by delaying hedonistic gratification you have allowed yourself to feel productive and accomplished today. Your brain rewards you by feeling good in the moment even when you delay feeling good later. A bit strange, no?

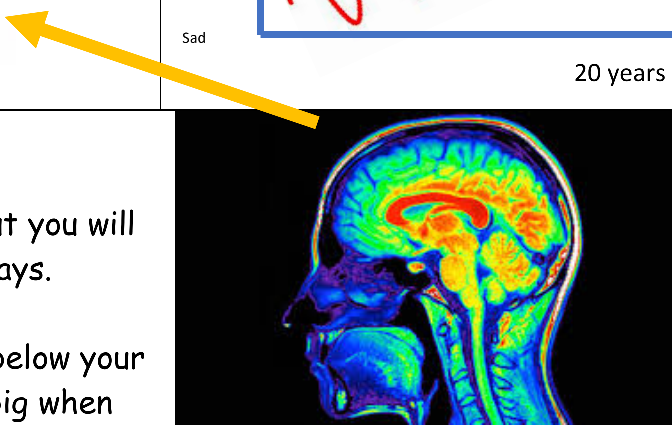
Delay of Gratification		
Hedonism now -Movie marathon when the alarm clock goes off	Vs. You pick this and your brain looks the same  Why does your brain feel happy right now? Because your brain knows the movie marathon is coming as long as you study first.	Hedonism later -Movie marathon after you study for your final exam at the library for 3 hours

Live Below Your Means + Delay of Gratification

What does all this have to do with saving? If you live below your means and follow the other advice in this book, you really become a superhero. By choosing cheaper options consistently and regularly, and then saving and investing your leftover money, you will grow increasingly happy and satisfied. As the months and years go by, you will still have bad days. But, you will have money saved and invested to afford your future goals: a first house, a nursing degree, a second house, an archeology degree, a fancy wedding, and on and on. This will allow your wealth and well-being to go up together, as if your brain were a yo-yo going up a hill:

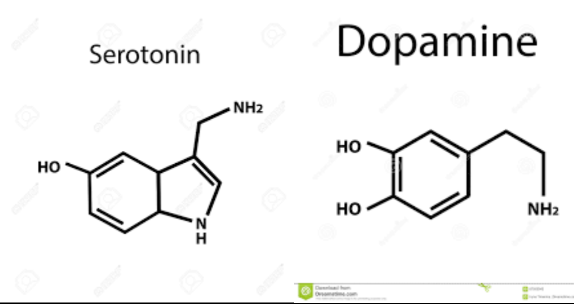
Imagine walking up a hill with a yo-yo





You will still have bad days, but you will have increasingly more good days.

Why? Not only are you living below your means so that you can spend big when you really want to. But, "delay of gratification" allows your brain to feel happy knowing you will be able to spend big when those days come.



For the less self-disciplined shopper, serotonin levels will only spike after the credit card swipes for the steak, suit, or Hawaiian vacation. For you, instead, your serotonin levels will spike the 9 out of 10 times you choose the cheaper option plus the 1 out of 10 times you opt for the more luxurious option. Why? You know that each cheaper purchase allows you more left-over money for returning to law school, a house down payment, or money to ensure a glorious retirement:

As shorter-term and longer-terms goals gain clarity, the desire to reach them grows. In 5 years, the goal could be nuclear engineer. In 30 years, it is to have a family and plan a yearly trip to the Bahamas for every member of your clan. But in just the next 2 years, the plan is to enjoy time with your best friends, take that internship in the city an hour away and get a much better car. To reach all these 2-, 5- and 30-year goals requires strict adherence to the principle "live below your means." Tuna fish sandwiches for lunch 5 days a week, coffee from your own coffee pot, and homemade pasta dinners until the weekends. You may love MMA classes, but you will have to sign up for the 3-day a week deal rather than the 7-day a week package to shave a few dollars and spend those other days jogging in the park across the street.

Even though the more expensive options greatly surpass the allure of the cheaper options, you may still feel just as happy and content because you are delaying gratification to reach your future goals and feel happy doing so.

Most Americans do NOT Live Below their Means

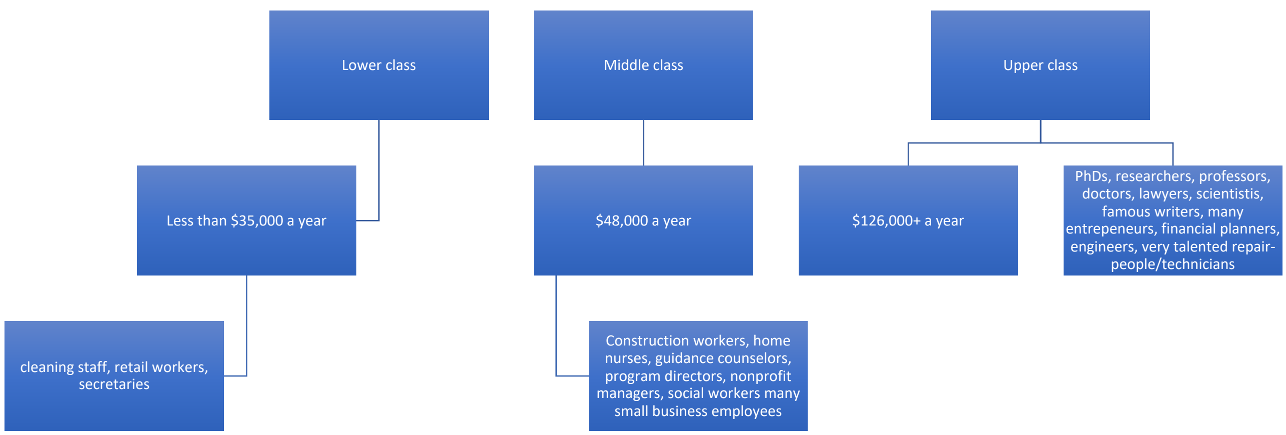
The average American has $7,000 in credit card debt and $37,000 in student loans, even the rich. Yep, even those with a lot of money actually OWE money. Take a moment and realize how surprising and frightening it is—even those who make $200,000 a year have credit card debt and are stressing to pay their bills. "Being paid well" and "Being good with your money" have absolutely nothing to do with one another.

Frame of Reference: Know this first

"Middle-class" (this is also average teacher salary for someone who has been teaching 3 years): $48,000

"Upper-class" (this is also the average salary for a lawyer, doctor, investment banker, and dentist) $126,000

Upper middle-class salary range: $50,000 - $125,000



$0 salary

Totally broke!

$10,000,000 salary

Average salary of America's top 50 companies

I have talked to rich doctors, architects, engineers, lawyers, bankers and real estate agents and many will turn to me at a party and say: "Dan, you teach finance. How come I make more in a month than others do in a year, and I still cannot pay my bills." My answer is always the same: "There is only one possible reason you cannot manage your money, even if you make a lot of it. Your costs exceed your income."

If bills create stress, then the following is always true: the amount of money you spend (costs) are higher (exceeds) how much money you bring in (income). With $10,000 in bills a month and income of only $7,000, then the government, collection agencies or credit card companies are coming after that remaining $3,000.

The solution to this problem is EASY TO DO if you are not already in debt: live on less money than you have coming in. That statement may sound painfully simple but the sad, sad truth is that outrageously smart people (those architects, engineers and bankers) do not realize that. They can research supreme court cases, do surgery and flip houses. However, these same people do not realize you cannot save money if every dollar goes toward a purchase.

Look at these frightening statistics[18]

+ 25% of Americans who make over $150,000 a year do NOT save even $1! We call that "living paycheck to paycheck."

+ 69% of all Americans do not have even $1,000 saved. ($1,000 is not enough for monthly groceries for a family of 4).

+ 1/3 of all families who make between $50,00 and $1000,000 have no money saved.

+ Living on less than you can afford (so you can save the extra) may seem like common sense. For whatever reason, it is **not common sense to most Americans**.

"Live below your means" is a statement you will hear wise, financially secure, and knowledgeable people say. If you meet someone who does not know what those 4 words mean, never trust them with a penny! If you have the means to treat yourself like a king or queen 3 days a week, do it just once so you can save that extra money. The more you do it, the more happy you will feel.

Chapter 10: Pay yourself first

Three Magic Words for Wealth

Money creates more opportunities. After college, the days of minimum wage labor will end. Sharing an apartment with friends, getting a car, and purchasing clothes for work become both desirable and a necessity. The older people get, the more responsibilities they tend to take on, and the more necessary money becomes. Yet, an increase in day-to-day duties does not justify overspending. Billboards, TV commercials, and other advertisements sing the same song: buy, buy, buy. The challenge becomes balancing needs and wants with your savings.

A core premise of this book (Chapter 3) is that wealth and well-being work together. Chapter 4 even argues that the power of money deserves super power status. Those who spend without thinking will soon end up with $0 balances in their bank accounts. Even though purchasing power enriches living, financial prosperity always includes: saving, saving regularly, and saving a lot.

"Pay yourself first" means that as soon as money enters your hands, save a generous portion of it even before you start thinking how you will spend the rest.

Most financial experts recommend you save 10%-20% of each paycheck, but do more if you can[19].

Imagine you are a bank. If you are paying yourself first, that means you are putting money into your savings account before you do anything else. You want to pay yourself first before you start to think of where your vacation will be, how much pizza you'll eat over the weekend or the other things you budget for. Why? If you plan out all your expenses and save the rest, then your purchases dictate your savings rate. If, on the other hand, you commit to saving 10-20% of each paycheck, and then divide up the rest of the money, you will wisely and astutely force yourself to give up expensive furniture, morning Starbucks trips, or other habits weighing on your wallet or purse. Purchasing stocks, property or other assets becomes impossible without money saved to make those purchases. Five hundred dollars, set aside each month as a "future house savings fund," requires you to pay $500 to yourself <u>first</u>.

This may sound overwhelmingly obvious; nothing could seem more like common sense, right? Yet, dozens of adults I have talked to seem to be unaware that the reason they cannot keep up with bills and take control of their finances is because they are not paying themselves first. First live below your means, then pay yourself first. Imagine a fictitious, but all too believable, Lily.

<u>The Life of Lily</u>

Lily received a bachelor's degree from a reputable state university and married quickly after college. She made an entry level salary as a manager at a boutique clothing store, as did her husband who worked at a marketing firm. They bought a home, used multiple credit cards to furnish the house, and never developed much of a habit for saving. Lily's energy level gradually decreased over the months, forcing her to see a medical specialist. A moderate blood condition affecting her glucose required frequent check-ups and medication. Luckily this condition was not severe, but the ongoing treatment did cost money. Only months later, a baby was on the way and her marriage soon strained. A year later, divorce struck. A child, divorce, and the steady stream of medical and credit card bills became overwhelming.

<u>What should Lily do to go from poverty to wealth?</u>

The detailed answer can be found in the final chapters of this book, but the quick and honest answer requires Lily to live below her means and pay herself first before she can do anything else.

Lily will need to move in with family or live in a free, transitional housing center. Lily will fight for alimony and never eat out for a long time. She will need to work with her ex-husband to sell the house (even if the housing market is weak) and take half the money. Lily will need to pay off her credit card bills. Until she is living in a way that allows her to put money into her savings account before she spends the rest of her paycheck, Lily will never, ever become wealthy.

There are many budgeting apps, programs and methods. Below is a copy of a simple Excel spreadsheet I use to list out my paycheck amount, the total amount I plan to spend until my next paycheck (these are my "expenses") and the amount I will save. This is a copy of the actual document I use to budget twice a month.

		10-Apr	25-Apr	10-May	25-May	10-Jun	25-Jun	10-Jul
Paycheck		2247	2038	2360	2072	2770	2217	2008
Saved		$462	655	506	647	626	558	212
to be spent "expenses"		1785	1183	1854	1425	2144	1659	1796
Percent saved		21%	32%	21%	31%	23%	25%	11%

I record every paycheck amount below each payday. I make sure I am saving 10 to 20% of each paycheck by the following formula:

$$\frac{\text{Saved amount}}{\text{Paycheck}} \times 100 = \text{Percent of paycheck saved}$$

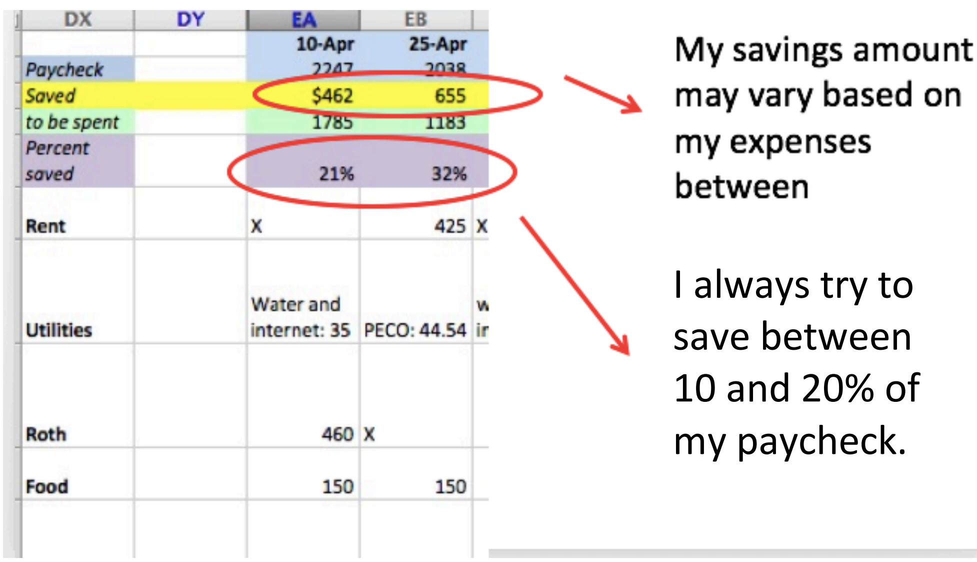
DX	DY	EA	EB	
		10-Apr	25-Apr	
Paycheck		2247	2038	
Saved		$462	655	
to be spent		1785	1183	
Percent saved		21%	32%	
Rent		X	425	X
Utilities		Water and internet: 35	PECO: 44.54	w ir
Roth		460	X	
Food		150	150	
Fun		200	150	

Chapter 6 argues there are 3 math formulas that power the Optimistic Universe and all wealth creation. Here is the second formula!

Please note:

While I always make sure I save money every paycheck, I am flexible with that amount I spend. Sometimes electricity is a little higher or I know I want to cook a fancy dinner for friends. Consequently, I may increase or decrease my savings amount each paycheck, but I always make sure I save at least 10% to 20%!

I know you all are impressed with my money-nerdiness



DX	DY	EA	EB	
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to be spent		1785	1183	
Percent saved		21%	32%	
Rent		X	425	X
Utilities		Water and internet: 35	PECO: 44.54	
Roth		460	X	
Food		150	150	

You'll notice my "saved" amounts are different. That's because I have different expenses throughout the month. For example, at the beginning of the month I did not have to pay rent. But, at the end of the month I had to pay $425 in rent. (We will talk about how amazing I am at finding amazing apartments at outrageously cheap rates, but that's a different conversation).

While I am flexible with how much I save, I never ever save less than 20% of my paycheck. If you looked at all the columns of my Finance Spreadsheets, only on RARE occasions do I save less than 20%.

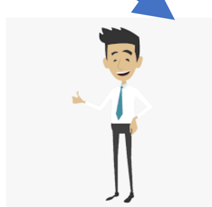
Chapter 11: Visualize your legacy and retirement

What We Know Right Now

Over 13.8 billion years ago, the Big Bang birthed reality and the universe as we know it. Then, 500 million years ago life emerges. Only 2 million years ago did humans start to roam the planet. Most of those years involved cave paintings, tribal warfare, and hunting. Only 5,000 years ago, after humans invented writing, did civilization produce cures to disease, greater peace between different cultures and religions, and the other innovations that define the modern age.

The speed at which cavemen move to modern human (2 million years) is actually astonishingly fast. (Cockroaches have been around for 300 million years and have not changed at all.) The speed at which humans invent and innovate once writing is invented (5,000 years) is even more astonishing.

Fast



2 million years of evolution

Very fast

What 5,000 years of civilization will accomplish

During this time, humans have always had to battle hedonism versus eudaimonia, or living a life of pleasure versus a life of purpose:

Vs.

In fact, the story of the monk and the minister represents this struggle.

Vs.

Most people will oscillate between living as a minister and living as a monk. The weekends may be filled with hedonistic indulgences, such as video games and trips to the club. The weekdays, however, may rely on focus and discipline to exceed expectations at a dream job.

Whether a particular moment is spent satisfying pleasures or pursuing purpose, money is necessary. Wealth allows a person to barbeque by the pool and also to afford acting classes, a new guitar, or laboratory equipment. Wealth and well-being work together.

So far in this book, we have explored the first two steps of generating wealth. This chapter will explore the third—visualize your legacy and retirement.

Steps to Generating Wealth (discussed so far)	
1	Live below your means
2	Pay yourself first
3	Visualize your legacy and retirement

Understanding the third step first requires an understanding of human capital.

Human Capital[20]

Wherever you are right now, the future can be better. Tomorrow is a new day at the office or school. Next year, when your resume lists new volunteer work or an internship, the dream job gets a little closer. In just a year, you will be over that bad break up, be wiser from it, and perhaps be living in a rural town or blossoming metropolis that is more your style anyway. If you are learning, improving yourself, and saving money, then more opportunity always awaits. To accept this rosy view of the future seems to require blind faith but, in fact, it takes much less—it requires an acceptance of the power of human capital.

Capital is money used to create something of more value. Wood serves as "capital" for a house. Oil serves as "capital" for car gasoline. Soil counts as "capital" for fruits, vegetables and crops. Remember the ideas of investments? **Investments** increase in value over time, and houses, gasoline, and crops are not only things bought and sold in markets everyday but are, themselves, investments because they may trade at higher prices in the future. Investments and capital very similar terms, and they are often used interchangeably. (Keep in mind that **securities** is the official term for something the government considers very possible of increasing in value over time.)

Something → Something of greater value

"Capitalism"

When this happens, we call "something" and "something of greater value" two different things

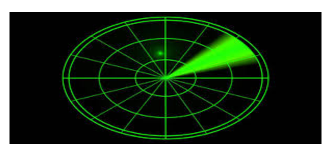
"Capital"

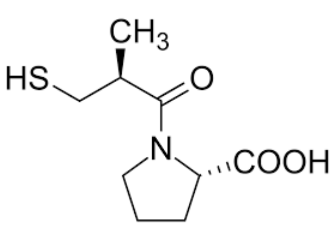
Capital, the things we can turn into something better, does not just refer to physical objects, but ideas too. Many discoveries of nature have been capital for inventions. The trunk of an elephant inspired how to build robotic arms. Even bats helped inspire sonar radars.

Some Cool Examples of how Ideas Serve as Capital for Inventions

Example #1: Bats cannot see and, instead, rely on their sense of sound to fly and hunt. In a process called "echolocation," a bat screeches and listens to the sound of its echo to determine how far away different objects are.

Bats and echolocation helped inspire sonar radars, which the military uses to determine the distance of unseen objects underwater.





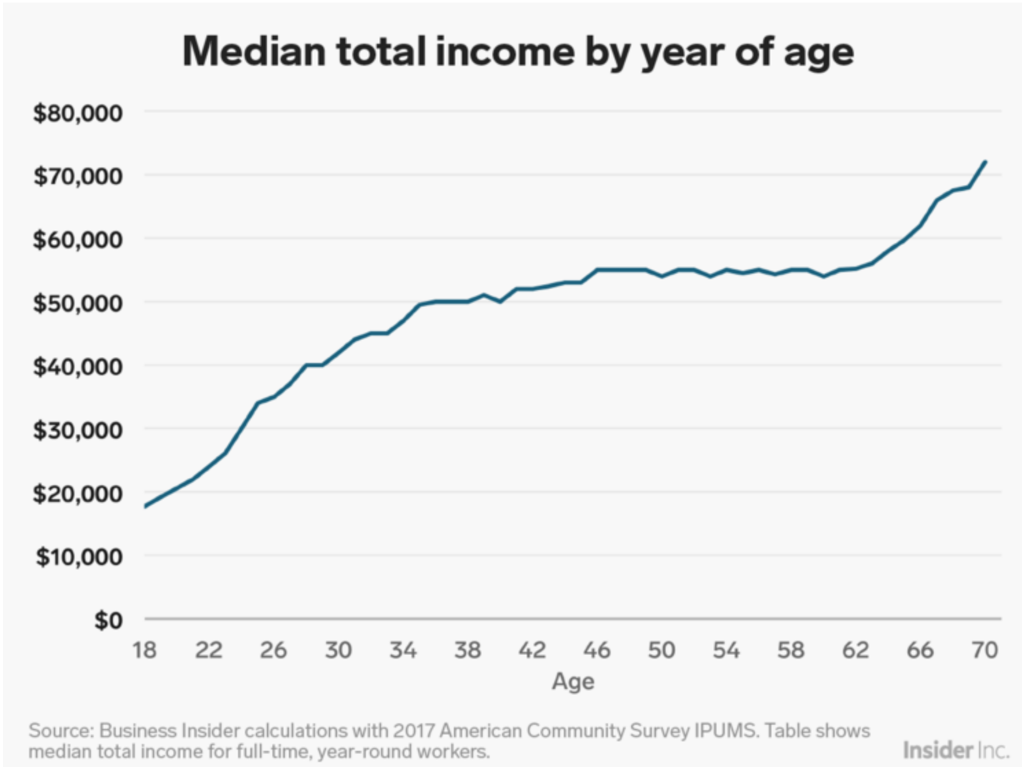
Example #2: ACE inhibitors are chemicals that help regulate damaged hearts from heart attack or high blood pressure.

Scientists discovered ACE inhibitors in the Amazon rainforest[21]. Many people thought, and still think, a snake bite carries some poison similar to vat of acid. Surprisingly, snake venom does not cause organs to bleed, chemicals to burn through veins or anything out of a science fiction movie. Instead, snake venom sends signals to the heart and brain for the prey's heart to stop pumping so the lungs stop working. Snake venom showed chemists how to control heart beating, which functioned as intellectual capital for ACE inhibitors.

Examples #3 and #4: Even personal experiences act as capital for better ideas to improve the world. Vitale Bramini witnessed too many climbers die in the hills of the Italian Alps, so he invented the rubber bottoms on shoes. John Hetrick, an engineer by training, invented the airbag after he was in his own car accident

Perhaps even more interestingly, humans become better at finding and converting capital with age. In time, people learn even from experiences and develop a more complex, sophisticated worldview. Some call it "wisdom," and psychologists believe more experiences, knowledge, and mistakes allow aging people to demonstrate greater cleverness, creativity and intelligence over time. Would you pay a college graduate who just earned his degree the same as an architect who has designed 20 buildings already? Probably not.

While some jobs determine salary explicitly by years worked, most employers can pay whoever they want as much as they want. (Both a school principal and the CEO of a nuclear energy company know talented employees can transform an organization, so both may double the salary of a promising new hire rather than give a raise to a veteran staff member.) Given that the flexibility of salaries reflects ability more than anything else, the graph below illustrates that expertise and age go together:



A possible explanation for this graph

I'll save my $10 allowance for a bike  Age 10	That bike earned me a job delivering papers, which I wrote my college application essay about. I studied mechanical engineering in college. With a higher salary, I'll put $200 away every paycheck to save for a house.  Age 25	After going to college and getting a house, I was able to work 30 years at one job. I have a higher salary now, and I can save $500 from every paycheck to start my own fusion restaurant and begin a new career.  Age 55

We call this **human capital**. Over time, humans become smarter, more creative, have more perspective, and have more money. Just as capital allows certain physical materials and mental ideas to produce something of greater value, humans not only have this same ability but this ability gets better over time.

If you spend your life smoking weed, drinking, getting in trouble with law and never educating yourself, then you waste your ability to generate human capital. Even if you are a straight A+ student but care more about getting the A+ then about thinking deeply, you are NOT maximizing your human capital. If you accept and develop your future potential, then each passing year of your life becomes more exciting than the last. When you understand the power of human capital, then you will automatically get excited about your legacy and retirement.

Retirement

To **retire** is to stop working by choice. "Termination" or "being fired' occurs when a company will not let an employee return to work. "Retirement" occurs when the employee chooses to stop working. BIG DIFFERENCE. A college major, a dream job, and even what to eat for dinner may seem mysterious and unknown, but developing even a basic idea of the glorious final 30 years of life helps put the immediate future into focus. Human capital enables retirement. Not only does your ability to self-improve allow you to think of greater ideas, and earn more money, but it allows you to step out of the game entirely and enjoy total freedom.

The average American retires around the age of 70, and preparation for it begins on the first day of a first job. (Some expert money-minded people can retire as early as 40 or sooner!) The average American is expected to live to the age of 95 now. Due to the increasingly power of medicine and nutritional science, those born today may live to be 125 years old and find it normal[22]. Retirees live off only the money saved, and everyone wants their final decades to be epic! You may want to write a book while sipping coffee at a café in Rome, drive a Lamborghini through the streets of Amsterdam, own a boat in Australia, buy your children a house, and pay for your grandchildren's college tuition.

Why is imagining and planning for a wonderful post-work life, many decades away, something to think about now? Why not start with college, the next year, or something just a few months away?

Two answers:

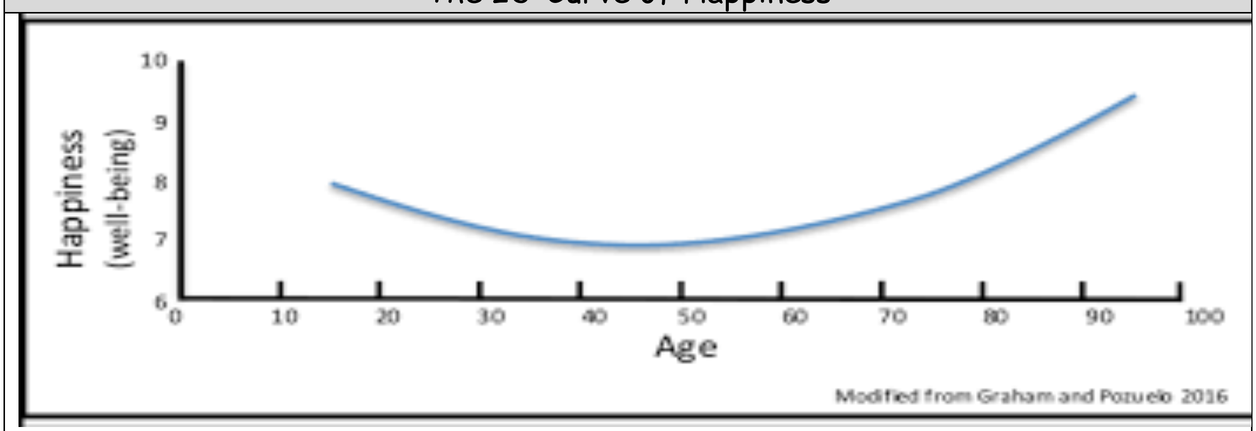
1. While all of those things should be given considerable mental attention, even a basic idea of a great retirement allows all the shorter-term goals to become increasingly clear. Even just a few goals for 40 years from now may help illuminate dozens of goals.

2. A poorly planned retirement can lead to unquestionable suffering.

The average American does not have enough saved for retirement[23], and 25% say they will never, ever be able to retire[24]. Hopefully these people truly, truly love their jobs. If not, they have become a slave to their bills. Living life today in a way to enable a rich retirement allows someone to make the final decades of their life deeply rich, meaningful and fun. In fact, the retirement years are often called the "golden years" precisely because people are most happy in the later years of life than in any other point. (Ever wonder why old people seem so jolly?)

Psychologists who study happiness (the same ones who study hedonism, the hedonic treadmill and eudaimonia from the earlier chapters) have found that some of the highest levels of happiness occur at young ages and then again during retirement. Given that happiness peaks in earlier years, dips in the mid years, and increases again, this phenomenon is called the "Happiness U-Curve."

The IU-Curve of Happiness



This diagram merely describes what the average human is like. It is NOT every human's destiny. Just because most people grow less happy until the age of 45 and then become increasingly happy does not mean this has to be the case. When I first read about the "U Curve of Happiness" I took dramatic steps in my life to make sure each year was better than the last. (Much of this book has been about how proper money management increases your well-being both right now and for the future). If the average American is both bad with money and does not see a measurable increase in happiness until age 45, then perhaps good money management earlier in life will lead to consistently greater amounts of happiness with age. The point: save and invest enough money for retirement to ensure the future will be prosperous, which will only help make the now and near future prosperous too.

Even if you never plan to retire, planning for it is the only way to make sure you can have it. While many Americans sadly never plan for a productive, meaningful and happy retirement, those who do seem to experience a profound experience. This experience is called "Active retirement," and now represents an actual development stage in life[25]. Look at the diagram below:

Developmental Stage	Age	Characterization of this developmental stage
Childhood	0-11	Focus on playtime, learn how to socialize, form meaningful relationships with peers, family, and institutions (like school)
Adolescence	12-17	A greater focus on identity development, purpose, and personality traits/interests that make a person unique.
Young adulthood	18-29	Moving into the workforce, connecting knowledge from school and college to the real world, and beginning to move up the career ladder; pursuit of relevancy and impact
Adulthood	30-69	More serious romantic relationships, starting a family, and ensuring that all important people within the family (old and young) are taken care of.
Active Retirement	70+	A return to focusing on the self and more playtime (this time, it's not with legos but anything/everything you have ever wanted to do)

Legacy

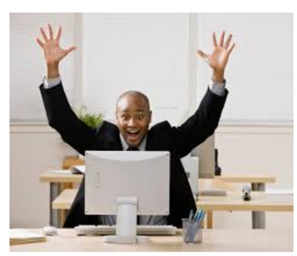
Besides retirement, live life now with your legacy in mind. We will all die, and many people will tell you that the reason we ever existed in the first place is to leave the world a better place from when we entered it. A person's **legacy** includes all the good and bad effects to the world left after death. Were you a life-changing social worker? Did you work on Wall Street and leave your savings to build a hospital in Ohio? Did you leave enough money so that all your grandchildren never have to pay for college? Did you donate throughout your life, write motivational comic books, and develop technological innovations that future scientists turned into medical marvels? All of these examples could comprise a person's legacy.

Visualize your Legacy and Retirement

This better future can become reality if visualized. Scientists perform unique experiments by tracking the goals and achievements of various people over decades. Those who set clear goals for themselves and visualize reaching those goals, end up much more likely to achieve them compared to those who do not. Self-improvement and visualization comprise two great tools for a better future, and this has everything to do with sustainable wealth.

Someone who visualizes future goals

Achieves more goals



Someone who does not

Achieves fewer goals

Given that visualization helps produce that better future, start to imagine retirement and a legacy because it will help short-term goals gain clarity. Below are common ideas of a great retirement:

<u>A Really Great Retirement</u>

- A beautiful house in a beautiful city with a beautiful family
- Time to publish novels, short stories, poetry, memories, or investigative research
- Earning another college degree
- Traveling across the globe
- Learning dance, jujitsu, another language, or how to build a car from scratch
- Figuring out if aliens ever visited, studying the origin of the universe, or running for office
- You have money saved for these 30 years! Your imagination is literally the only limit to what you do.

With just a general idea of what the golden years could be, perhaps short-term goals illuminate:

<u>You, today</u>

<u>Your shorter-term goals</u>
-Starting a smoothie business
- Going to college to study criminal minds
- Make a YouTube channel about government conspiracies.

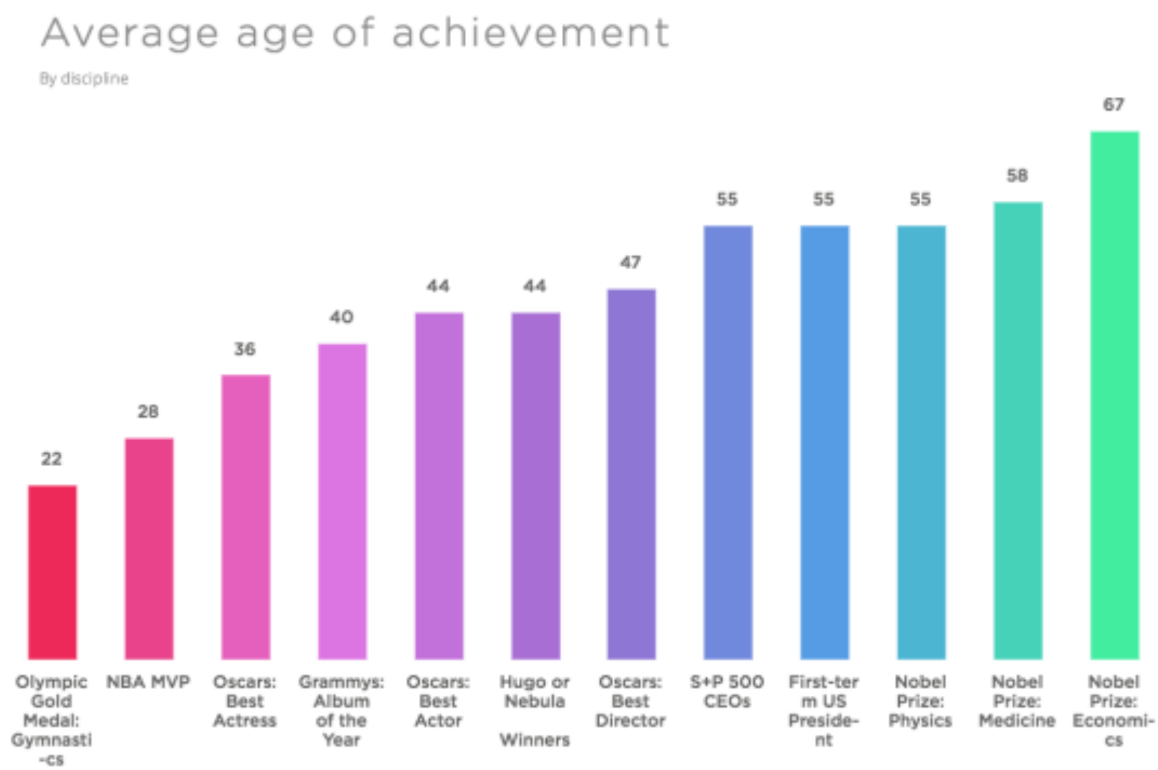
Makes thinking about this a lot easier

Thinking a little bit about this now…

<u>Your ideal retirement and legacy</u>

- Running a greenhouse for endangered plants with medicinal purposes
- Writing self-help books

As already explored earlier in this chapter, salary increases alongside age because humans get better at their craft with time, and thus demand better compensation. Not only do salaries increase later in life, but most people tend to have the greatest achievements around the age of 40l This statistic is, of course, an oversimplification but the point is that because of human capital we tend to get smarter in time and do better things later. Below[26] is a diagram outlining the average age for those who accomplish the greatest feats in each discipline. Only the things that require physical activity tend to be associated with younger ages:



What does this have to do with visualizing your retirement and legacy? Maybe beginning to plan for the last 30 years of life will make the successes of the first 50 years of your life much clearer.

Chapter 12: Find or Create Your Niche

To find your niche is to find your perfect spot in life. As the Greek's noted with their idea of eudaimonia (remember Chapter 3), there is an inner spirit that comes out only by challenging yourself. Perhaps destiny will bestow you with a successful YouTube channel, excellent writing skills, and a knack for memorizing details about politics. By spending hours editing YouTube videos, drafting articles for magazines and consuming multiple newspapers, this great future will be realized. If a dream career and a joyous life outside the job work in tandem, you have found your niche. Just like the story of the Minister and the Monk, the following story captures the pursuit of this balance:

> An American investment banker, on vacation, relaxed on the beach in a small Mexican village. A fisherman with three large tunas in a tiny boat came ashore next to the banker. The American complimented the fisherman on the size of his fish.
>
> "How long did it take to catch all of them?" asked the banker
>
> The fisherman replied, "Only a little while."
>
> "Why don't you stay out longer and catch more fish?"
>
> "This is all I need to support my family's needs."
>
> "Do you like fishing?" asked the investment banker.
>
> The fisherman replied, "Of course! It's pure peace out on the ocean."
>
> The American then asked, "But what do you do with the rest of your time?"
>
> The fisherman said, "I sleep late, play with my children,

take naps with my wife, and stroll into the village each evening to play guitar with my friends. I have a full and busy life."

The American laughed mockingly, "I have a business degree from Harvard, and I could help you. You should spend more time fishing and with the revenue, buy a bigger boat, catch more fish and sell them to your neighbors. Then, buy several boats, hire a staff, and expand into other villages. You could move to Mexico City, then San Francisco and eventually New York City, where you will run your expanding enterprise."

The fisherman asked, "But, how long will this all take?" To which the American replied, "15 – 20 years."

"And after that?" Asked the fisherman.

The American laughed and said, "Then you could retire. Move to a small coastal fishing village where you would sleep late, play with your kids, take naps with your wife, and stroll to the village in the evenings to play your guitar with your friends."

The fisherman has found his niche. In fact, he has created it! With a perfect balance between an enjoyable job and relaxing home life, the banker seems the fool and the fisherman, the sage. Why would the fisherman need to work any harder or a moment longer?! As long as the fisherman has money saved for emergencies and when he is too old to work, he has certainly found his niche.

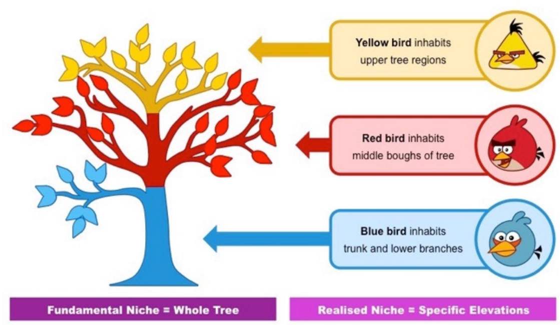
Our fisherman, however, may fall ill, watch a loved one lose a job, or receive a child's college tuition bill in the mail. If that happens, then the American investment banker offered some relevant advice. The fisherman can finance his daily activities, but he should also have earned and saved enough money for any possible emergency.

The fisherman and the investment banker perfectly mirror the minister and the monk—the battle between ignoring and wanting money. There will be times in our life where no extra money is needed, we will have everything of value. There will be other times when we get fired, need to pay for a nursing home for an elderly relative or want to take a year off to write a book. During those times, money is needed.

Work does not have to feel like work; work can feel like play, just with a paycheck added on. When both Presidents Barack Obama and Donald Trump were asked to give advice on how to be successful, both say: above almost all things, love your job.

To have found a job you love means to have found your niche. There's something very powerful about the word "niche."

Biologists (who study living organisms in nature) or ecologists (who study the environment) describe an animal or plant's role in the wildlife as its "niche." Plants and animals depend on one another for food, alliances, fertilizer, and protection. When an animal or plant survives by helping other organisms survive, then scientists say it has found its niche.



To have found your niche means to have carved out that little perfect spot in reality for you. Your multiple identities (as a parent, son/daughter, boss, friend, lover, learner) are all in perfect balance. You are not simply enjoying life on a day to day basis but you are living your best self; your true self! Your core self is flourishing in the way it was designed to.

Find Your Niche!

Remember the Hedonistic Helmet from Chapter 3? Remember how humans will choose a bold and meaningful life over the pleasurable, easy life? To find your niche means to find a job that provides both boldness and meaning to your life. The Greeks had a similar idea, called eudaimonia. But, Ancient Greece had very few types of jobs compared to today. In Ancient Greece, students could dream about being a farmer, an engineer, a teacher and that's about it. Today, it is actually possible to find your niche.

The earliest use of the term "niche" dates back to 1725 as synonymous with "nest."

Imagine yourself about to fly out of the nest and embark on your adult, bird life. You are leaving your nest, a place of security where you have been growing and developing, in order to explore the world and build a new nest somewhere else. Perhaps this new nest will be free of predators, with warmer weather, and greater food. Other birds will flock with you to this new place you discover. Your whole life has been getting ready for this exact moment. It's not a coincidence that niche comes from the word "nest."

If you love your job, you will never work a day in your life. There are many jobs that will feel like play to you. Actual people have earned millions of dollars designing architecture for celebrities, finding a cure for cancer in the rainforest, and using the laws of physics to search for alien life. Below are just 3 examples of people who likely have created their niche:

Annie Jacobsen 	Annie Jacobsen is an award-winning journalist, but she does not write for magazines and newspapers like the average journalist. She specializes in studying the decisions, research projects, and policies the government tries to keep hidden. How does she do this? She studies government reports released from government agencies. She has written books on how: (1) the FBI actually once thought telekinesis and telepathy was real, and almost paid them to be part of our military; (2) the Department of Homeland Security invents the world's most secret and dangerous forms of warfare; and (3) how the United States protected and paid Nazis after World War 2 for all their technological knowledge and discoveries.
Michio Kaku 	Michio Kaku is not just a professor who divides his time between conducting research, publishing his reports and teaching students. He is also one of the world's leading theoretical physicists on the Big Bang and String Theory, which says tiny strings of energy make up quarks, which make up electrons, neutrons and protons. He advises politicians, governments and foundations on how to design society for the new wave of robots being invented. He also shares his ideas in plain language on the Discovery Channel, late night shows, and radio programs.
Kim Kardashian 	You can say what you want about our obsession with celebrity culture, but Kim Kardashian knows what she is doing. She defines style for Americans. Champion brand clothing used to sit on the discount rack in department stores for years before she took it to the brand of elite athletes. She invents her own clothing and fashion lines, beauty products and reality TV. She builds global awareness for important humanitarian issues. That's power you have to respect.

You will spend 50 or more years of your life working. You need to love your job. If you are only working for a paycheck, you will see your hair grow gray, diet worsen, and you will turn to television, video games, drugs, or online shopping to fill the hole. You will spend just as much time working as sleeping (if not more).

To find a job you love is not easy. You must have the courage to chase unorthodox careers and the wisdom to leave under-stimulating ones. To do that, there are 4 ways to check yourself.

The A, B, C and D of Finding your Niche
A – Atmosphere
B – Boss
C – Content
D - Deliverables

Atmosphere

Do you prefer to work by yourself or in groups? Would you rather be able to show someone a YouTube video in the cubicle next to you or have your own office? Would you rather spend your day traveling to interview people or be in front of a computer? Your work atmosphere must match your personality.

Boss

Do you prefer to work for yourself or be given specific tasks from your supervisor? If you prefer the latter, would you like someone to tell you exactly what to do, step-by-step, or give you freedom and creative license to accomplish the goal? Your boss determines much of your work experience, and it is the LEADING predictor of job satisfaction. If you love your boss, you'll often (although not always), love your job. If you hate your boss, you will very likely hate your job.

Working for a boss has many advantages. A boss can often serve as a mentor. If you want to work on Wall Street, conduct radical new medical treatments, or help someone get elected into office you will want feedback, advice and guidance. A boss can provide you these things and help you develop expertise in a way books, college classes, and research cannot. If you respect your boss, earning his/her praise may very well make your weekend.

Not having a boss has its advantages too. Self-employment allows individuals to set their own hours and create their own agendas, as long as they are able to keep the business, government agency or nonprofit working at full strength.

Content

Do you want to work in a science laboratory specifically on understanding how each person's DNA molecule translates into left-handedness, procrastination or the love of cats? Do you want to research Supreme Court cases to determine if Walmart has the right to deny a gay couple from purchasing a marriage cake? How about programing a computer that can perform surgery or designing a trade policy between Japan and Mexico? The specific things you spend your time thinking about on the job, the content of your job, cannot be ignored.

Deliverables

When you don your coat, grab your briefcase or bag and shut off the office lights what is that attachment to your final email of the day? Is it the speech you wrote for a presidential candidate to deliver at a rally? Is it an excel full of computer code for *Mortal Kombat 15: Harry Potter versus Steven Universe*? Is it an architectural diagram of Jay-Z's recording studio in Mumbai? The product you must "deliver" justifies your paycheck. Make sure the deliverables of your job create enjoyment for you as well as a salary.

Whether it is stand-up comedy material, the manuscript of a detailed history of Iran, or calorie-free Doritos, your deliverables may take hours, months or even years to produce. Given the amount of time you might invest, be sure to love the products, ideas, or services you must deliver.

As you consider the A,B,C and D of a great job remember Confucius, arguably the most famous Chinese philosopher, who said it best (next page):

Cartoon created by Gavin Aung Than at ZenPencils.com

Chapter 13: Invest and do it often

Saving is not enough

Live below your means by choosing the cheaper options. Splurge only on occasion. If eating out 3 times a week is a must, then be sure to rent a small basement with friends rather than a one-bedroom, luxury loft downtown. "Living below your means" allows you to pay yourself first. Saving allows someone to build up a reserve of money for important future purchases. If you are trying to find your niche, then a savings account would be good for college, a business, or 6 months of living in Guatemala to write a novel.

"Living below your means" and "pay yourself first" are needed steps on the path to wealth, but they are not enough. To truly achieve wealth and well-being, you must invest. Simply saving, rather than investing, will never be enough.

Assume you graduate from college at age 22, save 25% of your paycheck and make $150,000 for every year you work, no more and no less. (This is a typical salary for an entry-level doctor, lawyer employed at a firm for a few years, or a principal with 10 years or work experience.) Also, ignore taxes for this example. If you are saving 25% of $150,000 that means you are saving $37,500 each year. See the math below:

Salary X rate of savings = amount saved
$150,000 X 25% = $37,500
(25% = 0.25 in decimal form)
$150,000 X 0.25 = $37,500

In this example $112,500 goes toward expenses (rent, food, and so forth) with $37,500 toward saving. Let's say you retire at the age of 50, which is 20 years sooner than most Americans. That means you work only 28 years and save $37,500 for each of those 28 years. Total that all up and you will have $1,050,000! But is that enough?? You are literally a millionaire.

Certainly not.

If you retire at age 50, live to the age of 95, and spend $112,500 each year, you will run out of your $1,050,000 in less than 10 years. That's right. Y**ou can make $150,000 right out of college, save an ambitious 25% and only have enough money for 10 years of retirement by age 50. You'll be broke and homeless by ago 60.**

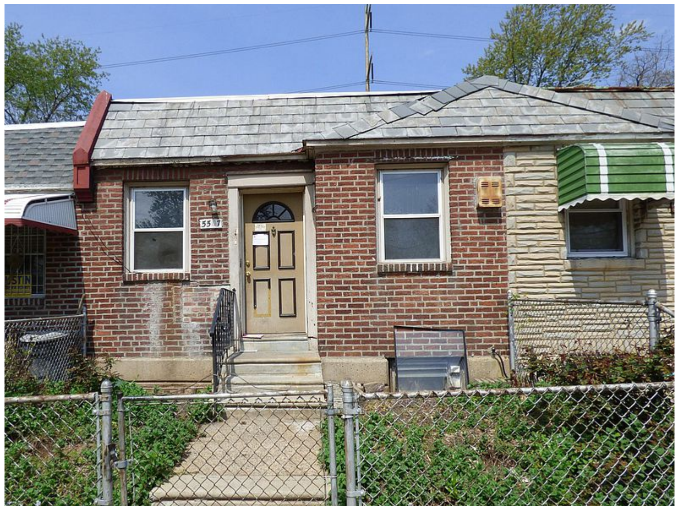
Let's say you make this same salary but retire at age 70 like most Americans. Assuming you are still saving 25% every year once you take the job, which is $37,500 each year, you'll have $1,800,000 SAVED. Is that enough for you to live until the age of 95 assuming you are still spending $112,500 a year? Still not even close. **You'll run out of money by the time you are 86.**

Now, of course, you could simply live on less money as you age. When you retire, you could live in a smaller house, drive a beat-up car, and go on fewer vacations. BUT WHO WANTS THAT??

How can we have enough for retirement, emergencies, and to reach all of our goals if simply saving money is not enough? Invest.

In chapter 8, we defined anything that we expect to increase in value over time to be an **investment**. While college degrees and our own mental and physical health prove more valuable over time, you cannot buy these things from someone else. As previously defined, a **security** are specific things (stocks and bonds, for example) that you can both buy and expect to increase over time. Investments, and specifically securities, help us achieve true financial independence.

On average, property increases in value 3% every year. If your parents give you a house that's worth $50,000 and all you do is keep it in good condition, then you can sell this house 30 years later for $121,363.12. Yep, you did almost nothing and it increased in value. As a reference. Today, a $50,000 house in Philadelphia looks like this (see next page):



And, a $121,363.12 home would look something like this:

Property is an investment. Simply by buying a house, and holding onto it, your net worth increases. Property, actually, is surprisingly a pretty slow-growing investment, comparatively speaking. Parents and “house flippers” may love to buy property but if you put the same $50,000 into the stock market, rather than buying that modest house on the last page, you would have almost $300,000 in 30 years and could buy a house that looks like this:

Assume that instead of saving, you invest 25% of your $150,000 salary in the stock market. (As explored in Chapter 4, this is calculated around 6% a year). By the age of 70, you'd have almost **$11 million**.

You read it correctly. Believe your eyes! If you invested 25% of your $150,000 salary, you would have **$11 million.**

Savings versus Investing	
Saving 25% of your paycheck assuming a salary of $150,000	**Investing 25% of your paycheck assuming a salary of $150,000 at the average rate of return of investing in the stock market**
Age of 70: Almost $2 million	Age of 70: Almost $11 million

To understand how investing works, we need to travel back in time to one of the oldest forms of currency—gold.

When gold was the new black: What investing looked like in the (g)old days

Both pirates and all those crazy kings and queens of the 1500s all wanted gold. Hundreds of years ago, humans only lived to the age of 40. Traveling anywhere, via land or water, often meant risk of malnutrition, disease or attack from the inhabitants of different lands. Why in the world would people risk their relatively short lives for shiny metal?! Gold is neither edible nor practical. You cannot use it build a sword nor a house. Most people only saw gold when it was adorned by royalty or the rich.

A deeper look into what it took to find and mine this metal only makes the story look more bizarre:

Kings and wealthy landowners were exploiting peasants and farmers with constant warfare, high taxes, and forced labor during the Middle Ages. They did this, in part, to send ships to other continents for gold. Sometimes explorers searched for sugar, lumber, iron and gasoline, but gold was always the favorite.

What explains our thousands of years obsession with gold that only recently diminished? The answer is that gold was one of the original investments; it was one of the things people would buy because they expected it to be worth more in time.

What gave people this idea? What allowed this confidence in gold? Three answers:

(1) People simply believed that gold was valuable. If kings and queens wore it, then it was the ultimate status symbol. If royalty wore gold, a rich government official or businessperson would always pay a top price for gold so they could communicate to the world, "I'm like the king and queen too." Before Instagram and the Jenner family, society still had trend setters. If gold never went out of fashion, then people were simply convinced gold was always going to be valuable.

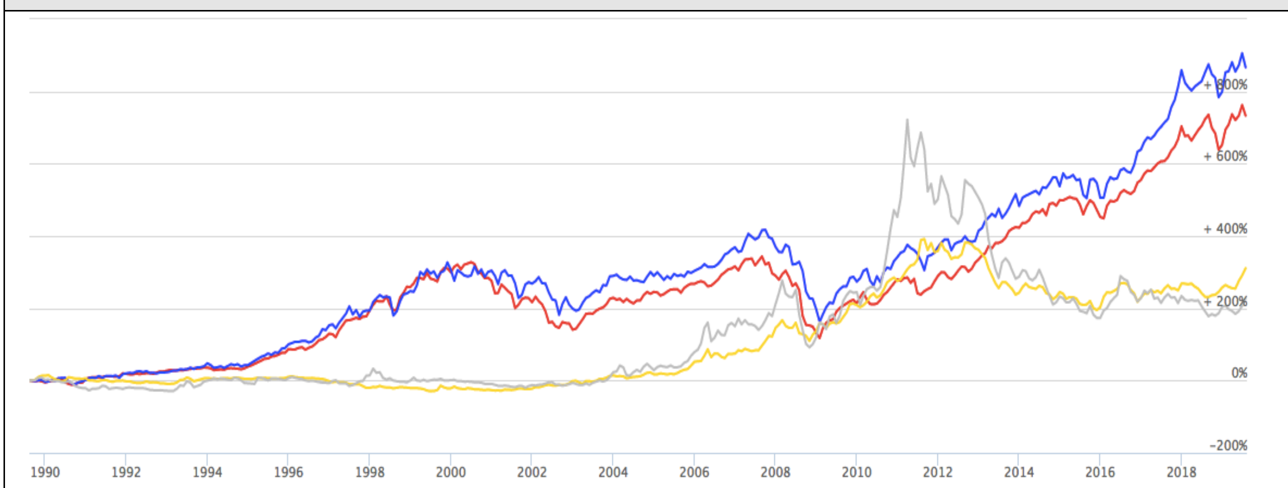
(2) Gold could cannot be easily damaged, while iron, steel, and bronze could be blown up, burned or rendered useless. Gold never loses its shine,

making it vital for creating jewelry and paints. Gold can be twisted and melted and still conduct electricity. It never weakens no matter how much you melt it, break it, or mold it together. This made it a very desirable part of cavity fillings many years ago. Gold, today, plays a necessary role in computer chips, smartphones, television sets, and anything that uses a GPS system.

(3) It could NOT be made by humans and it required explorers, archeologists and engineers to locate it and dig it out of the ground. Thus, gold was always be considered “rare.” If everyone can get a signed baseball card, then people will use it like a napkin. If a famous batter only signed 5 baseball cards in his or her lifetime, then those 5 cards can be sold on eBay for a lot of money. The fact that gold was hard to find and even harder to unearth when found made it rare and valuable.

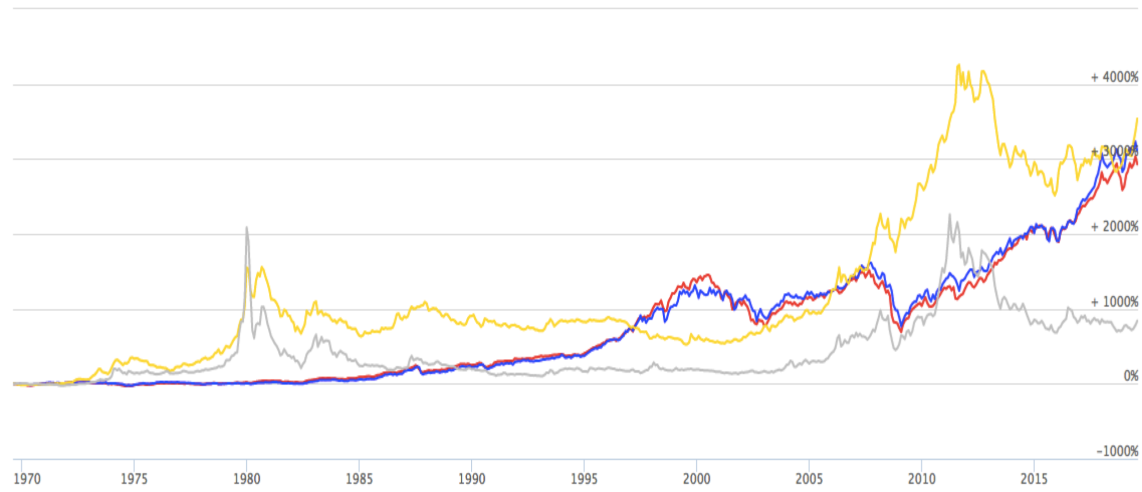
Even to this day, gold is still valuable. Many people still invest in it, and you should too. Below are two diagrams that measure investments over the last 30 and 50 years. Gold beat the stock market for some years, and the stock market beat gold other years. Both increased dramatically over the long-run.

30-Year Return of Gold and the Stock Market*



The blue and red lines represent two different ways to measure the stock market
The yellow line represents gold
The silver line represents silver
**Picture retrieved from Macrotrends.net*

50-Year Return of Gold and the Stock Market*



The blue and red lines represent two different ways to measure the stock market
The yellow line represents gold
The silver line represents silver
**Picture retrieved from Macrotrends.net*

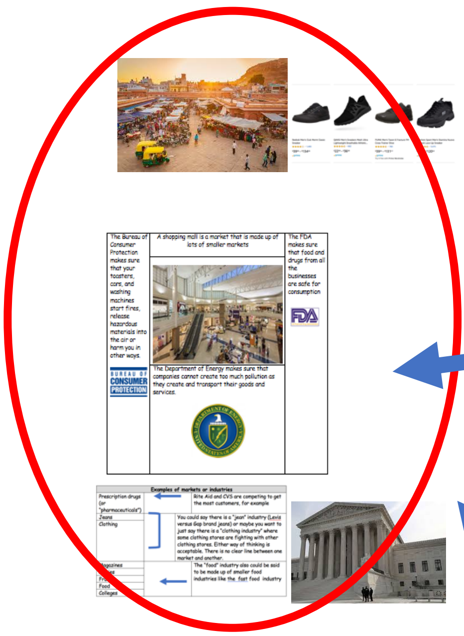
Even though gold (and silver) and the stock market all fluctuate, they all go up in time. They all may take first place at different times—2013 was the best year for gold and 2018 was the best year for the stock market—but they all have historically proven to be excellent investments.

Review from Chapter 7

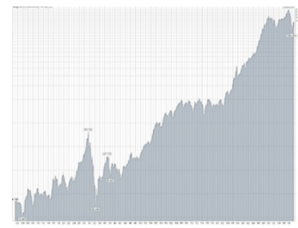
So far in this book, we have often mentioned the term "investments" to refer to anything that increases in value over time. Technically, "securities" is the more legal and technical word. In Chapter 7, we discussed how business and the government work together to create the "marketplace." The marketplace includes anything and everything that can be bought and sold, including food, prescription drugs, colleges, and anything where you see a "$" on the label.

Chapter 7 briefly described the diagram below. One way to measure the health of the market place is looking at the stock market:

The Market Place

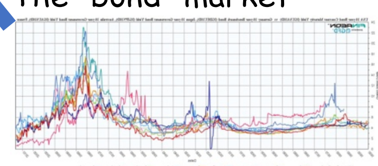


The “stock” market



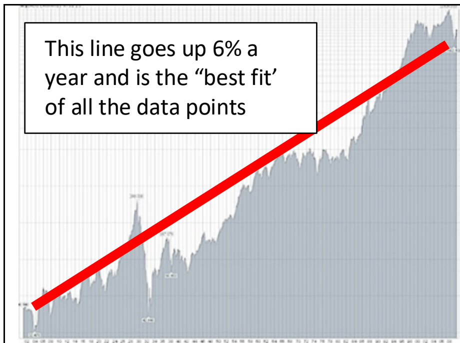
The “housing” market

The “bond” market

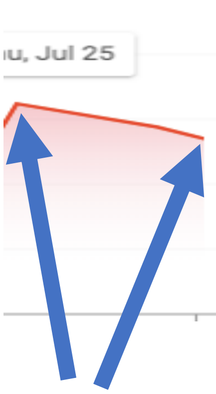
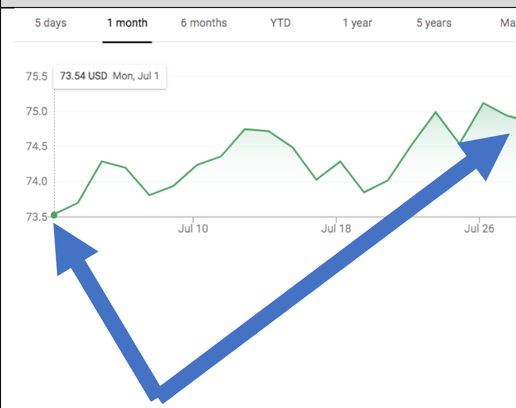
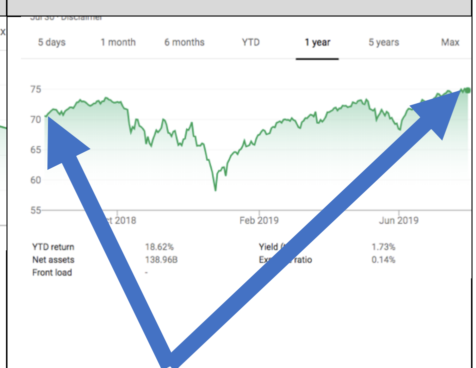


The stock market has never had a 30-year period where it has not averaged a 6% increase each year. This is excellent! Investing, and not planning to take your money out for 30 years, is one consistent way to get wealthy:

Stock Market Basics from Chapter 7	
<u>The entire American stock market</u>	Each peek on the graph represents a year in the stock market’s history, some years are higher and some years are lower. This means sometimes the average of all stocks of a company are worth less than they were one year and sometimes they are worth more. But, if we were to draw a “line of best fit,” we would see that the stock market averages a 6% increases each year. Again, some years

	might be lower than the previous year. One year the stock market might go up 20%, the next year it might go down 15%, and the year after that it goes up just 0.5%. But, on average, it goes up 6% a year.

The stock market is very **volatile**, which means it goes up and down a lot. However, it still goes consistently up. Take any season. In summer, it can get as hot as 100 degrees or as cool as 70 degrees in Philadelphia. A 30-degree difference across a month is quite dramatic. In fact, any time there is a dramatic shift in temperature nature produces a thunderstorm as a byproduct. However, despite this volatility, it is still safe to say that it gets a lot hotter from June to August.

Chapter 7 diagram: The stock market averages 6% growth each year, when we look at 30-year intervals, so do not let the short-term distract you		
Stock market in one day	Stock market in one month	Stock market in one year
 Beginning and end points for the day	 Beginning and end points for the month	 Beginning and end points for the year
It went down	It went up	It went up

Why can the short-term be volatile and but increase dramatically over the long-run? That is because individual companies may do better or worse on a given day, but overall many companies are growing stronger by the decade.

1 share of Netflix = $366.60, which is LESS than the previous day. Maybe one of Netflix's top series was cancelled	1 share of Amazon = $2,020.99, which is MORE than the previous day. Maybe Amazon found a way to increase the amount of goods that qualify for free, same-day delivery
1 share of Tesla = $253.50, which is MORE than the previous day.  Maybe Tesla announced another model of their self-driving car	1 share of Facebook = $203.91 , which is LESS than the previous day. Maybe the New York Times released a cover story about how terrorists used Facebook to attack a school in Pakistan

Review from Chapter 3

Chapter 3 argued that a person's mood naturally fluctuates. Some weeks, days or even hours feel happier or sadder. (Cycles of happiness and sadness are normal, unless extreme.) Money-management skills allow a person to enact greater and greater control over their future, by planning for and reaching short- and long-term goals. Thus, Chapter 3 argued to well-being and wealth work together because a person's happiness will look like a person swinging a yo-yo while walking up and down a hill, like the diagram below.

<table>
<tr>
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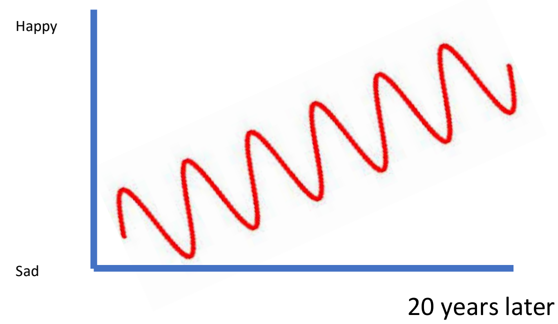
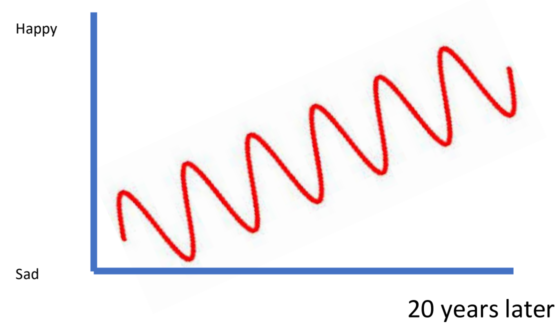
<td>
</td>
</tr>
</table>

The diagram of what happens when we value wealth and well-being resembles the stock market. Both are volatile but gradually go up over time.

<table>
<tr>
<th>Stock Market (over long periods of time)</th>
<th>Well-being if you get better at generating wealth</th>
</tr>
<tr>
<td></td>
<td>
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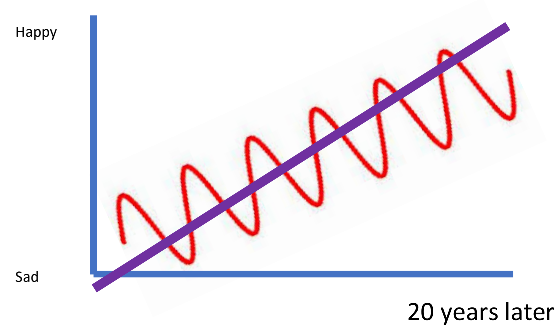
<td>
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Stocks

A stock is like a seed. A peach seed costs less than a penny. A full-grown peach tree produces around 750 peaches a year earning $188 a year or almost $2,000 every 10 years. All you have to do is be patient and wait for that seed to grow into a tree. Assuming you live in the right climate, a peach tree grows all on its own. You do not have to pay for rain or sunlight.

"Stocks" and "shares" of a company pretty much mean the same thing. A stock is simply a part of a company that you own. If you own 10% of a company worth $100, then you have $10. (10% of $100 = $10.) But, if that same company becomes very popular and is worth $1,000 then you have $100. Why? Because 10% of $1,000 is $100.

Think of a stock like a part of a company that you own

The entire history of American stock market performance

Over the course of American history, the value of American companies goes up, way up, over the long run. This is very important and is generally the same for other country's stock markets. One hundred years ago, America was creating lightbulbs, telephones and clunky automobiles that looked like farm equipment. Today, America is creating smartphones, better medicines, and hundreds of new cars a year! In one hundred years from now, maybe we will have flying cars and moveable houses.

The diagram has lots of jagged lines and points because some years are better than other years. Not every year is a good year for the stock market. But, if you drew a line over the entire stock market it is clearly going up.

Stocks can be tricky to understand. In fact, most adults pretend to know what a stock is but they usually do not. Back in Chapter 1, a garden served as a metaphor for the wealth-creation process. A garden serves as a good metaphor for stocks too.

Imagine Tomatoes 'R Us is a brand-new company that you think is going to take the country by storm. Right now, Tomatoes 'R Us is worth a whopping $0.50 (stay with me here.) The only assets to this company are 2 tomato seeds, each worth $0.25. The company realizes that they are not going to make a lot of money if all they have are two seeds worth a total of $0.50.

The company decides to start selling stocks. By selling stocks or "shares" of their company, they are "sharing" ownership with you. By giving you some ownership over their company, you are going to give them cash. A tomato business with 2 seeds each worth $0.25 is in desperate need of your cash.

You decide to buy 2 shares. Each share is worth $0.25, and now you give $0.50 to Tomatoes 'R Us for a piece of paper that says you own 2 shares of their company. They now have a total of $1 (they had $0.50 and you bought 2 $0.25 shares for $0.50 in total.)

Congratulations

This certificate is proof you own 2 shares of Tomatoes 'R Us that you bought at $0.25 a piece

Sincerely, the CEO

Tomatoes 'R Us has another $0.50 thanks to you! They use this money to buy two more tomato seeds for $0.25 each.

The 4 seeds go into tomato plants that produce hundreds of seeds. They are replanted and one year later Tomatoes R'Us owns the largest tomato field on planet earth (very unlikely, but stay with me here.)

Uncle Perry's Pizza, an exotic pizza restaurant, loves tomatoes from Tomatoes R' Us so much so that Uncle Perry's Pizza agrees to spend $1 million on tomatoes from Tomatoes R' Us each year. Now, your company is worth $1 million!

You are tired of living in Philadelphia and want to buy a fancy house in Louisville, Kentucky. Tomatoes R'Us owns 50% of their own company and YOU OWN 50% of the company. Why do you own 50% of the company? You gave them $0.50 when all they had is $1.00 after your stock purchase. You were 50% of the company one year ago, and you are still 50% of the company today. What's 50% of $1 million? The answer is $500,000. You can turn in your certificate and get $500,000 in cash.

Even if the math confused you above, the important thing to remember is that stocks are partial ownership of a company. You are giving money to a business in agreement that you get to own a chunk of that business. You can then sell that chunk of a business.

Some companies lose money and go bankrupt, so your stocks can be worth less (and sometimes $0) sometimes.

Imagine this similar situation below:


Imagine Sunflowers R' Us is another new company that you think is going take over the food industry just like Tomatoes R'Us did. The only assets this company has are 2 sunflower plants. Each plant is worth $1. The company realizes that they are not going to make a lot of money if all they have is 2 plants worth $2 in total. The company decides to start selling stocks.

You decide to buy 2 shares. Each share is worth $1.00. So you gave $2 to double the amount of sunflowers they have from 2 to 4. Once again, you own 50% of the company. They had $2 and you gave them $2. The company is worth $4 and you own half of that, so ou have 50% ownership.

<u>Congratulations</u>

This certificate is proof you own 2 shares of Sunflowers 'R Us that you bought at $1 a piece

Sincerely, the CEO




Sunflowers R' Us has another $2 thanks to you! They use this money to buy two more sunflowers

There is a tropical storm that destroys Sunflower 'R Us's farms. All 4 plants are destroyed and the company is worth $0 because they have nothing! Even though you own 50%, you own 50% of a company worth $0. And what is 50% of $0? why it's zero. You lost all the money you gave this company.

Even though buying stocks can seem like risky business, it is actually the greatest generator of wealth in the history of human civilization! The taller the graph, the more the stocks are worth. As you can see, over the long-run the value of stocks goes up and up.

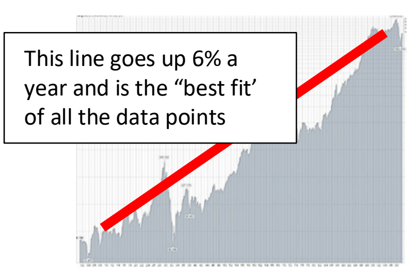
The Stock Market

The "stock market" is the combined worth of all stocks from all companies that ordinary people can buy each day. On a given day, one company can lose money and another company can gain money. Look at the stocks of some popular companies at the end of the day on August 15, 2019.

1 share of Johnson & Johnson = $129.85, which is LESS than the previous day.	1 share of Google = $1,168.70, which is MORE than the previous day.
1 share of Disney = $133.08, which is MORE than the previous day.	1 share of Nike = $79.79, which is LESS than the previous day.

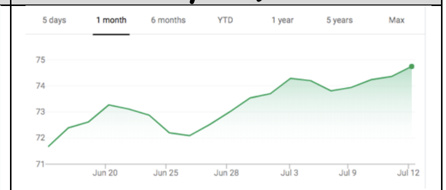
There are about 1.45 billion shares of stocks being bought, sold or traded in a given day. While some shares are worth less and some are worth more, the average of all stocks sold in a given day goes up over time.

The entire American stock market



While individual companies go up and down, the entire fleet of American companies continuously innovate. Companies come up with new inventions, sell their ideas to the government, and spread into other companies. While we NEVER know which specific companies do well, we expect the combination of all of them to increase over long periods of time.

Look at 3 pictures that depict the stock market. They all describe the same, American stock market.

Stock market across 5 days	Stock market in a month	Stock market from July 2018 to July 2019 (one year)
		

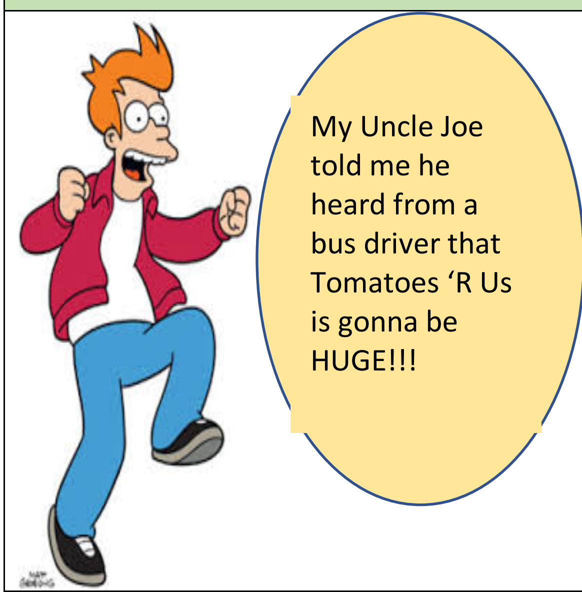
The stock market changes value every minute!

Thousands of things can affect the value of individual companies. Thus, the entire stock market, every minute, changes. The graph of the stock market looks very different depending on if you are looking at the value of stocks across 5 days, a month or a year. Just look at the diagram below:

Stock market across 5 days	Stock market in a month
	
The two graphs above measure the same stock market. This is the "international stock market" that averages all the companies of the world. (So if America's Netflix goes down but China's Alibaba goes up, this graph presents both of those data points.)	
Across these 5 days, the average value fell from about $17.75 to $17.	Across a month, this stock market went from about $14.90 to $17.

Analyzing individual stocks

Ordinary investors, like you and me, should never purchase individual stocks because we never know if they will increase or decrease over time. Many investment bankers do purchase individual stocks, but it's because they have rigorously studied, often in college, how to analyze the financial records of a company. When most ordinary Americans invest in individual companies, they do it based on a hunch after hearing one piece of information from a friend, relative, or headline. When most professional investors invest in individual companies, they do it after days of rigorous research and number crunching:

What ordinary Americans are thinking when they are about to invest	What expert investors are doing before they invest in individual companies
	

While many successful investors never went to college, a degree in finance makes the attainment of such knowledge much easier. Here is a list of just 4 common classes a college student would take for a finance degree:

1. Capital planning
2. Funds acquisition
3. Asset and debt management
4. Financial analysis

One of the world's most successful investors in individual companies, Warren Buffet, examines the publicly-released financial statements of businesses for the following things before he invests:

<table>
<tr><td rowspan="4"></td><td>Name: Warren Buffett</td></tr>
<tr><td>Net Worth: $82 billion</td></tr>
<tr><td>Rank: 3rd richest person in the world</td></tr>
<tr><td>Ways he analyzes business financial records

♦ How much debt does the company have?
♦ How much cash-on-hand does the company have?
♦ Is the company good at retaining top performers or do they move to other companies?
♦ What are the competitors in the industry?</td></tr>
</table>

Warren Buffett pioneered this approach to investing by looking at anything and everything a company does, known as "value investing." Warren Buffett too makes bad investments. Below are 3 of the worst investments Buffett made even with his "value investing" approach to investing:

EPIC FAIL #1: Dexter Shoe Company	Dexter® The #1 Bowling Shoe in the World!

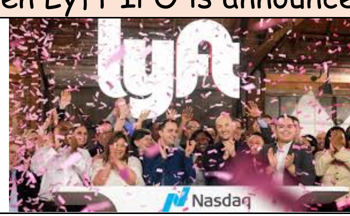
<table>
<tr><td>EPIC FAIL #2: US Airways</td><td>
</td></tr>
<tr><td>EPIC FAL #3: Tesco</td><td>


</td></tr>
</table>

Some companies do NOT offer stocks or shares. Some companies offer stocks ONLY to their own employees, and some companies offer stocks to anyone and everyone who can afford them.

A **private** or **privately-traded** company only offers stocks to their own employees. WaWa is an example of a company that does this. A **public** or **publicly-traded** company allows anyone to buy stocks. When a publicly-traded company first issues a stock, it is known as an **initial public offering** or, more commonly, an **IPO**. As discussed with the Tomatoes 'R Us and Sunflowers 'R Us example, stocks allow companies to raise money. This makes an IPO a very big deal for a company, and companies usually ring a bell and throw some confetti on Wall Street when this happens.

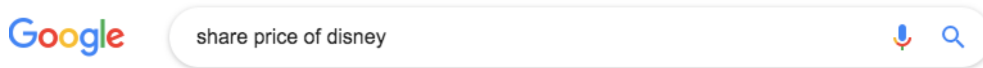
When Lyft IPO is announced



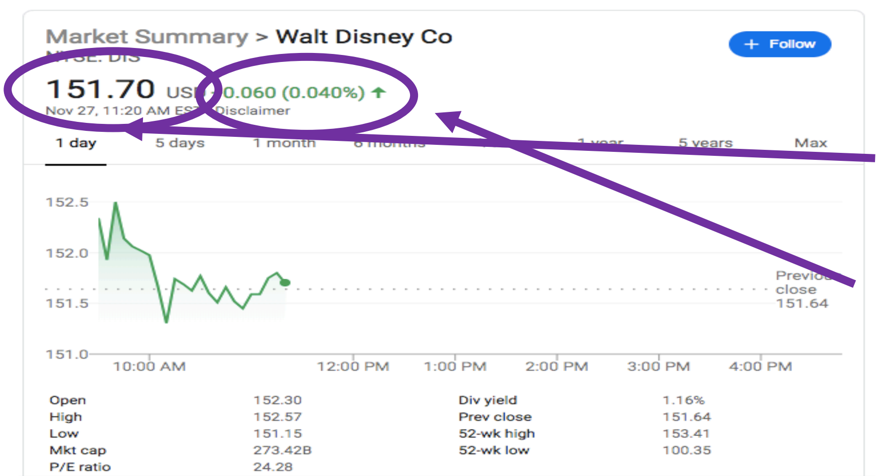
P.S. the Lyft IPO was WAYYY lower than they hoped it would be.

How you can analyze individual stocks

1) Simply type into Google "Share price of COMPANY NAME."



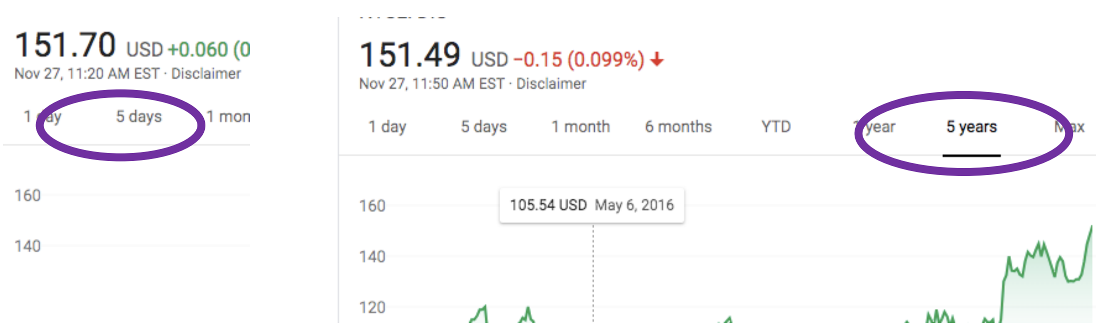
2) Google will automatically tell you how the company performed that day. The big number in the top left is the current **share/stock price**, which is how much one share of the company costs or how much money you would make if you sold one share of the company today. The smaller number and percentage represent how much the share price changed in one day.



Share price

Change over the last day

3) Click the time ranges to see how the company performed over weeks, months, or years.



Investing in the stock market, NOT individual stocks

Investing in stocks is VERY DIFFERENT than investing in the entire stock market. Any American 18 years or older can choose to invest in specific companies or invest a fraction of their money across the entire stock market. If any company's performance is a mystery, but we know with almost certainly that some company will increase in value then we should invest in all of them. Here are a few analogies.

Investing in specific companies		**Investing in the entire stock market**
Would you bet on pineapple becoming the #1 pizza topping in America?		Would you bet that many pizza toppings, old and new, will continue to be put on top of pizza?
Would you bet that one particular fast food chain will produce the best cheeseburger?	Or	Would you bet that a bunch of fast food companies will each make popular cheeseburgers?
Would you bet that one car company will sell the most cars?		Would you bet that many car companies will all sell a lot of cars?

Why do we know the entire stock market goes up over time, even if it's very hard to determine which individual companies do? The answer: our belief in the Optimistic Universe.

The Optimistic Universe			
The railroads of the early 1900s 	The textile industry of the 1920s 	Manufacturing of the 1940s and 50s 	Modern technology from 1960 to 2019 

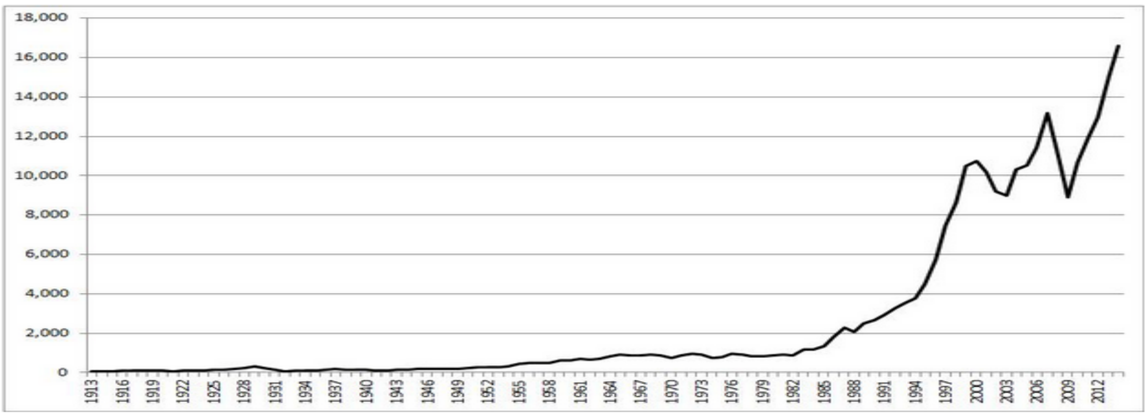


Figure 1: Dow Jones Industrial Average priced in nominal U.S. dollars

The "S&P 500" is one way to measure the stock market rather than an individual stock. (More on this in the next chapter.) Look at how the returns of the S&P 500 compare to Warren Buffett, whose company name is Berkshire Hathaway.

Visual retrieved from "Warren Buffett is Winning One Bet and Losing Another" from Market Watch by Cullen Roche on Sept 15 2016

Warren Buffet and his company would have been better off investing in the entire stock market than his own picks. That's right, investing in the entire stock market would have made the world's 3rd richest man even richer.

Chapter 14: How and When to Invest

Portfolios and Diversification

The entire total of a person's cash and assets is called a **portfolio**. The total value of a person's checking account, savings account, property and all the securities in his/her brokerage and retirement accounts comprises that person's portfolio. Portfolios need to be strong and resilient enough to manage the account holder's hedonistic and eudaimonic appetite:

A Portfolio needs to provide this

Hedonism	Eudaimonia
	

On average, there is a financial crisis ever 14 years. American economists and politicians are absolutely terrible at predicting economic crises. Remember how, on average, the stock market yields 6% annual returns over a 30-year period? Well, here are 3 major economic crises that all happened during one 30 year-year period:

<table>
<tr><th>Crisis #1</th><th>Crisis #2</th><th>Crisis #3</th></tr>
<tr><td>
</td><td>
</td><td>
</td></tr>
<tr><td>The stock market crash of 1987</td><td>The dot-com crash of 1999</td><td>The housing crisis of 2008</td></tr>
</table>

The wise investor received an average of 6% stock market returns over this 30-year period EVEN THOUGH this 30-year contained 3 major crises. Pretty impressive.

How do financial planners ensure long-term growth of a portfolio with minimal damage when crisis strikes the nation? There are two answers, which will be explored in detail in this chapter:

(1) Diversification
(2) Dollar-cost averaging

Diversification means having lots of different assets, including many different types of stocks in your brokerage and retirement account. If 90% of your retirement account is in stocks of Apple, and the iPhone is linked to cancer, expect to spend your golden years in a government-provided nursing home. When you hear diversification, think "diversity" or "diverse."

Dollar-cost averaging simply means invest the same amount of money into the same investments at the same time every year NO MATTER WHAT. It is literally that simple. If a person has set the goal to invest no less than $300 every month in the entire stock market, this person invests $300 every month no matter if newspaper headlines say "World War 3" or "Zombie Outbreak in Australia."

What dollar-cost averaging looks like		
Keep investing as usual	Keep investing as usual	Keep investing as usual
		
The stock market crash of 1987	The dot-com crash of 1999	The housing crisis of 2008

Do Not Invest in Stocks

In the short-term, it is impossible to know which businesses will succeed and which will go bankrupt. Kodak used to be a business powerhouse when polaroid cameras and black film could be found on each shopper's holiday gift list. Then, home printer came out followed by the smartphone. The Kodak company never recovered.

Kodak *Used to be top dog*	**Apple** *Now, Apple is*
	

Chapter 8 discussed how Sears used to be the chief of the department stores. Families would eagerly wait for the Sears Catalog in the mail before traveling to the store to buy microwaves, clothing, school supplies and anything else.

A sample cover of the Sears Catalog

Even though Sears helped pioneer American superstores and department stores, which both Walmart and Amazon now dominate, no one predicted this. Not even the world's most promising finance, business, and government policy experts know which American businesses will succeed and which ones will fail.

The Famous Monkey Example

An independent company called Research Affiliates[27] conducted a very famous experiment in finance. The researchers created two groups to see who could better predict which companies would become or remain the top performers and which companies would weaken or eventually go out of business. The first group was made up of professional investment bankers. They knew how to audit the budgets and records of companies and theyhad rich historical knowledge of business and economics. The other group was, literally, a bunch of monkeys.

In the first room, Group 1 spent hours coming up with their list of the top companies. They shared insight, research and knowledge with one another.

In the second room, a group of researchers put newspaper clippings of select American businesses around the room and then gave the monkeys a bunch of darts.

Group #1 Group #2

Vs.

Picture from TowardDataScience.com

While Group 1 debated, the monkeys in Group 2 threw darts. While Group 1 came up with their list of the most promising American businesses for the future, a team of researchers recorded the companies hit by Group 2's darts.

The researchers then waited many years to see which list of companies did the best: Group 1 or Group 2's list.

Group 2 won.

That's right, a bunch of monkeys who did not even know what they were doing are better predicators of the American stock market than experts.

Remember how Warren Buffet made billions investing but he would have made even more if he just invested in the entire stock market?

Visual retrieved from "Warren Buffett is Winning One Bet and Losing Another" from Market Watch by Cullen Roche on Sept 15 2016

How do you invest if you do not invest in individual stocks?

Investment in individual companies creates a major risk. The result could be billions in gains or complete bankruptcy. Investment in the entire stock market, however, is as close to a guarantee as we can get.

Imagine that instead of investing $500 in one company (say Facebook or Toyota), $1 went into the top 500 American companies—in fact, the United States keeps a record of the current 500 top American companies, because the list can change at any moment, and it is called the **S&P 500.**

Imagine that instead of investing $3,000 in Amazon stock, a little more than $1 went into the 2,800 companies listed on the New York Stock Exchange. Investing across the stock market beats investing in one company in the stock market.

Remember this diagram from the last chapter?

Investing in specific companies		**Investing in the entire stock market**
Would you bet on pineapple becoming the #1 pizza topping in America?		Would you bet that many pizza toppings, old and new, will continue to be put on top of pizza?
Would you bet that one particular fast food chain will produce the best cheeseburger?	Or	Would you bet that a bunch of fast food companies will each make popular cheeseburgers?
Would you bet that one car company will sell the most cars?		Would you bet that many car companies will all sell a lot of cars?

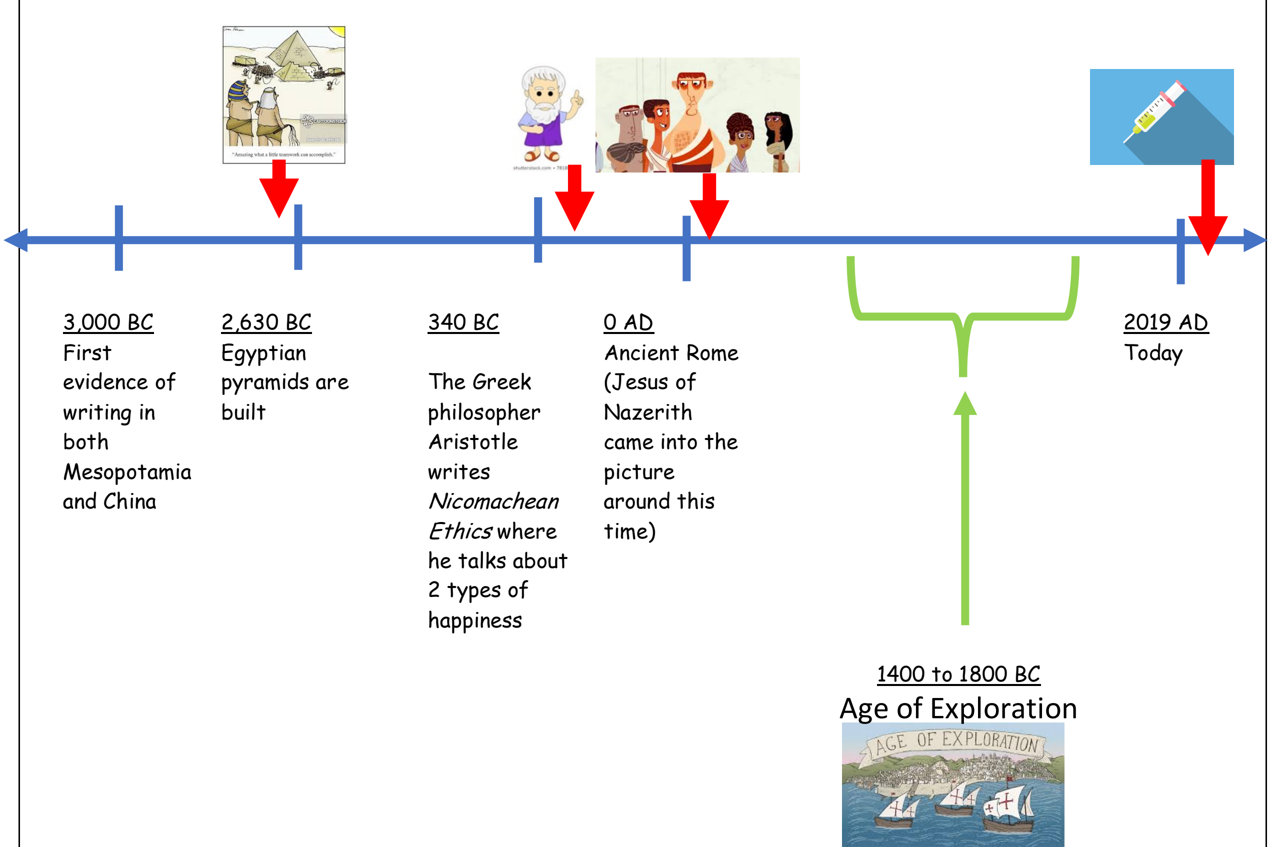
Investing in the entire stock market beats betting on individual companies, and the following section explains how in more detail.

The Logic Behind Investing in the Entire Stock Market

A human child can break a bone or lose an arm, but still grow taller. A tree may lose a branch but still increase in length and size. One animal species may go extinct, but the population of the animal kingdom can grow even bigger. Similarly, a stock is different than the stock market.

Chapter 13 briefly touched upon the world's obsession with gold. During the Age of Exploration, roughly 1400 to 1800 BC, the world had knights, crazy monarchs, the Crusades, explorers, and lots of violence partially but substantially motivated by gold. The Timeline of Human Civilization illustrates this below:

Timeline of Human Civilization



In 1602, the small European country of the Netherlands creates the world's first stock exchange where businesses can issue stock, by exchanging partial ownership of their company for cash. For the first time in history, ordinary people can trade stocks to one another. A **stock exchange** is a place where stocks can be bought, sold and traded.

While most of the world obsessed over gold at this time, the Netherlands created the world's first the stock market, the single-greatest generator of wealth in human history. As the world began to see that not just gold but "businesses" could generate lots of wealth for the shareholders, other countries began to follow suit:

The birth of stock exchanges		
Amsterdam Stock Exchange	The Netherlands	1602 AD
Paris Stock Exchange	France	1724 AD
Philadelphia	USA	1790 AD
London	Britain	1801 AD
Milan	Italy	1808 AD
New York	USA	1817 AD
Frankford	Germany	1820 AD
Madrid	Spain	1831 AD
Toronto	Canada	1861 AD
Bombay	India	1875 AD

Stock exchanges now exist across the globe: China, Nigeria, Japan. There are literally hundreds, yet the two largest stock exchanges in the world are only minutes apart in New York City: **The New York Stock Exchange** and the **Nasdaq**. The New York Stock Exchange is involved in nearly $22 trillion of activity and the Nasdaq is involved in nearly $6 trillion.

When normal Americans buy, sell or trade stocks at home they create jobs for the people who conduct and finalize these transactions on the floors of the stock exchanges. If you have ever seen a movie involving Wall Street where people are screaming "buy" and "sell," with phones up to each ear, it's the New York Stock Exchange:

But, the Nasdaq is a little different. The **Nasdaq** is a stock exchange that is entirely online.

The stock market is what we call all the companies listed on all the stock exchanges of the world, and those are a lot of companies with a lot of money.

Why is it that we can be confident about the performance of the entire stock market rather than individual companies? The answer: The Optimistic Universe. In the first chapter of this book, I asked you to accept the facts that the world tends to get better and better. We have less violence, fewer wars, less poverty, and more wealth with every passing generation? The reason we can accept the Optimistic Universe is the same reason we can have confident that the stock market will continue to go up over time.

It is unlikely America will return to wagons, dinner by candle-light and houses made out of straw. As you read these words, engineers and designers across dozens of countries are racing to build the first pollution-free car, safer bullet trains, flying cars, and software you can actually install in your brain to make you think clearer. We are expected to have robotic home nurses, cures for cancers, and an end to male baldness!

We expect humans to innovate, which requires more research, more technology, and more politicians to pass laws to legalize these processes. We expect more textbooks that explain these innovations and more teachers who need to learn how to teach these things. (Robotic classes are becoming more popular in schools, which were unheard of just 20 years ago.) As humans get more creative in designing society, we create more companies and new services. In fact, old companies must get better with time or else fear competition and replacement. Individual companies may grow or die, but we expect to see better and more companies listed across the stock exchanges of the world. In 1601, we had one stock exchange. Now, we have hundreds.

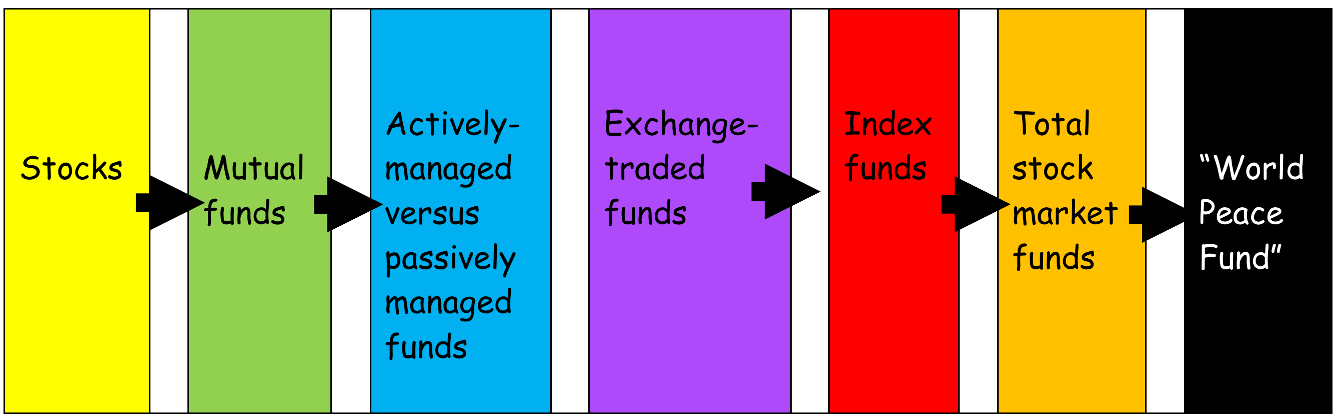
The only reason humans would stop spending money on better technology would be because of nuclear war, a disease epidemic or something so severe and devastating that no one would be worry about their money anyway.

If the "stock market" includes all the stock exchanges, businesses, and money passed between ordinary people and those businesses, then we surely expect the stock market to grow as humans invent, discover, and share.

If we accept the Optimistic Universe, then we should invest in the entire stock market.

The World Peace Fund

The rest of this chapter will argue that the best way to invest in the entire stock market is something called the "World Peace Fund." This fund does not normally go by this name, it is my own name for two actual funds that do exist: Total American Stock Market ETF and the Total International Stock Market ETF. The steps to understanding the World Peace Funds go in this order:



A group of stocks is called a **mutual fund**. You may be worried if one, particular company will go bankrupt but if you invest a little bit in a group of companies then it's a lot more likely at least one of them will go up in value.

For example, humans will probably never stop watching TV. At first, a home television set was a rarity. Now, people stream television shows on their smartphones, tablets, and televisions. Amazon Prime Video, Netflix, Hulu, Starz, HBO, Disney+, Cinemax, and dozens more are all competing to dominate the television industry. Instead of buying stock in just one of these company, why not buy a little of each?

Assume 1 share of Netflix is $4	Assume 1 share of a TV-Mutual Fund is $4.
Netflix gets the full $4	Each of these 4 providers gets $1

How does this work? Your shares in a company can never go below $0. This means you will never owe money. Assume an electrical problem at the Netflix headquarter starts a wild fire and this fire consumes street after street of homes and businesses. The state of California can sue Netflix for damages. (It is Netflix's job to operate a safe business.) Now, Netflix goes out of business because all its money was spent restoring California after the fire. Your share of Netflix drops from $4 to $0.

Hulu, Amazon Prime Video and HBO are thrilled! The millions of worldwide customers who relied on Netflix are not going to give up watching TV; they will turn to a different company instead. Hulu, Amazon and HBO spend a lot of money on advertising and creating new shows to win over the Netflix customer base. Hulu recruits 25% of Netflix's old customers, Amazon takes another 25% but HBO kills it winning half (50%) of all the old Netflix subscribers. In fact, all of the advertising those 3 companies did led people who relied on just cable to subscribe to these 3 companies. As a result, those 3 companies are more valuable and their stock prices go up. By investing in a TV mutual fund, you did way better than if you invested in just one company:

Netflix loses all its value after the imaginary fire of California	Netflix is at $0, but now Amazon doubles to $2 a share, Hulu doubles to $2 a share, and HBO quadruples to $4 a share.
Your $4 with Netflix became $0	Your $4 with the TV Mutual Fund is now worth $8.

Actively-managed funds, passively-managed funds and exchanged-traded funds (ETFs)

Mutual funds can be made by humans or made by computers. A former TV executive, maybe a producer for NBC, may go find an investor and say: "I have worked in this business for 20 years, and I know the 3 TV companies that are going to be the most successful for the next 50 years. I want to create a mutual fund of just these 3 companies." Or, that investor can go to a computer and tell the computer to buy 1% of the top 100 TV companies.

If the mutual fund was assembled by a human, it is called an **actively managed fund.** If the mutual fund was assembled by a computer, it is called a **passively managed fund**. Why these terms? If a real-life person had to take the time to research companies and decide how much each, particular company comprises the mutual fund then it required effort and attention. Someone or something that is "active" requires effort, attention and activity --- think "physically active." If a person is assembling parts of a company into a single fund then it is actively managed.

Computers, on the other hand, do not think like humans do. Computers carry out programmed instructions at the level of specificity in the program. Automatic breaking in your car will immediately cause your car to freeze if a child runs in front of the vehicle. Your computer will get Google, Spotify and your iPhotos ready to launch as soon as you hit the power button. This allows humans to be passive. Since humans are letting computers do most of the work on these funds, they are called passively managed funds.

There is a special name to a group of passively managed mutual funds. They are called **exchange-traded funds or ETFs**. ETFs are cheaper to buy than other mutual funds precisely because they are passively managed. If a computer is doing 99% of the work, then it's cheaper to buy.

There are some differences between passively managed funds and ETFs. (There are some passively managed funds that are not ETFs, but almost all ETFs are passively managed.) <u>For the purposes of this textbook, and most of your life, assume passively managed-funds and ETFs are the same thing.</u>

<u>Index Funds</u>

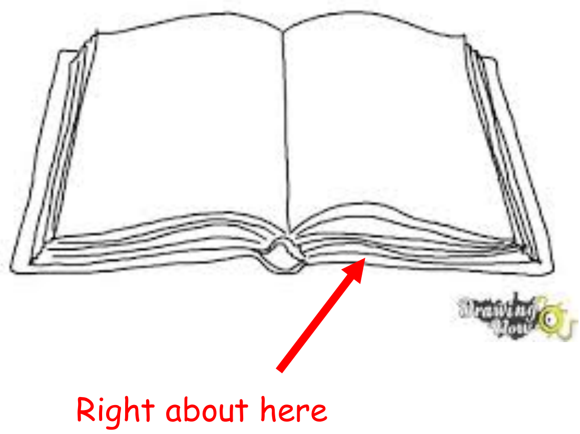
Remember those stock exchanges that ate away at humanity's obsession with gold:

<table>
<tr><th>A pretty long while ago</th><th>Recently</th></tr>
<tr><td>
</td><td>
New York Stock Exchange</td></tr>
</table>

If you took a list of all the companies on the New York Stock, it could look something like this:

We call this list an "index." If you put it in alphabetical order, then it's pretty much the last section of every non-fiction book you have ever read (or pretended to read.)

Index of a book



INDEX

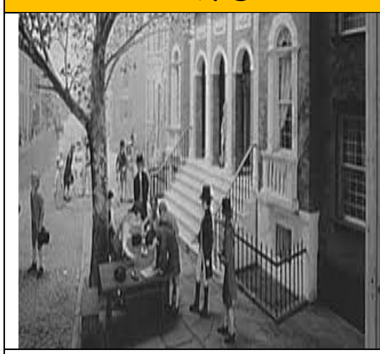
A stock is like investing in one company on the list. An **index fund** is investing in the entire stock market, which are all the companies that are listed on stock exchanges across the world. A computer can make this list! If you program a computer to literally copy down all the companies that get listed on the various stock exchanges, then this is passive-managed. It's almost entirely electronic, so it can be bought, traded and sold very easily and very cheaply—thus we call it a "passively managed mutual fund" or "exchange-traded fund (ETF)".

Computers can create indexes of just fast-food companies, energy companies, or all companies listed on a stock exchange.

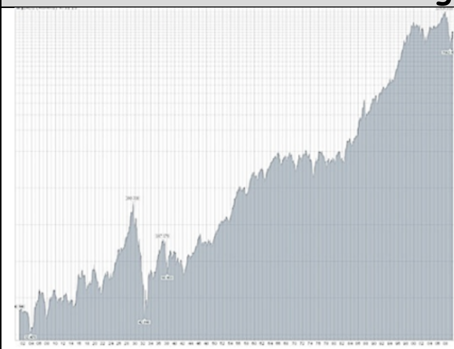
If the computer-generated list of companies to go into a mutual fund follows a list, such as the top 500 American companies or S&P 500, it is an "index fund."

These funds are both cheap to manage and destined to increase in value because who would expect it not to?

From 1601 to 2019, humans of the world witnessed the creation of skyscrapers, antibiotics, air conditioners, the telegraph, the telephone, the home phone, the cell phone, the smart phone, the computer, the personal computer, the laptop, and so much more. Consequently, the world went from:

This		This
	To…	
Stock exchange painting hundreds of years ago		One of these in many cities in most countries

The point: stocks are risky, but the stock market is not. The stock market may even be volatile, going up and down in the short term but, as stated before, **there has never been a 30-year period in American history where the stock market has not averaged 6% a year. This does NOT mean that the stock market goes up 6% every year. It means that if you look at the stock market in 30-year intervals, it's the same as treating the graph as if it were a straight line that increased in value 6% every year.**

Stock market in the short term	Stock market in the long term
	

Two great American indexes

There are two important indexes that track the American stock market. Both indexes are used by politicians, business people, and ordinary people to help determine the health of the economy: the S&P 500 and the Dow Jones Industrial Average (sometimes just called the "Dow Jones")

Standard & Poor's Financial Services is one of America's oldest finance companies, and its job is a lot more like journalism than finance. Stand & Poor's Financial Services (often just called Standard & Poor's or S&P) has only one real job-- to evaluate the health of different investments. Right now, Sears and Kodak would get an F rating. Amazon would get a AAA rating, which is like an A+.

Standard & Poor's began in 1860 when Henry William Poor wrote the first in depth look at the operations and finances of the railroad industry. Today, Standard & Poor's is headquartered in New York City right on Wall Street, just minutes away from both the New York Stock Exchange and the Nasdaq, keeping an ever-watchful eye on those stock exchanges.

Standard & Poor's back in 1860	Standard & Poor's today
	

One of the most important pieces of research that Standard & Poor's collects each year is called **the S&P 500**, a list of all of America's top 500 countries at any given moment. It is an index where only the top 500 American companies can be on the list. Within the last couple of years, the following companies were REMOVED because they simply no longer made the list of the top 500 American companies: Urban Outfitters, Dell Computer and Radio Shack.

All kicked out

If you examine the performance of the S&P 500, it is very close to the entire stock market. In fact, it is so close that the S&P 500 holds the title as the best index to measure the performance of the entire American stock market. Since the top 500 American companies make up nearly $24 trillion and 80% of the entire stock market, following the S&P 500 is the easiest way to follow the entire American stock market.

<table>
<tr><th>S&P 500 performance</th><th>Entire stock market</th></tr>
<tr><td>
</td><td></td></tr>
<tr><td colspan="2">Very similar</td></tr>
</table>

Besides the S&P 500, there is one other major index that helps us measure the entire stock market, the Dow Jones. The **Dow Jones Industrial Average (or "Dow Jones")** tracks the top 30 companies in America. It too kicks out companies that fall out of the top 30.

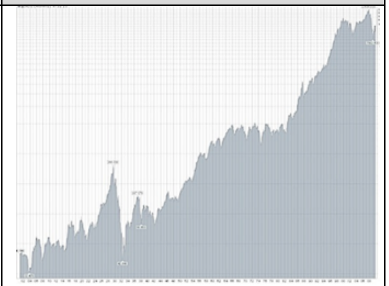
DOWJONES

kicked out..

AT&T

General Electric:

Just like the S&P 500, the Dow Jones only examines part of the entire stock market but it is a really easy way to keep track of the entire stock market:

Dow Jones	S&P 500 performance	Entire stock market
		
All very similar		

The World Peace Fund[*]

War, violence, and rioting only benefits companies that sell body armor and weapons. All other businesses suffer in times of unrest. When people are at war, there is less time to go out to eat, travel to Disneyland, attend college or do anything fun. War is Hell and there aren't any shopping malls in Hell.

Chapter 4 asked you to imagine what controlling space and time could do to the prairie fields of Oklahoma. Personal finance--a super power that controls the physical world and what happens over time in the physical world--allows dreams to come to reality. The diagram is reprinted on the next page:

[*] I do not have a direct source for this section of this chapter because it is my opinion and thought experiment..

Resulting Great Things

1) Jobs are created and kids have positive learning experiences from the camp.

2) Parents can take college classes during the summer or pick up a second job because their kids are at camp.

3) People who live near the camp might create restaurants and hotels when families come to visit the kids in camp.

4) Because hotels and restaurants are being built, some families will realize that the area outside of the camp might be a nice place to own or build a house!

5) Because more and more houses are being built, a local not-for-profit organization might build a university for students to go to school. In fact, there is a shortage of engineers in the state of Oklahoma so this particular university is going to specialize in a great engineering department.

6) Now that a college is being constructed, clothing stores, more restaurants, and technology stores will want to serve the growing population.

7) Now that everyone has more money, the government can collect more in taxes and use that money to expand financial aid for low-income students across the state.

As also discussed in Chapter 4, the government plays a vital role in the marketplace. The government develops products and services that we have not yet found a way to charge money for. Here is a diagram we first saw in Chapter 4:

Man-eating war tanks and flyable birds 	The United States is the world's most advanced military. We now have: (1) computer chip implants that go in the brains of birds so we can control how birds fly, and (2) tanks that power themselves off the dead bodies of fallen soldiers. It's so creepy because it's actually true. Tax dollar money that goes to the government that the government sends to this defense agency helps make America the strongest, safest country in the world.
The internet 	The government created the internet by paying hundreds of scientists to develop a way for government agencies to communicate immediately with one another. Without the government spending billions of dollars in this successful research project, smart phones, Netflix, and modern home security systems never would have happened. For the last several years, the entire stock market has been driven upward by Amazon, Apple, Google, AT&T and many others that rely on the internet for all its purposes.

In fact, in Chapter 7, I made the argument that the government protects and ensures fair practices in the market place among businesses

<u>A shopping mall is a market that is made up of lots of smaller markets</u>

The Bureau of Consumer Protection makes sure that your toasters, cars, and washing machines do NOT start fires, produce hazardous materials or harm you in other ways.

The Food and Drug Administration (FDA) makes sure that edible goods from businesses are safe for consumption

The Department of Energy makes sure that companies cannot create too much pollution as they create and transport their goods and services.

In times of war, the government cannot focus on any of these things. The FDA will focus more on the safety of medicine going to soldiers than what goes on the aisles of grocery stores. Economists from the Bureau of Consumer Protection may be pulled from examining faulty microwaves to instead make sure American machine guns do not jam in times of battle.

In short, the stock market suffers in times of war. But, World Peace would make the stock markets of every nation climb higher and higher. If governments and private companies could spend their time creating ways to get every human on the planet to spend all their money on ways that only made their lives better, then the value of companies would go up, up, up!

Many people have said, "Money is the root of all evil" but that's not the full story. Money may motivate evil, but it motivates good. In fact, the economies of the world do much better during times of peace, NOT war.

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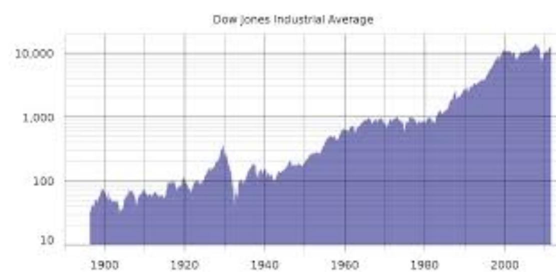

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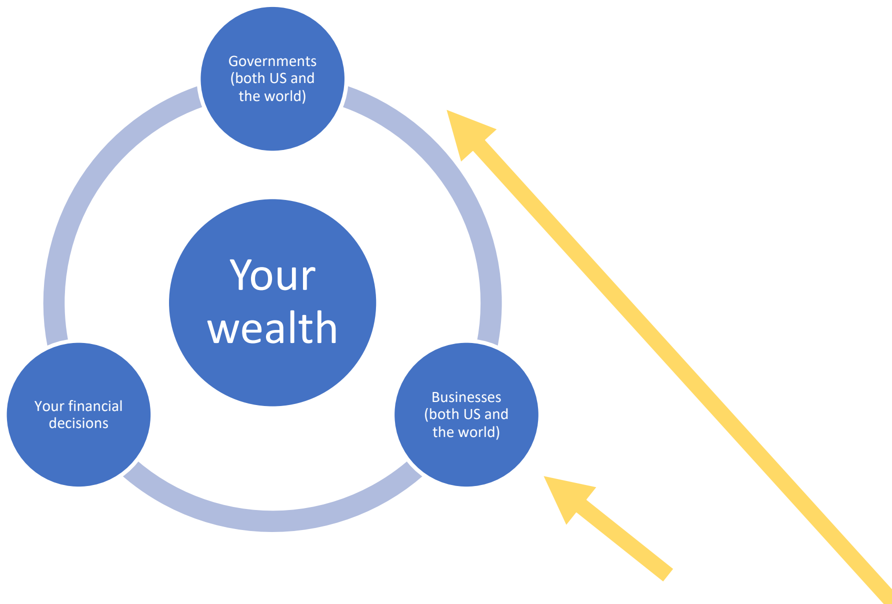
How do we invest in all companies going up? The World Peace Fund may not exist under that name, but there are 2 actual mutual funds that capture the health of governments and businesses across the world: **The Total American Stock Market ETF** and the **Total International Stock Market ETF**. Nearly all investment banks offer their own version of these 2 ETFS. One is an index of allAmerican companies and the other is an index of all international companies. Both are bound to increase in time but world peace would make them both skyrocket!

Remember this diagram from Chapter 7?



Total American Stock Market ETF and Total International Stock Market ETF measures these

As the Total American Stock Market ETF and the Total International Stock Market ETF gradually go up over long-periods of time, the health of governments and businesses improve. This creates more personal wealth for each investor. This is why we can call a portfolio made up of these two ETFs the "World Peace Fund"

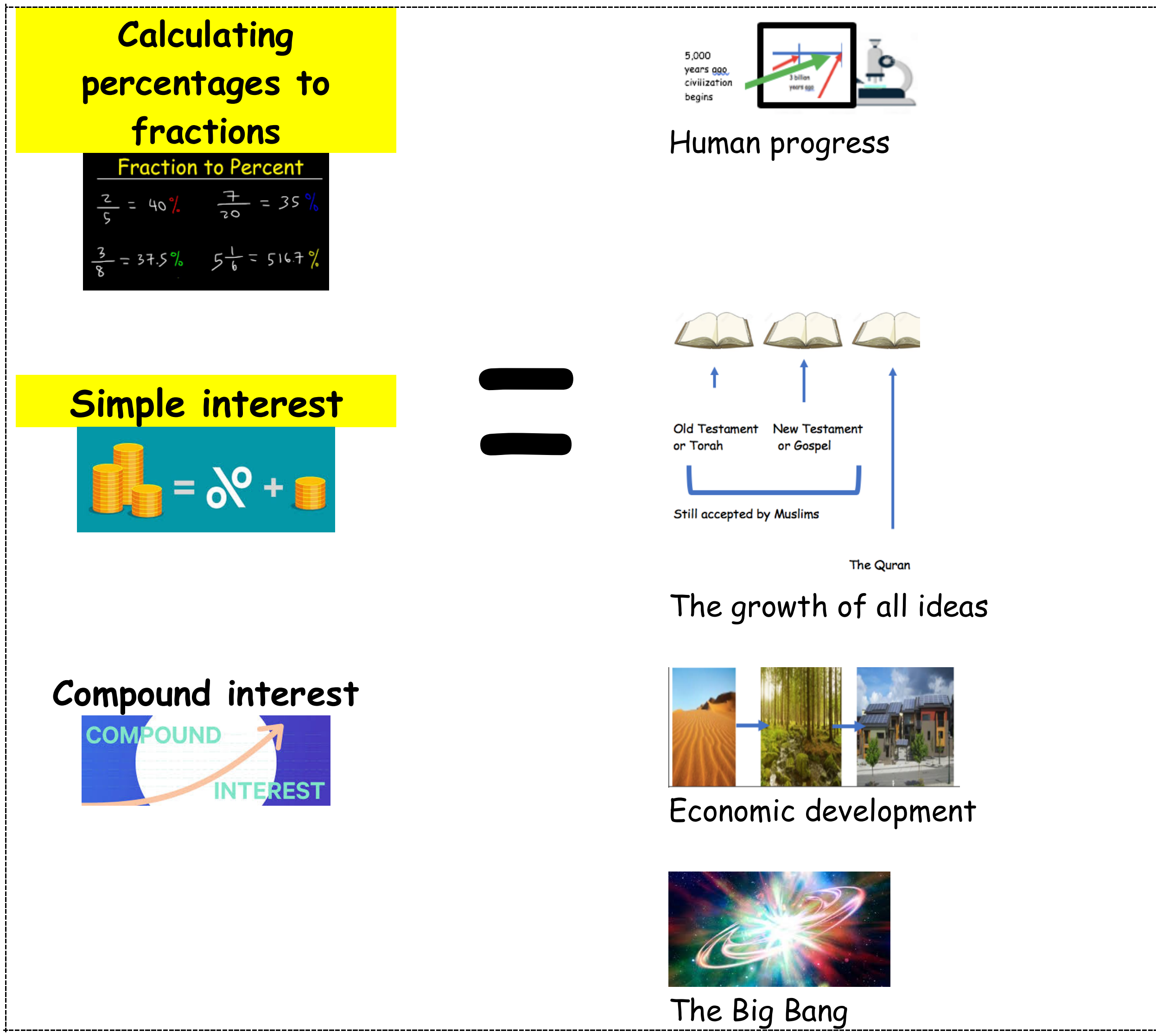
As explained earlier in this chapter, dollar-cost averaging is when an investor puts the same amount of money into the same funds at the same time every year NO MATTER WHAT.

When comparing hundreds of different investment strategies, including the "value investing" done by Warren Buffett, dollar-cost averaging wins.

All early, beginning investors should purchase both the Total American Stock Market ETF and the Total International Stock Market ETF the same time every month or year.

<u>Chapter 15</u>: Millionaire Math, Part 2

Chapter 6 argued that the super power of personal finance not only help explain the math behind the Big Bang and the development of human civilization, but all these innovations comes down to just 3 formulas. Two of these formulas, highlighted in yellow, have already been covered.



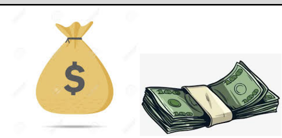
Loans, credit cards and bonds use "simple interest" to determine how much money a person gets back on a loan. "Chapter 6: Millionaire Math, Part 1" explained why and how to calculate simple interest. To do the math, someone needs to know the difference between principal and interest.

Review Principal and Interest

The **principal**, or original amount of money, is lent to a person or organization. The specific percentage of extra money that is charged for borrowing the principal is called **interest**. Below is a diagram that illustrates the common times simple interest is used, each of which has been discussed in this book:

Financial product	Example	Principal	Interest	Who gets the principal plus interest?
Credit Card	Bob orders a 22% interest credit card from a bank so he can spend $10,000 on a new car.	$10,000	22%	The bank. The bank will get $12,200 back
Bond	Jewel has $5,000 in savings account she is saving for a house. Since she does not need another house for 5 years, she buys a 1-year Treasury Bond that pays 5% interest.	$5,000	5%	Jewel. The U.S Treasury will pay Jewel $5,250 in 1 year.

A diagram giving another example of principal and interest has been reprinted below:

Principal	Interest	Interest is usually a percent. You may get a credit card that charges 22% interest, or you may purchase a bond where you receive 2% interest (more on that later.)
		
The amount you start with (and hope becomes bigger)	The extra amount you earn	

Review of Simple Interest

3 Steps to Calculating Simple Interest

(1) Convert the interest percentage to a decimal by moving the decimal over two places to the left: 50% = .50, 25% = .25, 5% = .05, 54.8% = .548.

(2) Add one to the number. Why? 1.0 = 100%. When calculating money you get back, you always get all the money you lent out (100% or 1.0) plus the interest rate.

(3) Multiply the principal by this number.

Here is an example we saw from Chapter 6:

Nadir borrows $20 with 50% interest to own: (1) his own cricket, and (2) multi-colored hats he can put on his cricket. How much does he owe?

Steps	Example
Convert the interest percentage to a decimal by moving the decimal over two places to the left	Nadir's loan has 50% interest, so that's.....**0.5**
Add one to the number	**1.5**
Multiply the principal by this number.	Principal X 1.5 $20 X 1.5 $30
ANSWER	$30

Compound Interest: The math of wealth creation

Compound interest is where the money-making really happens, and it helps explain the stock market.

Simple interest	Compound interest
Bonds, loans, credit cards	Stocks
 	

Compound interest is just "simple interest" but you keep repeating the process for more than one year. That's it! Compound interest is just simple interest but you use your final amount you get at the end of the year as the principal for next year. This occurs as long as the money is invested.

For example, assume Cheyenne is debating between starting a new business or investing in the stock market. Cheyenne comes up with "Meatloaf Mondays," which is a meatloaf restaurant only open on Mondays. After all of her friends stop telling her that his idea is terrible, Cheyenne decides to buy $10,000 worth of the World Peace Fund instead—Mr. LaSalle's name for buying both Total American Stock Market ETFs and Total International Stock Market ETFs.

Assume the World Peace Fund compounds at the end of the year with a 6% return, which has been the yearly average for the S&P 500 over 30-year intervals. Cheyenne is going to let her $10,000 sit or "compound" for 5 years. Look how much she has in 5 years.

Year	Principal	1 + (interest as a percent)	Amount at the end of the year
1	$10,000	1.06	$10,600
2	$10,600	1.06	$11,236
3	$11,236	1.06	$11,910.16
4	$12,624.77	1.06	$12,624.77
5	$13,382	1.06	**$13,382**

By letting the $10,000 just sit in the stock market for 5 years, she ended up with an extra $3,382. This may not seem like a lot of money, but imagine if you invested $10,000 when you were a teenager and did not touch it until retirement. You would have $184,201.54.

This time, imagine you invested $10,000 as a teenager in the World Peace Fund but also added just $50 a month to it. You never sold any of your ETFS; you just bought $50 more every month. How much would you have in retirement? You would have almost $400,000.

To perform compound interest, just repeat the process for simple interest for as many years as the money compounds. Try the practice example in the box below before moving on:

Practice Question

Taliah continues to get lost on the trains because she cannot transfer between the Market-Frankford line and the Broad Street line effectively. She finally decides to buy a car. She is so in love with cars now that she decides to buy a car mutual fund. Let's assume each year, the mutual fund increases by 6%. Assume she buys $2,500 worth of this mutual fund and allows it to compound for 5 years. How much money will she have? Answer: ____________

Year	**Principal**	**1 + (interest as a percent)**	**Amount at the end of the year**
1	$2,500	1.06	2,650
2		1.06	2,809
3		1.06	2,977.54
4		1.06	3,156.1924
5		1.06	3,345.563944

Final answer is $3,345.56 (I rounded down to 6 cents because cents only goes out to the hundredths place)

How to Visualize Compound Interest

Understanding why compound interest works this way is much more important than knowing how to calculate it. Let’s start the story of compound interest with a snow day:

Imagine your school district has declared a day off due to a blizzard. After spending your morning eating cereal in front of the TV, you then decide to role a snowball down a hill. You do not need to know anything about math to know that as that snowball rolls downhill, it is going to get bigger and bigger.

To understand “compound interest,” start by imagining a snow ball on a hill.

The snowball grows as it reaches the bottom of the hill because as the snowball rotates, more and more snow sticks to it.

If you have ever rolled a snow ball on a flat ground to build a snow man, it’s the same thing. When it roles downhill, however, it gathers more snow faster because of gravity.

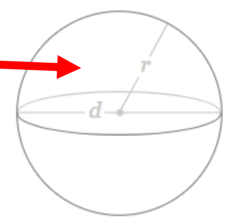
A snowball is a sphere. (Duh.) And snow from the ground sticks to the surface of the sphere. (Also, duh.)

$$\text{Area} = 4\ \pi\ r^2$$

If you think back to 11th grade math, there is a formula for "surface area of a sphere" that your math teacher would give you a formula sheet for. So, if you saw a math problem about measuring the surface of a round sphere, you have seen this formula before:

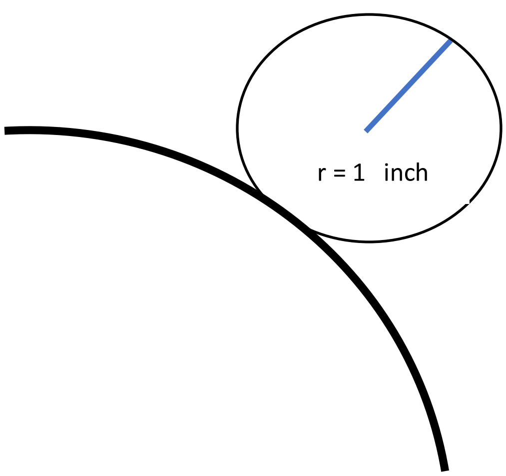
$$\text{Area} = 4\pi\ r^2$$

Radius is how far the center of the sphere or circle is to the outside



π (pi) is rounded up to 3.14.

$$\text{Area} = 4\ \pi\ r^2$$



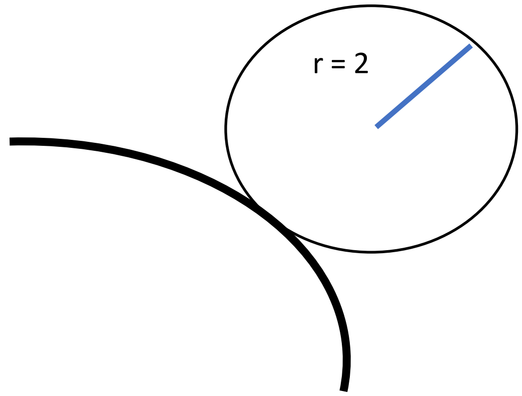
Imagine the radius of your snowball at the top of the hill is 1 inch.

The area of this snowball, at the top of the hill, is as follows:

Area = $4\ \pi\ r^2$
Area = $4\ (3.14)\ (1)^2$
Area = 12.57

This is how many inches of snow the whole surface or outside of the sphere takes up.

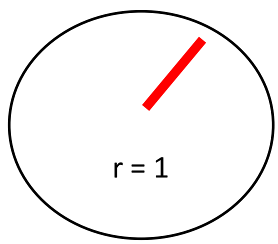
Just imagine you let that snow ball roll downhill for a moment and then you stop it. Your snow ball got a little bigger from the snow that stuck to it. Imagine the snow ball grew so the radius is 2 inches

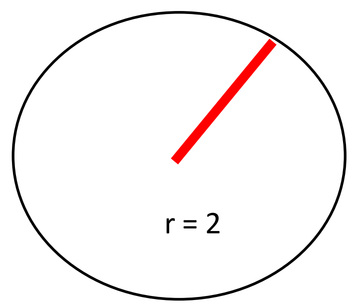


Let's calculate the area again, but with a snowball that has double the radius:

Area = 4 π r^2
Area = 4 (3.14) $(2)^2$
Area = 50.27

The area of the entire sphere is so much bigger even though the radius only went up 1 inch as the snowball rolled down the hill!





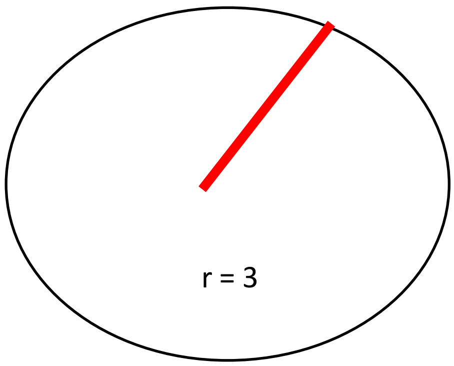
Area = 4 π r^2
r^2 Area = 4 (3.14) $(1)^2$
(3.14) $(2)^2$
Area = 12.57

Area = 4 π
Area = 4

Area = 50.27

All you did was let the radius go up by 1 and the entire sphere increased to 4X the size!

This is like taking \$1, adding \$1 to it and putting your \$2 total under your pillow. Then, the next day it becomes \$4.



Area = $4\pi r^2$
Area = $4(3.14)(3)^2$
Area = 113.4

Imagine you let this same snowball role down the hill again until the radius was 3. The area would be 113.4!

Even if you got confused about how there is this thing called a “radius” that went from 1 inch to 3 inches and it made the entire sphere grow from 12.57 inches to over 113 inches, that’s totally fine. (This probably confuses most people). The point is: the same laws of nature that let a snowball become a giant snow ball are what allow a little bit of savings to become a vast sum of wealth!

Below is a data table that shows what happens when you increase the radius of a snowball one inch at a time.

Radius of a snowball rolling down hill	Surface area
1	12.57
2	50.24
3	113.4
4	201.6
5	314.16
6	452.39
7	615.79
8	804.25
9	1017.88

If the radius increases by just 1 inch, the surface area can increase hundreds at once. This is the power of compound interest!

A final example

As previously discussed, the greatest generator of human wealth in the history of civilization is the stock market. If a time-machine and a briefcase of money appeared on your door, the wisest thing to do would be to invest in the World Peace Fund as early as possible, such as when the Netherlands created the first stock exchange in the 1600s.

The best and most effective way to take advantage of the power of the stock market, as also previously discussed, is to set-up a roth IRA account. Any American can set up a roth IRA starting at the age of 18 and contribute no more than $6,000 a year.

Imagine at the age of 22 you finally have $6,000 saved up. Maybe you completed a few tours of duty with the military, graduated college, or have diligently been saving since you entered the workforce after college. In fact, imagine your financial situation is looking so good that you think you will be able to contribute $500 a month every month until you retire. (That would meet the $6,000 yearly limit.)

A $6,000 starting balance at age 22, with $500 a month every year until retirement, will produce 1.73 million at the age of 70.

Over these 48 years you would have invested $288,000 and returned 1.73 million due to compound interest.

Now, imagine you not only have a roth IRA but an employer-sponsored retirement plan that comes with an employer-match. Assume you never got a promotion or a raise and you stay at a $45,000 salary for 48 years. (As Chapter 8 explained, $45,000 is the average American salary.) In this example, you contribute 6% of your salary and your employer matches 6% into this plan.

Over these 48 years, you would have invested $129, 600 and earn back 1.6 million.

With the power of compound interest, a roth IRA and an employer-provided retirement plan, you will have put in $416,600 over 48 years and you will earn over $3.3 million.

Power of compound interest

+

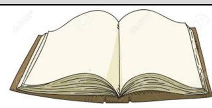
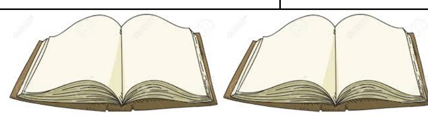
bank accounts

$417,600 → $3.3 million

<u>Chapter 16</u>: Other kinds of investments

Bonds

As discussed earlier in this book, most of the world's religions have more similarities than differences. Judaism, Christianity, and Islam make up 60% of the world's population, and they all worship the same God and share many of the same stories. Each religion includes, not excludes, the religious texts of its preceding religion:

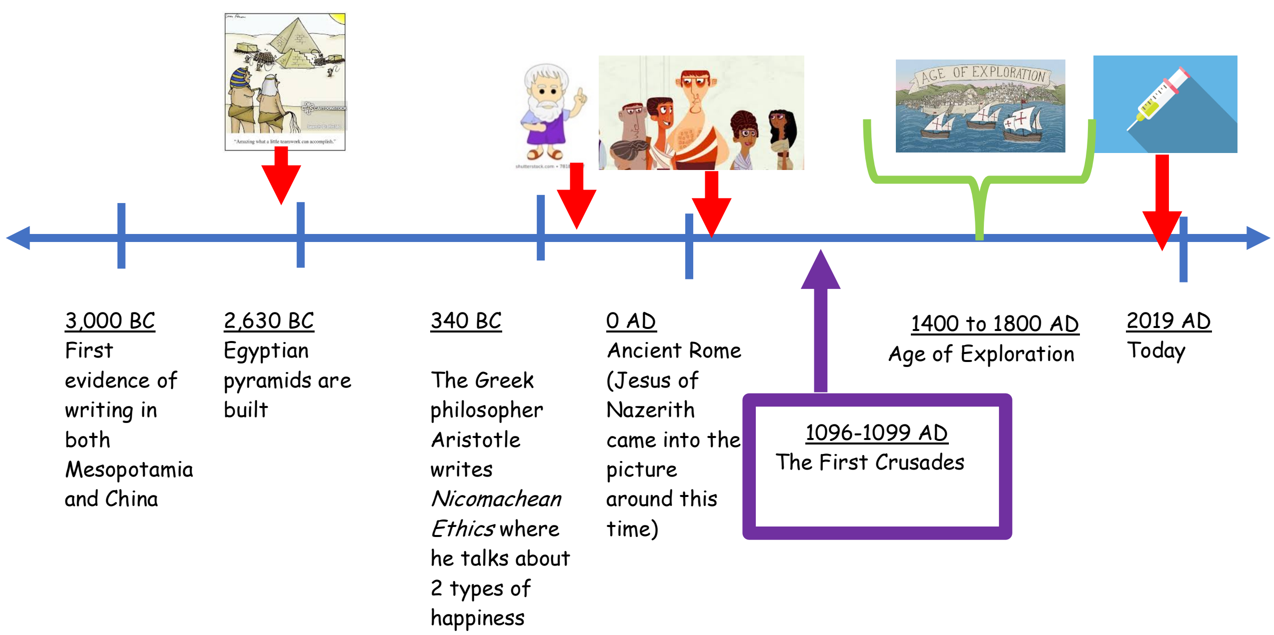
Diagram from Chapter 5		
Judiasm	 Torah	Judaism's core religious text is the Torah. It contains the 10 Commandments, the story of Adam and Eve ("Genesis"), Noah's Ark and more
Christianity	 ~~Torah~~ Old Testament New Testament	Christianity keeps the Torah and adds on another collection of stories, laws, and beliefs after they accept Jesus of Nazareth as a prophet or "Christ." They rename the Torah as the "Old Testament" and the new book is called the "New Testament." Sometimes Christians just call all these books, the "Gospel."
Islam	 Old Testament or Torah New Testament or Gospel Still accepted by Muslims The Quran	Followers of Islam (often called Muslims) accept the Torah and the New Testament as religious texts. But, they believe the prophet Muhammad was the greatest and last of God's prophets. The newest set of rules and beliefs is called the Quran.

For all three of these religions, the city of Jerusalem holds immense importance. For Jews, Jerusalem was the original capital of the Jewish state and the home of their first Temple. For Christians, during Roman rule, Jesus was crucified and then resurrected in Jerusalem. For Muslims, Mohamed died and rose to heaven in Jerusalem. Remember the story of Adam and Eve? According to all 3 religions, one of Adam and Eve's children was Abraham and his body is believed to be buried in Jerusalem as well.

Given all this history, it is no surprise why so much conflict in the Middle East deals with this one city. This special city also contains immense importance in the history of finance

Almost one thousand years ago, a war over Jerusalem led to one of the most important economic innovations—the government bond. In 1096 AD, Christians and Muslims began a 3-year war for greater control over Jerusalem known as the First Crusades. This would happen two more times in history.

<u>Timeline of Human Civilization</u>



During the First Crusades, Muslims from the Byzantine Empire imprisoned a group of businesspeople from the Italian city of Venice[28]. The Venetian government felt a duty to defend their Christian "merchants," the name given to those who make profits off of buying and selling goods at a higher price. The city, however, did not have the money to charter the soldiers, ships and supplies necessary. As a result, the city of Venice sold bonds, which function identically to credit cards or loans, just in reverse.

A **bond** is an agreement where a person pays a government money upfront, and then years later the government or company returns that money plus interest. If you pay $10,000 for a bond with 3% interest, then you get $10,300 back. Bonds have lower interest rates than the stock market, but it does not have the volatility of the stock market. Therefore, you may buy into the stock market with your retirement account at age 25. But, when you are one year away from retirement you may move all that money into bonds—you'll end up with a little less money, but you won't have to worry if the stock market takes a temporary dip in value.

In the 12th Century AD, Venice funded fleets of warships with the issuance of government bonds. Thousands of Italians give their money to the Italian government so Italy could fight in the Crusades. Did Italians do this out of Christian loyalty? Probably somewhat but they also did this because the Italian government would give them a lot of interest back.

Unfortunately, the mission was a complete disaster for Italy: nearly 75% of the soldiers died in battle or the plague. When the head of the military operation returned alive, he was chased down by a mob and hung in public. While Venice's military may have failed, it gave to the world the first bond. This was one of the world's first investments. Today, bonds can be purchased from banks, businesses or governments in nearly every country. The United States Treasury prints America's government bonds.

Even though the governments of the world in the Middle Ages watched as Italy failed in the Crusades, all the nations realized the power of issuing investments.

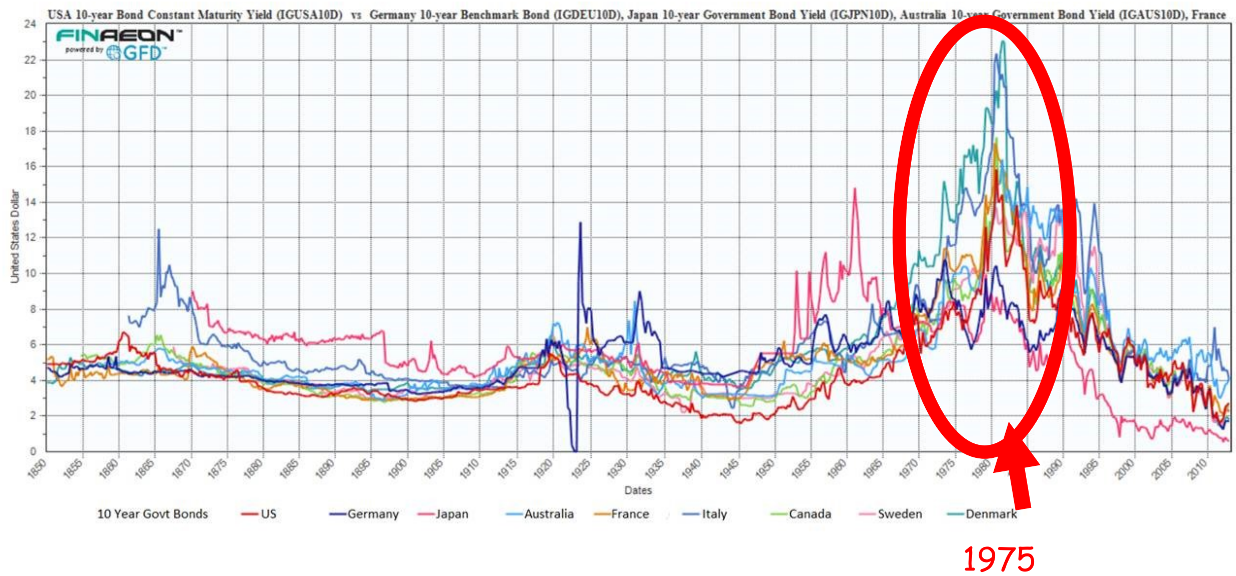
The Bond Market

Chapter 7 explored the idea of a "market place." Ordinary Americans spend money on much more than clothing, food, and medicine. Jobs will pay thousands of dollars per employee for "insurance," so that an insurance company (rather than the employee) will pay most of the medical bills when a worker falls ill. Homebuyers purchase houses or condos to switch from paying rent to a mortgage so that 15 or

30 years later, the homebuyer owns, well, a home. Companies will pay people for their ideas and students pay professors for their knowledge with college tuition, and part of that college tuition goes to fund research labs. The government uses tax dollars to pay police, firefighters, teachers, and construction workers. The government even pays engineers, scientists, and researchers to develop things that companies refuse to start creating—remember, the internet was a government invention. The following diagram was offered to illustrate that there are many ways to measure the health of the United States economy, and so far in this book we have discussed only one of them.

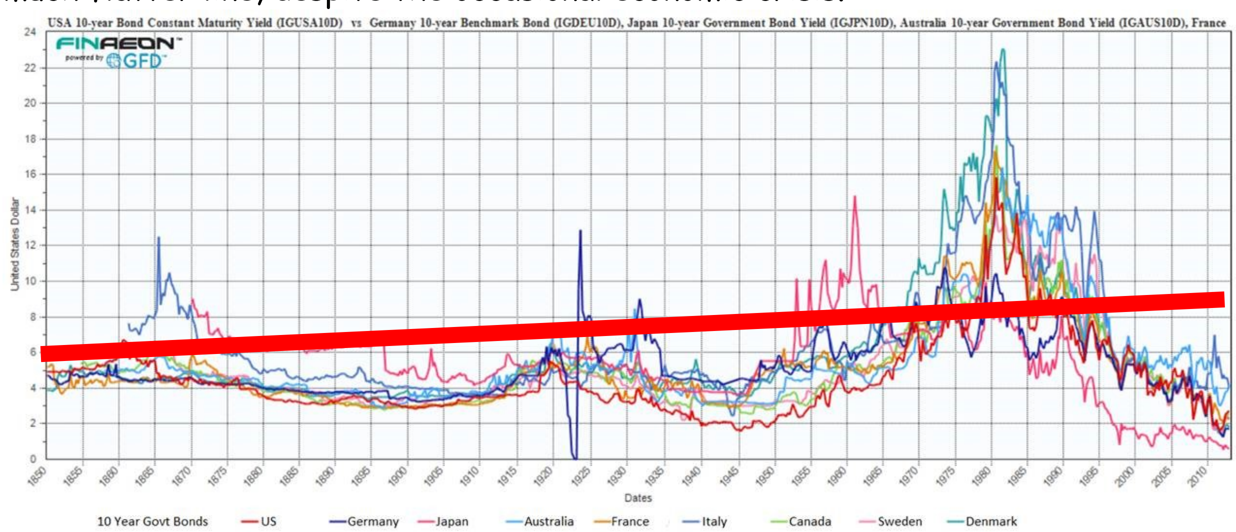
Governments issues bonds when tax dollars do not provide enough money for government services. Just as Venice issued interest-bearing bonds to fund the Crusades, city governments offer "municipal bonds" to pay judges and lawyers to prosecute criminals while Washington D.C prints federal bonds to fund wars, research diseases and rebuild cities after disasters. The government puts your money to use now and agrees to pay back that money plus interest later.

Despite a crisis in 1975, bond interest rates are pretty stable. The diagram below shoes the historical interest rates on bonds:



What happened in 1975? Long story short: President Nixon created a new economic policy where America did not rely as much on reserves of gold. The economy took a shock with this decision, and the government increased bond interest rates so more people would use government bonds.

While the stock market gradually goes up over time, the bond market follows a much flatter line, despite the occasional economic crisis.



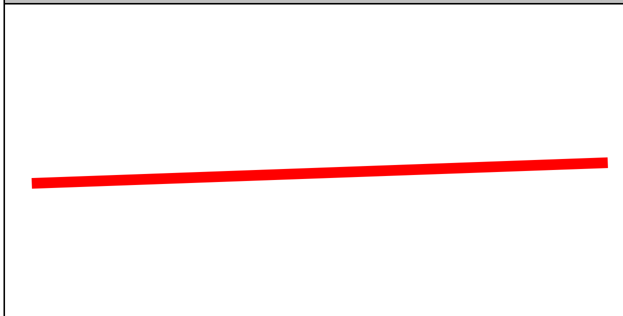
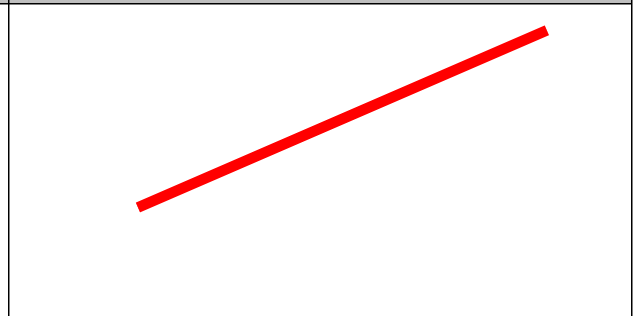
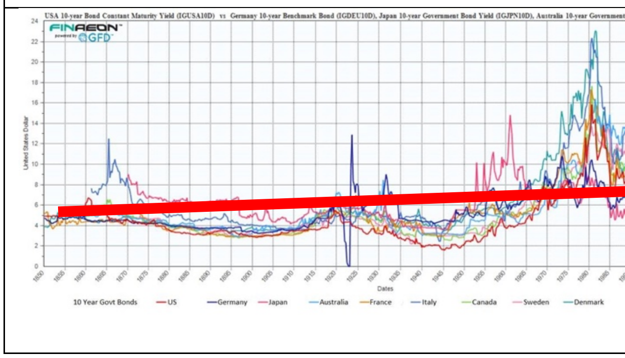
Right now, the interest rate paid on bonds is 3%. This is much more than the average savings account and considerably less than the stock market. It is closer to the average increase in property value per year:

0% interest	0.01% interest	2% interest	3% interest	6% interest
How much extra you get when you stick your money in your mattress	How much extra money you get when you put your money in a bank savings account (very, very little)	How much extra money when you buy a certificate of deposit or other fixed-income investments (more on this later)	How much extra money your house is worth, on average, each year. This is also how much bonds return (more on this later too)	How much extra money your stocks are worth, on average, each year

Bonds versus Stocks: Volatility and Stability

Stocks are more volatile, meaning they go up and down often even though they gradually go up. (Think of a yo-yo going up a hill.) Bonds are less volatile and, thus, more stable. Therefore, stocks are great for young and middle-age investors. The stock market may be down for 5 years, but that makes them cheaper to buy. Since the young and the middle-aged have years to go before retirement, they can wait for those stocks to rise.

Since bonds have a stable return, those who are in or nearing retirement can continue to let their money increase in value without having to worry about losing any. The returns may be smaller but the risk of loss is smaller too.

Health of the US Government (bonds)	Health of US businesses (stocks)
	
	

Certificates of Deposits (CDs): The twin sibling of bonds

Certificate of deposits (or CDs) function almost identically to bonds, except that CDs are given only by banks while the government, businesses and banks can offer bonds. You give a bank a lump of money, and then they return that money (the principal) plus interest. A 10-year CD rate pays a little more than a 5-year CD rate, which pays a little more than a 1-year CD rate. Even though you can keep CDs in banks for many years, the interest rate is very low and not that much different between banks. It’s a good way to make a little bit of money, but it will not get you wealthy.

Average 1-year interest rate for a bank CD	Average 5-year interest rate for a bank CD	Average 10-year interest rate for a bank CD
2.50%	2.55%	2.70%

Other kinds of investments

There are 18 major assets classes. Stocks, bonds, and property represent the top 3, but there are 15 others. A professional financial planner will help you own a little bit of all 18 asset classes, but none of the 15 are as important as the top 3. Below is a diagram that discusses 4 other assets types that may be important to keep in the back of your head if you ever like to talk money with people.

7 Top Asset Classes of out the Big 18	
Stocks	Discussed in detail so far in this book
Property	
Bonds	
Rare-earth metals	Gold, silver, lithium, and cobalt serve important functions. They can be found in jet engines, ant-psychotic medication, and cancer treatment
Commodities	Wheat, cotton, corn oil, and anything/everything physical that can be bought, sold and traded in bulk.
Futures	"Futures" or "future contracts" is ownership over the business dealings of a company in a specific area
Foreign currencies	Not all currencies of all countries are equal. American dollars can be exchanged for the money of other countries. Right now, the American dollar is the most valuable currency in the world. Twelve years ago, it was not. Owning currencies that you think will be worth more than the American dollar allows you to exchange for American money years later.

Rare-earth metals are exactly what they sound like; they are metals that serve important purposes in society. As discussed earlier, gold never loses its strength or shine no matter how much it is melted or manipulated. Therefore, gold can be found in medical equipment and computer chips. Lithium powers smart phones and the electric car batteries. Gun revolvers and baseball bats use scandium. Microscopes and water-purification machinery require lanthanum.

Commodities represent any physical thing that can be bought and sold between parties. If such things can be bought and sold, then a finance expert can come up with ways to connect suppliers and consumers to make a profit. China, for example, purchases soybeans from America and Brazil. If American food scientists create a more effective and safe pesticide for soybeans, China may decide to purchase more soybeans from America and less from Brazil. (If the pesticide is effective and safe, then the soybeans can stay in the produce section of the grocery store longer before spoiling.) If you own American soybeans, when they travel to Chinese supermarkets you make a profit. Commodities include other sources of energy, cotton, dairy products, wheat, agricultural products and more.

Future contracts, sometimes just called **"futures,"** is ownership over the future profits and decisions of a product or service. (This is a little weird.) For example: In order to protect the environment, President Barack Obama prevented much oil drilling and "fracking" of natural gas in mainland America. President Trump removed this restriction to allow more oil drilling and natural gas production. Under Trump, America became the #1 producer of gas and oil in the world, the first time since the 1970s. A smart investor with a time machine would have purchased "futures" of gas and oil under Obama because the gas and oil industry became more profitable under Trump. (This does not mean that Trump's decision was the right one, given effects on the environment, just that it was the more profitable decision.)

Foreign currencies (or the Forex Market) are the currencies or money printed by other countries. Most countries have their own currencies, and some share. The official currency of El Salvador, Micronesia, Puerto Rico, and Ecuador is actually the United States dollar. However, most countries design, distribute and print their own.

Examples of Foreign Currencies.			
Mexico's peso	UK's pound	Canada's "Canadian dollar"	China's renminbi (sometimes called the "yuan"
			

Currencies are not all equal. $1 from America is very different than ¥1 (renminbi) from China. In fact, right now, it takes 7¥ from China to get you just $1 from America. Why is that? One main reason is the strength and quality of the country's government. For example, $1 American equals 20 Mexican pesos because America has had nearly 250 years of a strong economy and banking sector, despite the Great Depression, housing crash and other crises. It would take 20 Mexican pesos to get a European to give up their one $1 from America. There's a greater risk that Mexico, than America, will have a riot forcing banks to close, police officers to attack civilians and a civil war.

Review of diversification

A collection of a person's assets, especially for retirement, is called a **portfolio**. Portfolio's should be as **diverse** as possible, meaning that many different types of assets (and variations of each individual asset) should be in that portfolio. For example, a person's retirement portfolio should have many mutual funds but maybe even some rare-earth metals, futures, and foreign currencies. The process of making sure someone's portfolio is very diverse, is not surprisingly, called **diversification.** The next page illustrates 4 examples of increasingly diverse portfolios:

Low diversification

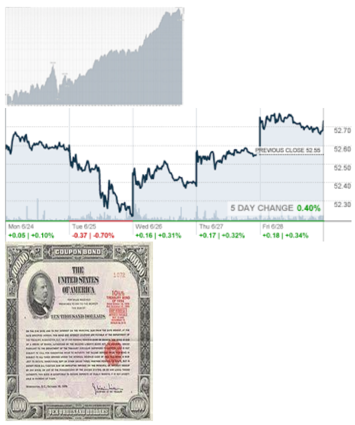
Portfolio #1

♦100% of portfolio is just bonds.

Portfolio #2

♦50% of portfolio is stock in Total Stock Market ETFs

♦50% of portfolio is Treasury bonds that pay 2% interest



Portfolio #3

♦25% of portfolio is Total American Stock Market ETF

♦25% of portfolio is Total International Stock Market ETF

♦50% are Treasury bonds that pay 2% interest

Portfolio #4

♦20% of portfolio is Total American Stock Market ETF

♦20% of portfolio is Total International Stock Market ETF

♦20% are Treasury bonds that pay 2% interest

♦20% in bank CDs

♦5% are currencies of other countries

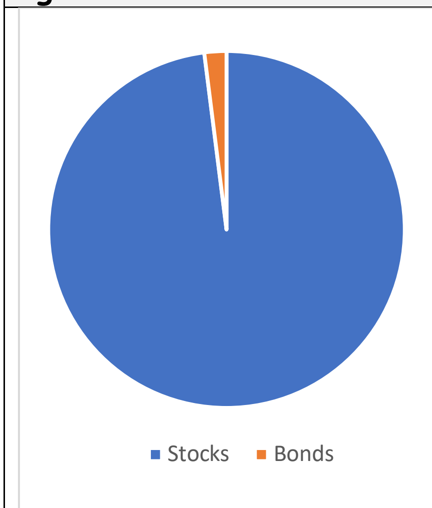
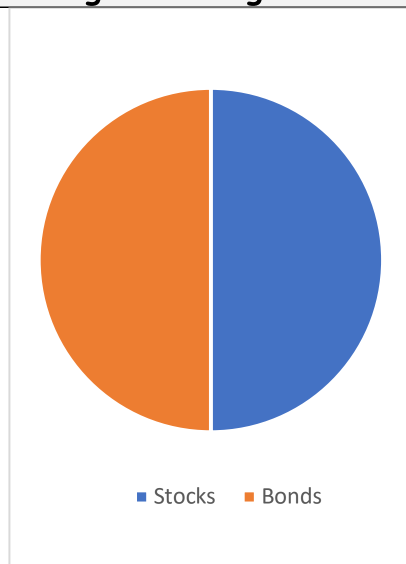
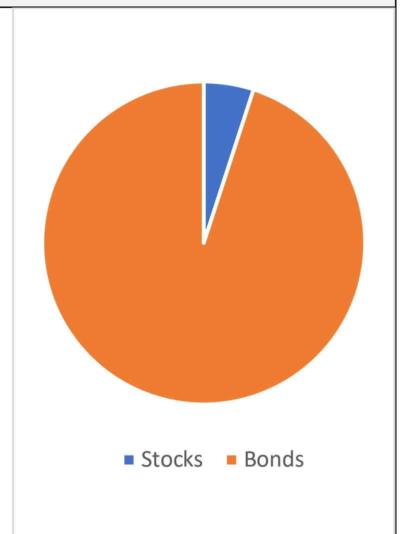
♦5% are commodities of various kinds

♦5% are rare-earth metals

♦5% are futures

High diversification

As people age, their portfolios should have less diversity and more stable assets, even though that will mean smaller returns. People should have nearly 90% of their assets in mutual funds and ETFS up until the age of 35. After that, their portfolio should gradually increase the amounts of bonds (with some of the other asset classes) until the age of retirement:

Suggested portfolio until age 35	**Suggested portfolio during middle age**	**Suggested portfolio near retirement**
		

Buy Low and Sell High

The only way to invest and make money is to "**buy low and sell high**." Every investor knows this idea because it is logically true—the only way to make any money with investments is if the investments are sold at a later date with a higher value.

"Buy low and sell high" makes sense but there is only one way to do it.

Chapter 14 explained that a bunch of monkeys throwing darts on a wall littered with company names beats professional investors. In fact, total stock market ETFS outperforms Warren Buffett.

Group #1 Group #2

Vs.

Picture from TowardDataScience.com

If a person, such as Warren Buffett, attempts to buy low and sell high by selecting just the assets he/she thinks will increase in value, this is called **"playing the market**." This is a terrible strategy and it never works.

As Chapter 14 explained, the best investment strategy known to humankind is to purchase the same funds every year, at the same time, no matter what. This is known as **dollar-cost averaging**.

Here is how **dollar-cost averaging** works. To become wealthy, a person should invest and do it often. Avoid individual stocks but instead strive for a diverse portfolio full of mutual funds, such as the Total American Stock Market ETF and the Total International Stock Market ETF. (I like to call this the World Peace Fund.) In fact, invest a little bit in rare-earth metals, commodities, futures, foreign currencies, and bonds.

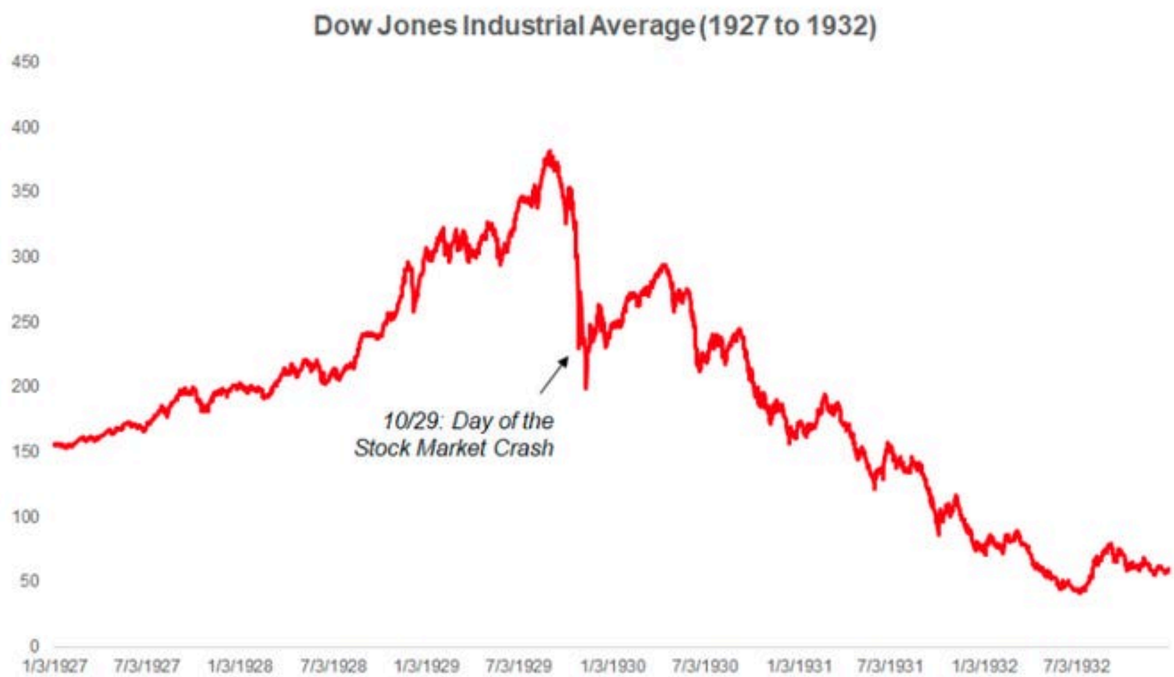
Over 30-year periods, an investor who follows this advice will not be disappointed. Why? There has never been a 30-year period in history where the stock market has not returned, on average 6%, a year even if some years are terrible and some are amazing.

A person should just purchase the same amount of the World Peace Fund each year, gradually changing the portfolio once a year (or less) by putting in more bonds and other asset classes.

Someone who attempts to research the companies that are likely to do best may get lucky one or two years in a row, but no one in the history of the world has been able to play the market and do well.

<u>Chapter 17</u>: When it Crashes, Do Nothing

The most famous stock market crash occurred in 1929. America has seen 24 crashes in its history, but such a big crash was so shocking in 1929 because no one yet realized how normal this process actually was.



Picture from *Business Insider, retrieved at https://www.businessinsider.com/the-stock-market-crash-of-1929-what-you-need-to-know-2018-4*

After the stock market crashed, the next 5 years witnessed 25% of Americans out of work, food scarcity, and poverty unlike anything prior. This bleak episode in American history earned the name, "The Great Depression."

An unemployment line during the Great Depression	A shanty town for those who lost their houses
	

High school history classes often neglect a detail during this turbulent time: the stock market crash did not cause all, or even most, of these problems. The country's overreaction to the stock market crash mostly caused American unemployment, malnutrition, and poverty during the Great Depression.

Strange as that may sound, the stock market crash had less to do with the economic hardship than the government's poor policies it enacted after over-reacting[29]. (We can forgive the American government because no one yet discovered how successful the stock market would be over 30-year intervals.)

As stated earlier, America has had 24 stock market crashes in its history. In fact, there is an economic crisis every 14 years. Problems in the national economy resemble thunderstorms—weeks of clear skies and warm weather cannot last forever; sometimes it storms.

After the stock market crash, the American government set price controls on how much farmers could charge for agricultural products. This may, at first, sound like a good idea to prevent poverty. If no one can afford dinner, why not pass a law saying that bread is $0.01, peanut butter is $0.25, and jelly is $0.25?

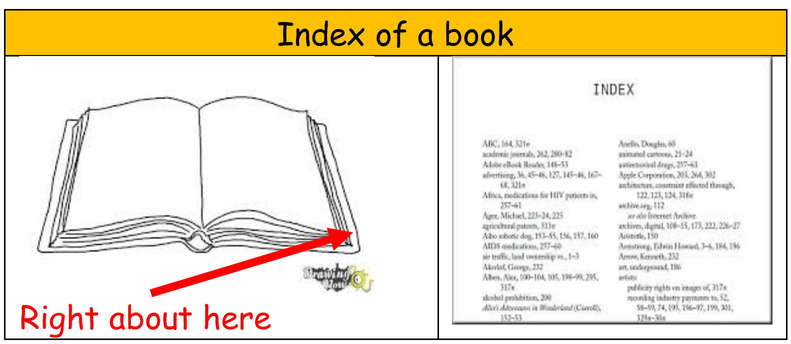
Price controls during the 1930s forced farmers to lose money; if they could not sell their food for a profit, how could they save enough money to survive yet alone pay for seeds, soil and farm equipment? The price limits on corn, wheat and dairy forced farmers to go out of business, which led to food shortages.

The government would set a price control, people would eat cheaply for a period of time, then the food would run out.

Also, at this time, President Franklin D. Roosevelt created the Office of Price Administration which stopped the building of American homes. At first, this seemed like a good idea—if the American people were poorer, we should not allow businesses to create houses for people who could not afford them. However, this caused the current supply of houses to skyrocket in cost. (If three people could each afford a house, and there is only one available, the seller is going to raise the price to the highest amount the richest of the three people would pay.)

What should America have done after the 1929 stock market crash? What should America have done to prevent the Great Depression? For that matter, what should America have done after the 2008 stock market crash that launched the Housing Crisis less than 15 years ago? The answer: **absolutely nothing**[30].

Remember how the stock market can be described in indexes?

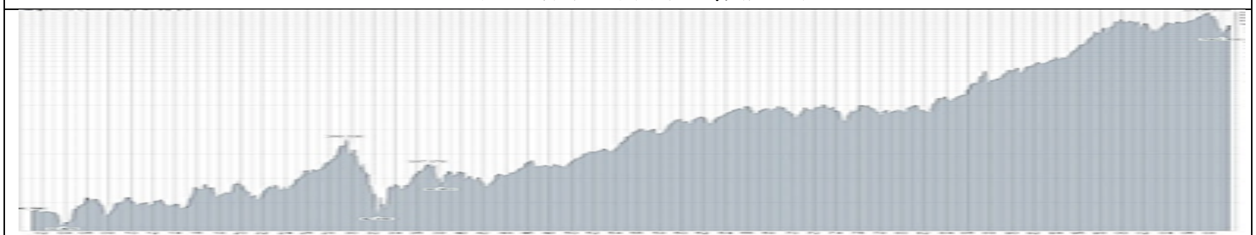


A stock market index is simply a list of all the companies that are bought, sold or traded on a stock exchange. There are some very popular indexes on the next page:

Dow Jones	S&P 500
	

Measure this…

The entire stock market



Not all indexes measure stocks. Some indexes measure the value of gold, rare-earth metals and even agricultural products. Below is one of the best indexes that measure the value of American houses:

The Case-Shiller Index of Home Prices

Crash before the Great Depression

Housing Market Crash of 2008, which can also be seen in stock market indices like the S&P 500 and Dow Jones.

The best average of the increase in value of United States property.

Anytime an index takes a big dip, we call it a **crash**. We can see the same crash affect indices of multiple markets:

S&P 500 during 2008 crash	The Case-Shiller Index of Home Prices during 2008 crash
	

In 2008, the housing market crashed. From 1980 to 2006, American homeowners saw the value of their houses skyrocket. Some purchased a house for $50,000 and were able to sell it for $400,000 within a 26-year period. But that same $400,000 would only go for $200,000 (a 50% reduction!) in 2008. This led the stock market to crash. (Think of all the American companies that rely on valuable property to conduct business.) Many retirement portfolios dropped, temporarily, to 50% their value. Those who had $1 million saved for retirement would look at their bank account and see only $500,000.

What should American homeowners have done when they saw their property value drop by 50% in 2008? Then, when the housing crash spread into the stock market, and the stock market dropped, what should American investors have done? **Absolutely nothing**.

Those who did nothing in 2008—those who did not sell their house nor liquidate their mutual funds—saw their investments return to pre-crash levels in just a couple of years.

Why should Americans do nothing when markets crash? Those same people who saw their house drop to $200,000 and retirement portfolios drop to $500,000 would see those assets increase to $500,000 and $1.5 million in 10 years. Liquidating their assets into cash would have been very foolish, and that's sadly what most Americans did.

Why are there crashes? Answer: It's a different type of line

So far in this book, the historic returns of the stock market have been championed many times. To summarize: no one knows which individual companies will become valuable or go bankrupt. The Optimistic Universe, however, continuously proves that humans continue to innovate, invent, and create new ideas since we first entered into existence 2 million years ago. Since humans need money to find their niche, the world will always rely on money to satisfy their pleasures (hedonism) and goals (eudaimonia.) Humans are forever curious and never satisfied with the way things are. All of this means the stock market will increase over time, even if there are crashes.

Twenty years ago, cell phones were born. Today, there are smartphones. In the next 20 years, perhaps "smart" contact lens will replace smartphones. As has been said and will be continued to be said many, many times: the progress of human ingenuity can be seen in the long-term performance of the stock market:

We NEVER know who will win…

NETFLIX VS hulu

But, together, everyone wins….

Some years the stock market goes up, some years it goes down. This is **volatility**. But, there has never been a 30-year period where it has not produced a 6% increase each year.

Think of the stock market just like a person who knows how wealth can improve well-being. Both are like a yo-yo going up a hill. Someone who knows how to manage money to improve their well-being, and the stock market, may have bad years and good years, but over long periods of time it's a lot better.

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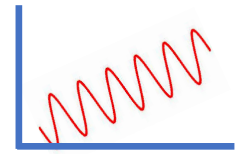


This is true of all markets. Remember from Chapter 7 that there are limitless examples of markets:

Examples of markets or industries	Businesses
Prescription drugs (or "pharmaceuticals")	Rite Aid and CVS are competing to get the most customers.
Jeans Clothing	You could say there is a "jean" industry (Levis versus Gap) or maybe you want to just say there is a "clothing industry" where some clothing stores are fighting with other clothing stores. Either way of thinking is acceptable. There is no clear line between one market and another.
Fast-food delivery Textbooks TV streaming services	Each of these is a separate industry. Then again, maybe they also belong to the "college kid industry."

The housing market represents the average value of property in America. If immigrants continue to travel here, universities continue to expand, schools improve and businesses grow, then American property grows in value. Therefore, the homes that sit on this land grow in value. If war, energy shortages, or protests slow down development, then the land decreases in value.

Markets represent something called a **non-linear** or **dynamic functions**. Non-linear means "not-straight." Dynamic means "change." Therefore, the stock market follows a not-straight and changing line. <u>Dyn</u>amite explodes, and people with <u>dynamic</u> personalities are hard to predict. A dynamic line may move gradually up or gradually down, but it takes a pretty rocky path to get there.

8th grade students learn about "functions" in math class and their teachers probably rarely communicate how cool these things are.

A **function** is a way to represent a process that turns one number into another. Take a look at the diagram below:

X	Y
1	2
2	4
3	6
4	8

Can you figure out how to turn X into Y? What you have to do is double X to get Y. Your math teacher would present a formula that says: Y = 2X, and all that means is if you double X, you get Y.

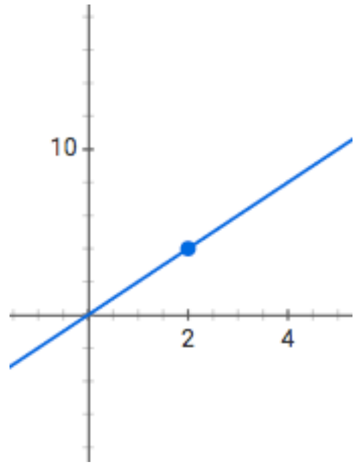
What a math teacher does not always tell you is that Y = 2X is only 1% of the story. As soon as a researcher figures out Y = 2X, the next and bigger question is WHY?!!

If Y is the energy needed to power a house and X is a turn of a giant windmill, this formula means that 2 "turns of a giant windmill" give you the "energy to power a house." That's pretty cool.

This data can more accurately be represented as:

<table>
<tr><th>X</th><td rowspan="5">Some mysterious process creates…</td><th>Y</th></tr>
<tr><td>1</td><td>2</td></tr>
<tr><td>2</td><td>4</td></tr>
<tr><td>3</td><td>6</td></tr>
<tr><td>4</td><td>8</td></tr>
</table>

We call this "mysterious process" a function. A **function** turns one thing into another; something turns X into Y—and this is what ALL of math, since the history of forever, studies. An air conditioner turns your 100-degree apartment into a cool 68 degrees. Antibiotics turn your sick body into a healthy one. Y = 2X can be represented by the following line below:

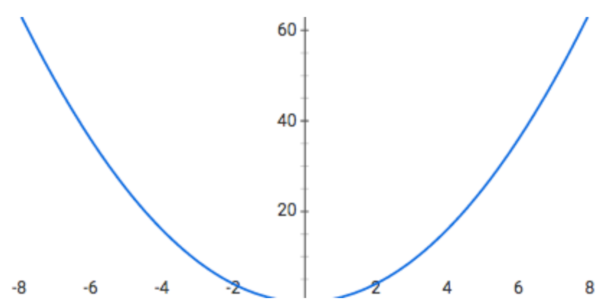


The stock market, like well-being or happiness, is NOT linear. This means that it is not always going up; sometimes it goes down.

Take a look at the data table below:

X	Some mysterious process creates…	Y
-2		4
-1		1
0		0
1		1
2		4

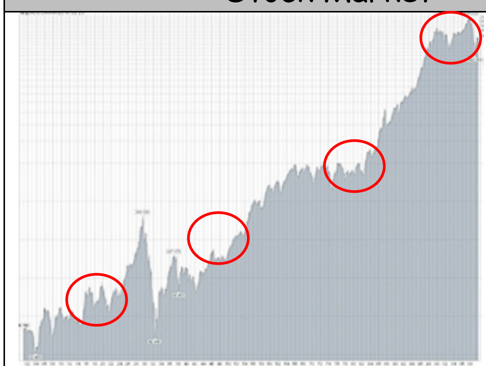
Even before I tell you what the formula is, take a look again at the table above. Can you see something strange that happens between the X and Y values? The answer: As the X gets higher, sometimes the Y is higher. Sometimes as the X gets higher, the Y is lower. The above table's formula can be represented as: $Y = X^2$. The line looks like this:



This curve or "U" looking function can be found in both the measure of the stock market and the housing market.

We can call this mysterious process or "function" the "performance of the market," and it can refer to the stock market, housing market, and most other markets.

Take a look below:

Stock Market		Housing Market	
	There are so many dynamic or non-linear functions!		Same thing here

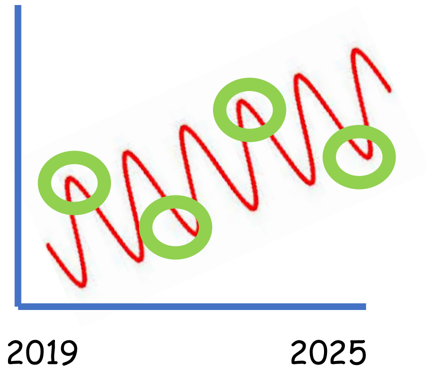
<u>Dollar-cost averaging automatically makes an investor buy low and sell high because of its dynamic curve</u>

To review: whether you are purchasing the World Peace Fund in the stock market, a bound of gold in the rare-earth metal market, or buying property in the housing market, the Holy Grail is to *buy low, sell high.* But, to do this, requires almost acting in the most opposite way than you would expect.

The World Peace Fund is going to be worth more in 2019 than 1970. If a modern-day grandma bought the World Peace Fund in 1970 and sells it in 2019, she has bought low and sold high. If a modern-day grandpa bought a farm in 2000 and sold it in 2015, he would have bought low and sold high.

The big problem is, no one can predict the stock market. While the stock market has averaged an increase of 6% a year over every 30-year period, no one knows what happens during those 30 years.

When the line dips down, the asset becomes cheaper to buy. When the line goes back up, the asset becomes more profitable to sell. Since the stock market, rare-earth metal market, and all other markets follow this dynamic curve, the best strategy is to purchase the same amount of investments at the same time each month or year no matter what.

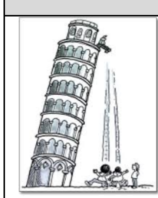
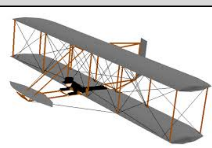
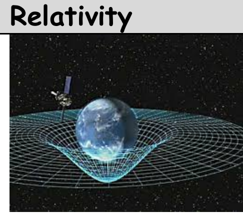
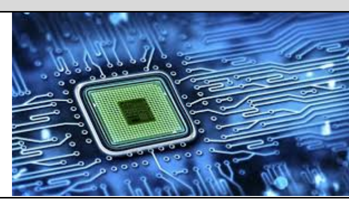


Assume each green circle represents the 12th of every month, which is when your brokerage and retirement accounts automatically deduct money from your checking account to purchase the World Peace Fund.

Due to the non-linear line, some months you buy your mutual funds cheaper and other months they cost more. But, over time, they are all worth more money.

As stated earlier, dollar-cost averaging is a fancy sounding name for a very, very simple procedure—purchase the same amount of an investment the same time each month or year, no matter how crazy the market looks or what the news says.

The Optimistic Universe teaches us that wars, political scandals, and natural disasters will come and go but humans will continue to improve, innovate and collaborate.

Galileo helped discover gravity.	This helped us invent airplanes.	Airplanes actually helped Albert Einstein discover his Theory of Relativity	Einstein's Theory of Relativity gave us the world of computers	This made the economies of different countries grow bigger and bigger.
				

The markets teach us that volatility is natural. Just like a yo-yo going up a hill, finance follows a non-linear function. Thus, as soon as you can invest, start to do it, do not stop and do not let yourself get distracted by fear of crashes. Those will happen and continue to happen all throughout human history.

I, the author of this book, invest on the 12^{th} of every month no matter what.

For you, it could be the 2^{nd} of every month. For others, it could be the 23^{rd}. Whatever day it is, stick with it from now until the day you retire. This is dollar-cost-averaging and all research, analysis, and journalism reveals is the most effective way to invest.

To summarize, in the short-run, a market looks like a heart-beat going up and down. This is a dynamic or non-linear curve.

Over the long run, we can see the curves are gradually moving upward just like a yo-yo going up a hill.

This allows any investor to use dollar-cost averaging to buy-low and sell-high.

If America had figured this out a hundred years ago, we may never have had the Great Depression.

Chapter 18: Buy Property When You are Ready

The Housing Crisis of 2008

All industrialized countries of the world experience stock market crashes. America has had 24 of them. Most recently, American home prices crashed leading to the Great Recession that went on for 3 years beginning in 2008. Millions of Americans lost their homes, jobs, and savings. Many Americans who planned to sell their house, retire, or at least return to work could no longer. As discussed in the last chapter, in times of financial crisis do NOTHING. This can be easier said than done.

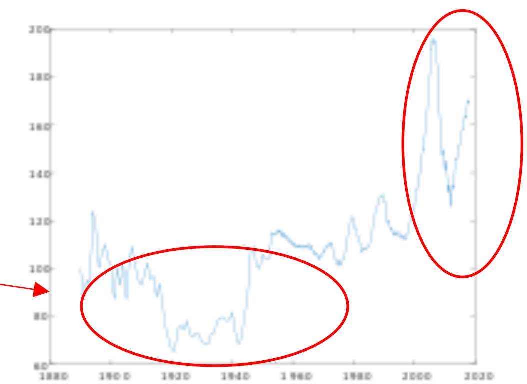
Pictures from the 2008 Housing Crisis

To explain this event, and what it teaches us about home ownership, let's review some of the concepts in the previous chapter.

The Housing Market Line

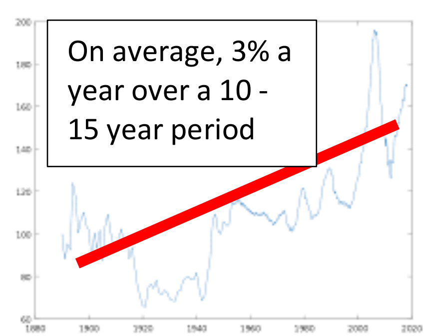
The housing market, like the stock market, represents a non-linear or dynamic function. Some years, your house is worth less than the previous year. Other years, it is worth more. But, over the long run, property increases (on average) 3% a year. As stated throughout this book, the Case-Shiller index provides the best summary of American property values year-by-year, and it is certainly a non-linear function (aka very curvy.)

Crash before the Great Depression

The Case-Shiller Index of Home Prices

The best average of the increase in value of United States property.

Housing Market Crash of 2007

The stock market outperforms the housing market, but the housing market is a close second. Both are volatile, but both provide consistent returns over the long-run.

The stock market	The housing market
	

What does this mean for you?

1. Property is a great investment. Given that crashes are as natural as thunderstorms, and that property increases on average 3% annually, then owning a house is like owning a mutual fund that is guaranteed to go up over time.

2. Buy a house only if you can live in it for 10 to 15 years. A house bought today may be worth less next year. Then again, maybe it will be worth a lot more. Year to year, no one knows. The housing market, like the stock market, follows a dynamic curve so it may not increase in value every year. A home owned for 10 to 15 years, however, usually equates to a 3% increase each of those years. For example, a house purchased for $100,000 in 2007 would sell for $50,000 in 2008 during the Housing Crisis. That same house, if sold in 2017 (10 years later) would go for $148,000. A $48,000 profit could be earned just by living in a place for 10 years!

3. Anyone who does not own property is probably paying rent. Unless someone lives with relatives (which is not a bad idea), then chances are a person either owns a home or pays rent. When someone rents an apartment, the renter mails a monthly check to the landlord. At the end of the year, the renter may choose a different place to live. The landlord earned a year's worth of rent payments and the renter has the memory of living in the apartment and nothing more. But, if the renter were a homeowner and a year later wanted to move, then the homeowner could sell the house and make some money. A "renter" pays only to borrow a space; no asset is gained in this process.

How to "Buy" a House

Most people who say they "own" a house actually do NOT own it—it is NOT necessary to pay for an entire house upfront and yet still hold the deed to the house. If writing a check for the full cost of a house were a requirement to own it, there would be far fewer homeowners in this country—the average home price is $230,000 and very few Americans have that sitting in a bank. To "buy" a house actually requires two things: a down payment and a mortgage

A **down payment** is a portion of the entire cost of the house that you, the future owner, must pay upfront. A **mortgage** is a bank loan for the rest of the house. The following house is actually available for purchase for $600,000 in Philadelphia:

Imagine you want to buy this house, but you do not have $600,000 in your bank account. You can still buy it! You walk into a bank and here is the conversation:

> YOU: I want a loan for $600,000 for a house
>
> BANKER: Okay. We can give you a mortgage. How much do you have saved for it?
>
> YOU: $100,000
>
> BANKER: Okay, here is the paperwork to complete a mortgage for $500,000. You will take $100,000 of your own money and the $500,000 this bank is about to give you should go to the current owner. When you give the seller all $600,000 you will get the deed to the house. Remember, if you do not pay back the $500,000 loan to us, we can take the house from you.

Why call it a mortgage and not just "loan?" Loans for houses get a special name because the interest rate is lower than most loans. Why? Why would the bank give you a lower loan for a house than, say a credit card? The answer: the bank can legally take your house from you if you do not pay back the loan. As long as you pay your monthly mortgage bills, you are still considered the owner of the house. You can renovate it, sell it or turn it into a castle! A bank's ability to seize possession of the house, in case the owner fails to pay mortgage bills, keeps a mortgage interest rate lower than credit cards:

Average credit card interest rate	Average mortgage interest rate
22%	4-7%

A 4%-7% interest rate is no small amount, but it's WAY smaller than 22%. Mortgages have lower interest rates than credit cards because a bank knows exactly where your house is, making it easy to seize in case of late payments. If the credit card went to purchase clothes, the credit card company won't even bother trying to look for the clothes, yet alone attempt to re-sell them. A bank may try to find and repossess a car when someone neglects car payments, just like a home. The bank's knowledge of where exactly to find your borrowed assets, i.e. a house, enables a lower interest rate.

How to get mortgages with the lowest interest rate

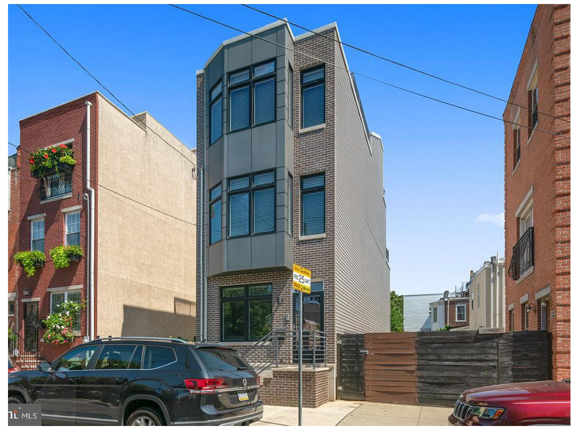
There are two types of mortgages, and the difference between the two could not be more important. The two types are a fixed-rate mortgage and an adjustable-rate mortgage, and the Devil hides in one of them.

A **fixed-rate mortgage** is exactly what it sounds like; the interest rate on the mortgage loan stays the same; it is fixed. If the bank offers you a $500,000 mortgage at 4% interest to buy a $600,000 house (because you have $100,000 saved up), then that 4% interest will never change.

An **adjustable-rate mortgage** is also exactly what it sounds like, the interest rate can change; it is adjustable. If you want to buy a $600,000 home but you only have $1,000 saved up, the bank may give you a mortgage for $599,000 but the interest rate will be adjustable. Assume you get a $599,000 mortgage with an adjustable interest rate starting at 4%. In one year, the bank may send you a letter saying the interest rate changed to 10%. That could be over $30,000 extra than you were planning to pay the bank. Not good.

How do you get a fixed-rate mortgage rather than an adjustable-rate mortgage? Usually, it requires a <u>20% down payment.</u> 20% is the magic number.

Assume you come across your dream home in Philadelphia for $700,000. (This house is currently on sale as of August 28, 2019.)



What is 20% of $7,000?

20% = 0.20

20% X 7,000 = ?

Same as…

0.20 X 7,000 = $140,000

You do NOT want an adjustable-rate mortgage. No way is some bank going to trick you into paying tens of thousands of dollars unnecessarily. Good thing you have been a diligent investor in the World Peace Fund. You liquidate some of your funds for the 20% you need, which is $140,000.

You go to the bank and show that you have $140,000. The bank gives you a loan for the remaining $560,000 at a fixed 4% interest rate. We call this a fixed-rate mortgage.

You then give all this money to the current owner of the house, and he gives you the deed to the house.

A **down payment** is how much money a future homeowner must pay out of his/her own pocket to qualify for a mortgage. A bank does not want to provide a home loan if the buyer has little money and is thus unlikely to pay off the mortgage in case of financial hardship.

The Untold Story of the Housing Crisis of 2008

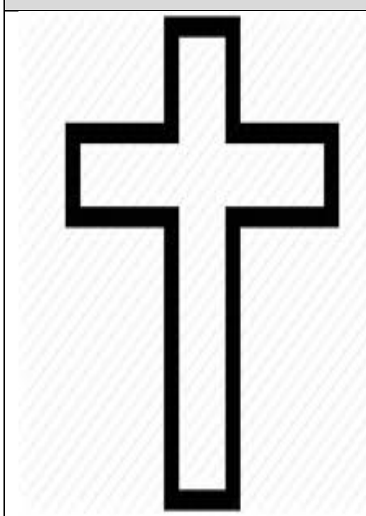
This chapter began by discussing the Housing Crisis of 2008. When the stock market and housing market crashed, millions lost their homes. Why? Most of those who lost their homes had adjustable rate mortgages. Banks had seen a lot of their investments drop to zero when the stock market crashed, and to make up for that loss they did what they were legally allowed to do—they increased the interest rate on the adjustable-rate mortgages. Most of those who had to abandon their homes did so because they could not afford their monthly mortgage payments with the interest rate increase. Those who lived below their means, had money saved, and purchased a house with a fixed-rate mortgage were able to remain in their house even if they had to find a new job. In fact, 2008 was the best time to buy a new house! The Housing Crisis of 2008 was mostly a crisis for those with adjustable-rate mortgages.

CNN, Fox News, and the rest of the media continue to portray the Housing Crisis as an example of corporate greed. In reality, it was a crisis of the poor financial literacy of homeowners.

Chapter 19: Buy the right types of insurance at the right times

The Beginning of Modern Banking[28]

One of the most vital inventions in finance began in the Middle Ages, right around the time Italy invented government bonds. Remember how around 1,000 AD Christians and Muslims were fighting for control over the city of Jerusalem? To the Christians, Jerusalem held holy significance as the place where Jesus died and God resurrected him. To the Muslims, Jerusalem was also the city where Muhammad died and descended into heaven. As discussed in Chapter 16, the series of wars over possession of this city is called the Crusades.

The Crusades		
	 Vs.	

Italy, a mostly Christian country, hired soldiers and built fleets of ships to send to Jerusalem. To do this, Italy invented **government bonds**. Ordinary people would give their money to the government, and each year those investors could get their money back plus interest. Around the same time, Britain invented a different financial instrument to support the Crusades in a different way. While Italy invented the bond, Britain invented the modern bank staffed with knights.

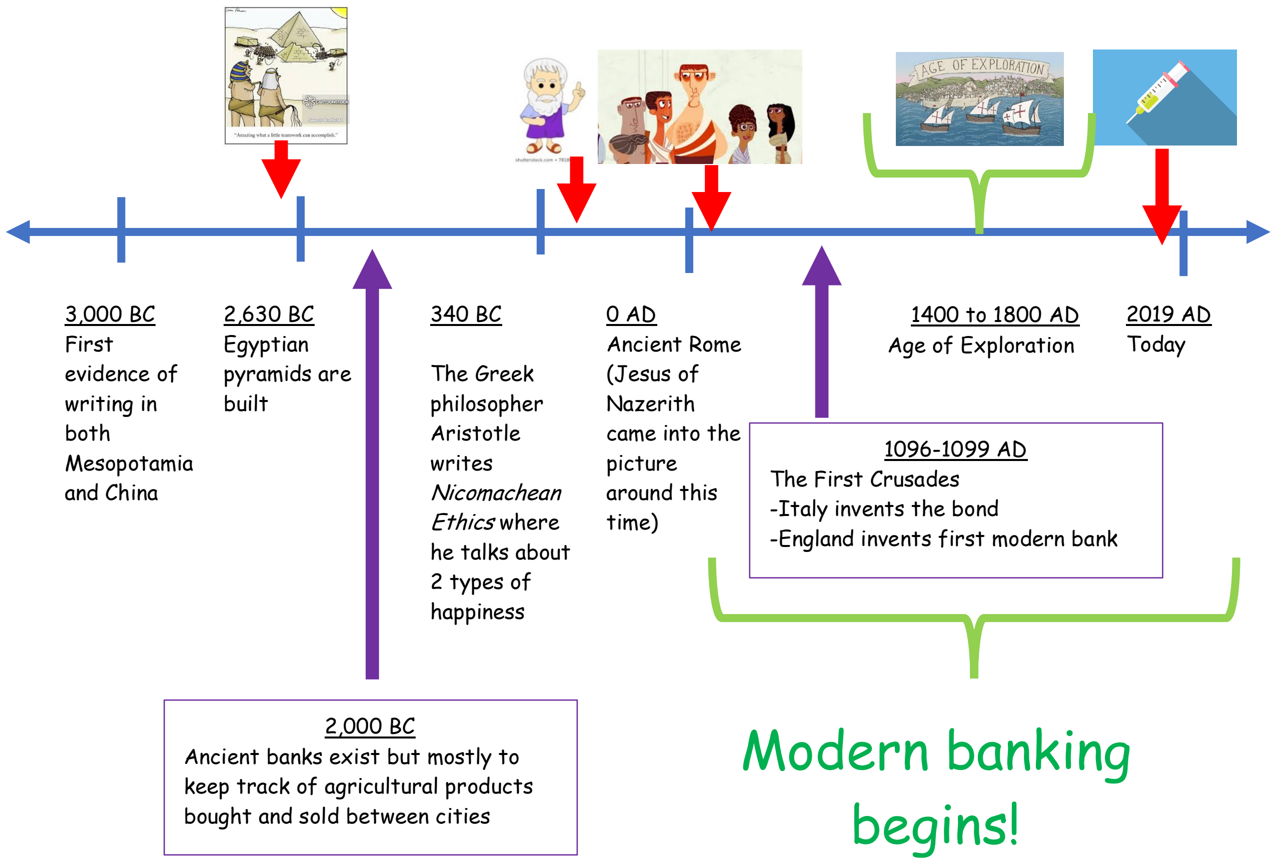
Home of the first modern "bank"

Home of the government bond.

To protect religious travelers heading to Jerusalem, the King of England created the Knights Templar. These knights not only fought in iron armor with swords, but they protected the ordinary peasants who desired safe passage to the holy land. The Knights Templar vowed a life of poverty and service to the country, making them the most trustworthy bankers imaginable. The Knights Templar proved so successful at protecting pilgrims that they soon protected the valuable possessions of travelers and the English royalty. These knights functioned as bankers, keeping track of deposited gold and valuables for the rich and elite in medieval Britain. They would charge interest and compensate those whose valuables went missing. The Knights, for their service, were awarded a pension. As discussed in Chapter 8, a **pension** is a monthly amount of money that is paid for a retired person every month until death. The Knights may have sworn an oath of poverty, but if they protected the pilgrims and the valuable belongings of kings and queens, they would be rewarded with a guaranteed monthly source of income until they died—not a bad deal when the majority of people at the time were peasants dying of the bubonic plague.

The Knights Templar were financial masterminds without ever realizing it, and they represented a serious change in the history of finance. Below is the updated History of Human Civilization timeline we have built upon many times in this book. Starting around the time of the First Crusades and continuing throughout the Age of Exploration, modern finance first appeared:

Timeline of Human Civilization



Insurance

Soon after the first bank appears, so too does insurance. **Insurance** is when a customer pays a monthly amount of money to be protected in case of specific emergencies. For example, imagine a homeowner who purchases home insurance for $100 a month and accidentally comes home to see the entire house on fire. The insurance company will write a check for the entire worth of a house to rebuild it. $100 a month is a good deal since a home is, on average, worth over $200,000.

Without home insurance, that $1 million home is worth $0. Below are common forms of insurance, and there are many more:

Examples of Insurance	
Renters insurance	Pay a little bit every month, and have your belongings replaced if someone breaks into your apartment
Health insurance	Pay a little bit every month, and the insurance company will pay your hospital and doctor bills when you are sick
Car insurance	Pay little bit every month, and have your car fixed or replaced if you are in an accident
Longevity insurance (this is an interesting one!)	Pay a little bit every month once you retire, and get a monthly check if you ever run out of retirement money.

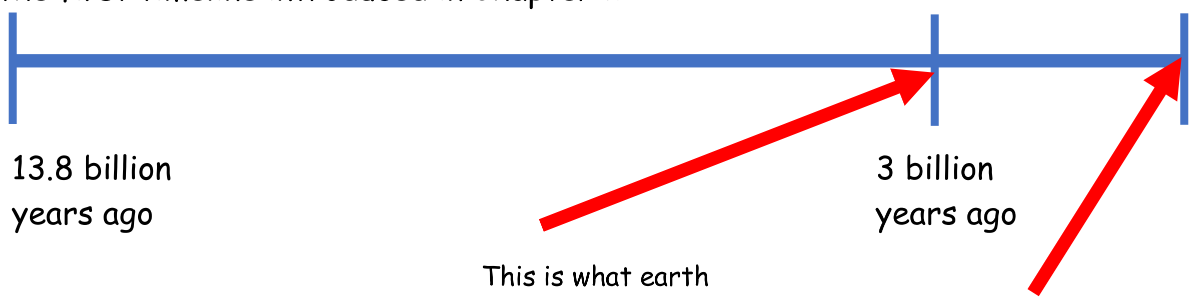
A helpful way to remember insurance is to understand two related words: "insure" and "assure." To insure is to protect, and to assure is to give confidence to. Both are a way of supporting someone, which is what insurance is all about.

Two words related to **insurance**		
To "insure"	To protect	I will **insure** your motorcycle for $50 a month. If it ever breaks, I'll fix it as long as you pay me $50 every month no matter what.
To "assure"	To express confidence in	I **assure** you that you will do great at the chess tournament.

The History of Insurance

Insurance represents an outrageously important innovation. To truly appreciate it, we must revisit some timelines again.

While the Italian government and English royalty invented bonds and banks the rest of Europe began using early forms of insurance. Let's return to a version of the first timeline introduced in Chapter 2:




(Picture from Quora)

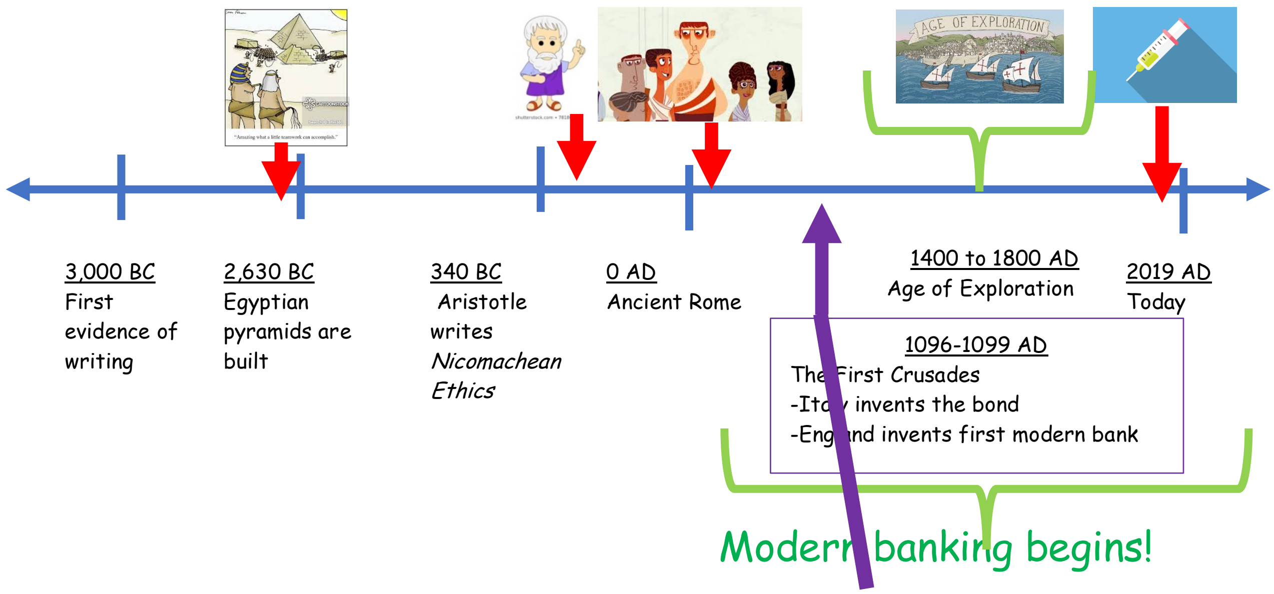
This is what earth looked like. Boiling oceans and the air filled with poisonous gases. No living thing could live here.

2 million years ago, which is 0.06% of this time line, humans enter existence.

In the 2 million years that humans existed, only the last 5,000 years (about 3,000 years BC and then another 2,000 years AD) did humans settle down, learn to write and then start building civilization. That means for 1.996 million years humans were just cavemen beating each other with clubs and hunting wild game. What allowed humans to begin the process of building civilization? The main answer is writing. Writing allowed humans to communicate, come up with architecture plans, pass on religion, and write math equations. During these 5,000 years of civilization it was only the last 1,000 to 500 years that humans got super sophisticated. If writing enabled civilization 4,000 years ago, what began mankind's intellectual and innovative prowess in the last 1,000 to 500 years? The answer: finance.

Humans may have built pyramids, bridges, and iron swords from 2,000 BC to 1,000 but in the last 500 years we have seen: fossil fuels, steam engines, vaccines, houses, telescopes, computers, phones and more. Just look at the list of inventions on the timeline on the next page:

Timeline of Human Civilization



Inventions created during this time:
-Bridges, churches and temples, castles
-Ships and boats
-Spears and swords
-The wheel

Inventions created during this time:
Electricity
Cars
Nuclear energy
Fossil fuels
Satellites
Rockets

Humans in the last 500 years had more innovation than the 3,500 years of civilization before that (and clearly more innovation than the 1.996 million years before that!) Mankind's intellectual achievements skyrocketed in the last 1,000 years (and more specifically just the last 500 years) because of finance.

As discussed in Chapter 14, the Age of Exploration involved the ruling kings and queens of Europe financing explorers to travel the world in search of gold, colonies, and resources to trade. Christopher Columbus, Hernan Cortez and the Aztecs, and Galileo with his telescope all occurred during this time.

Chapter 14 explained how gold motivated many of these expeditions. Gold was (and continues to be) a rare-earth metal that never loses its shine or strength no matter how much it is melted, broken or mixed. It comprised jewelry, dentures, and heating equipment. Without gold, humans would still be living in castles or on farms, unable to have achieved the great engineering feats of modernized society. While gold may have motivated kings and queens, what actually got Christopher Columbus and the other explorers motivated to get in those boats?

The Knights Templar received **pensions** and ordinary people could buy **bond**s and **stocks**. What then motivated explorers?

Exploration was dangerous and hard. Sailors often died of starvation, malnutrition or disease if foreign tribes did not kill them first. The answer: **insurance.**

Explorers and their team of sailors often engaged in insurance agreements with the kings and queens. In case of ship damage (or sinking), the explorers and sailors would be compensated for the damages and still be paid. Of course, they would get a portion of any gold that was found. This was the only way explorers would take such risks.

Explorers, sailors, and soldiers needed protection when venturing into new continents and countries. Although loyal to their kings and queens, these travelers needed to be promised protection, payment, and coverage from damages in case storms, violent native peoples, disease, and unknown dangers awaited them in new lands.

Insurance gave the kings and queens the ability to motivate explorers in search of gold, and it gave motivation to those bold enough to travel to far off lands. If Kings and Queens agreed to take care of the explorers in times of trouble, they would pocket 90% of whatever land, resources or gold was found.

Insurance allowed everyone to get a good deal.

Paying for insurance

Since the types of insurance vary widely, each person may select different types of insurance at different times in their life. The purpose of insurance is to be protected from emergencies that could not be paid on their own. The leading cause of bankruptcy in America continue to be medical bills. Cancer treatment can run from $250,000 to $500,000. Very, very few people have that money sitting in a bank. But, paying $300 a month in health insurance means that the very unlucky person to get a diagnosis of cancer could get their treatment at $0.

Most insurance plans can have up to 3 parts: a premium, deductible and/or copay. Some insurance plans have all 3; some have only 2; and some have just 1. This is how they are different;

1. **Premium** is the monthly amount of money a person pays to keep an insurance plan. For example, the average renter's insurance to cover the cost of a break-in or fire will cost about $15 a month. The $15 each month is called the premium.

2. **Deductible** is how much someone pays to activate their insurance. For example, I have a $500 deductible on my car insurance. If I get in a car accident and the damages cost $3,000, I have to pay $500 before the insurance company pays the rest. This is the insurance company's way to make sure I am a safe driver.

3. **Copay** is how much someone has to pay when receiving services, which is almost identical to a deductible. My health insurance may come with a $300 premium, a $500 deductible and a $20 copay. My job pays $500 a month for my health insurance, every month no matter what. If I need dental surgery for $5,000, I have to pay a $20 copay just to meet with my doctor. Then, if I decide to go through with the $5,000 surgery, I will pay the $500 deductible. The copay, like the deductible, is a way for insurance companies to make sure people do not activate their insurance policies unnecessarily.

As stated earlier, insurance plans may have one, two or all three parts. Sometimes, the customer gets to choose. For example, I had the choice to pay $200 a year for renter's insurance with a $500 deductible or $220 a year for renters insurance with a $0 deductible. (I picked the higher premium and the $0 deductible.)

Chapter 20: Cars

A necessary but bad investment

Cars may be one of the most convenient inventions, but by definition cars are one of the worst investments. Why? Cars are NOT investments. Investments are things we expect to increase in value over time, such as a college degree or securities like mutual funds. Unless the car is a limited-edition novelty car, cars always go down in value.

Gold, stocks, bonds and property always increase in value over time because they represent assets that will always have an increasingly important function in society. Could you ever imagine a future where we did not need to invent new technologies with strong metals (gold), rely on new businesses (stocks), ask for government help (bonds) or conduct business on land (property)? Of course not! Metals, companies, governments and land will always be important to civilization.

Humans spent 1.996 million years as caveman and only 4,000 years with organized civilization. What allowed humans to move out of caves? The answer: inventions, businesses, government and land. Cars get worn out, break down, and need to be replaced. Cars are not investments.

Why do cars decrease in value?

As soon as a new car is driven out of the car dealership, it automatically decreases in a value. A brand-new Toyota Carola goes for $25,000. Imagine someone decides to sell their $25,000 one minute after leaving the car dealership, literally 60 seconds after making this purchase. The most this person will get is around $23,000. Why? Even if the purchaser did nothing to the car, the future owner has no idea if the previous owner, in those 60 seconds, slammed on the breaks, dropped coffee in the seats, or got a flat tire. If the car is only 60 seconds old, a customer might as well get an actual brand-new car for $25,000 from the dealership without the worry that the previous owner did something stupid with the car in one minute's time. One minute of ownership will drop a car's value around 8%--that is no investment.

Cars always decrease in value over time because they get worn down, need replacements, and newer cars are put on the market. Cars decease in value over time just like food in a refrigerator. Food expires, so those leftover tacos sitting in a lunchbox are worth a lot less than fresh tacos.

Buy new or used?

Always purchase a used car. This may seem counterintuitive because the car may have sat through a flood, gone 10 years without an oil change, or experienced 5 car accidents before getting sold. These are sensible fears but nothing an auto-mechanic could not inspect for you.

Any quality mechanic can inspect a used car to determine its value. A mechanic can usually determine if a car can survive another 1, 5 or 10 years.

Used cars will always be cheaper than new cars, and any quality car repair shop can let you know if a used car has any damage. Just like the human body shows scars from surgeries and diseases, a car too has tell-tale signs if its engine, frame, or interior have been damaged. Why used over new? A used car can function just as well as a new car, but it will always be cheaper simply by being used. (Think of the new car that drops 8% in value as soon as leaving the parking lot.)

Lease, Lease-to-own, or buy?

There are 3 options when getting a car, and only one of them represents the best financial option:

1. **Lease** – a lease is when someone borrows something and pays a monthly bill. When someone rents an apartment, they sign a lease agreeing to pay monthly rent to inhabit the space. The person is borrowing and will not own any of it. To lease a car means that someone pays a monthly bill to rent the car and returns it once the lease is over.

2. **Lease to own** – someone borrows a car each month and after a set number of months or years, the person then owns the car

3. **Buy** – someone pays for a car upfront and then is the owner of the car. This person may purchase the car from a car dealership or an individual person who just wants to get rid of his/her car.

Two options when purchasing a car	Pay for it out of pocket	Car loan
	Use money in your savings account	The bank gives you the money, but you pay back the bank back with interest

Which is the best answer? <u>Buy and pay out of pocket</u>. Leasing and lease-to-own costs the car driver more money over the long run than owning a car. No car dealership would lease a car if they did not make a profit on the arrangement. By leasing, you pay a higher monthly amount for the duration of the lease rather than if you bought it upfront. The best option is to buy a used car out of pocket and use the car for as long as possible until it breaks down.

<u>What do you do if you cannot afford a car? Don't get one, except in one case.</u>

Most teenagers and college graduates do not have enough money saved up for a car. This presents a problem: If it is more financially savvy to pay for a car upfront rather than lease, what do you do? If a new college student or employee needs a car but does not have enough money saved to buy it, what is the most financially wise next step? The answer: Do not lease or take out a loan for a car. Instead, use public transportation unless: (1) you can pay off the auto loan and own a car within a year, and (2) this allows you to take a job or attend a college you would not have otherwise.

To be wealthy, you must:

1. Live below your means
2. pay yourself first,
3. invest and do it often.

Taking out a loan for a car, or leasing a car, goes against all of this. Most people take out car loans for $10,000 to $20,000. (Some old cars sell for just $500 and last one to two years.) The average worker, who contributes to a roth IRA and makes a $45,000 salary, will take 5 years of additional savings to pay off that loan.

If you cannot afford a car, then take public transportation. Public transportation has its benefits besides being the most cost-effective commuting strategy. Public transportation provides an opportunity to read, listen to podcasts or music, journal, or watch YouTube. (Some Youtube channels can better explain physics, economics and history than a lot of teachers, so do not think YouTube is simply for frivolous pleasures.)

The only exception to this rule is if a loan or car lease would enable travel to a cheaper college or a job with a much higher salary. If you want to be a teacher, suburban schools pay $20,000 higher than Philadelphia city schools. A train to a Philly school will be cheaper than a car loan to commute to Doylestown, but Doylestown schools would pay you so much more that it would justify a car loan.

Another example could be if a company offers you a job in their Newark, New Jersey office or their Atlanta, Georgia office. Newark has pretty good public transportation; a combination of buses and trains effectively transverses the entire city. Atlanta, however, is known to be a city that is only travelable by car—the buses they have are so few that it's nearly impossible to travel extensively in the city without a car. If Atlanta will pay you a high enough salary so that you could pay off your auto loan and own a car in a year, then take the job.

Chapter 21: The Many Forms of the Devil

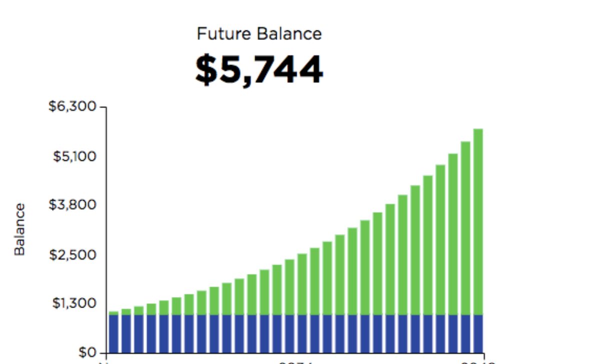
Credit Card Review

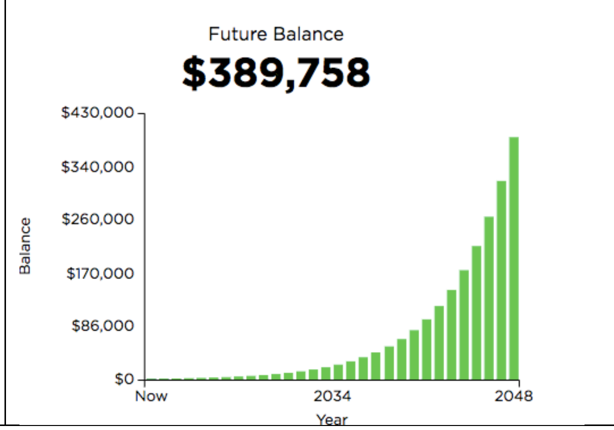
If ordinary Americans can live below their means and pay themselves first, many, routes to wealth become available—mutual funds, property, bonds, and more. As discussed in Chapter 5, the surest way to destroy this growth involves credit cards. Why? The interest rate on credit cards far exceeds the returns of the stock market, bond market, and housing market.

0% interest	0.01% interest	3% interest	6% interest	22% interest
How much extra you get when you stick your money in your mattress	How much extra money you get when you put your money in a bank savings account (very, very little)	The average increase in property values each year, and the average yearly bond return	How much extra money your stocks are worth, on average, each year	The average credit card interest rate

Imagine two different people. The first person invests $1,000 in a roth IRA for 30 years. The second person spends $1,000 on a credit card with 22% interest and ignores it for 30 years. Look at how much the $1,000 becomes in these two scenarios:

$1,000 invested for 30 years, assuming a 6% annual return	$1,000 of credit card debt with 22% interest

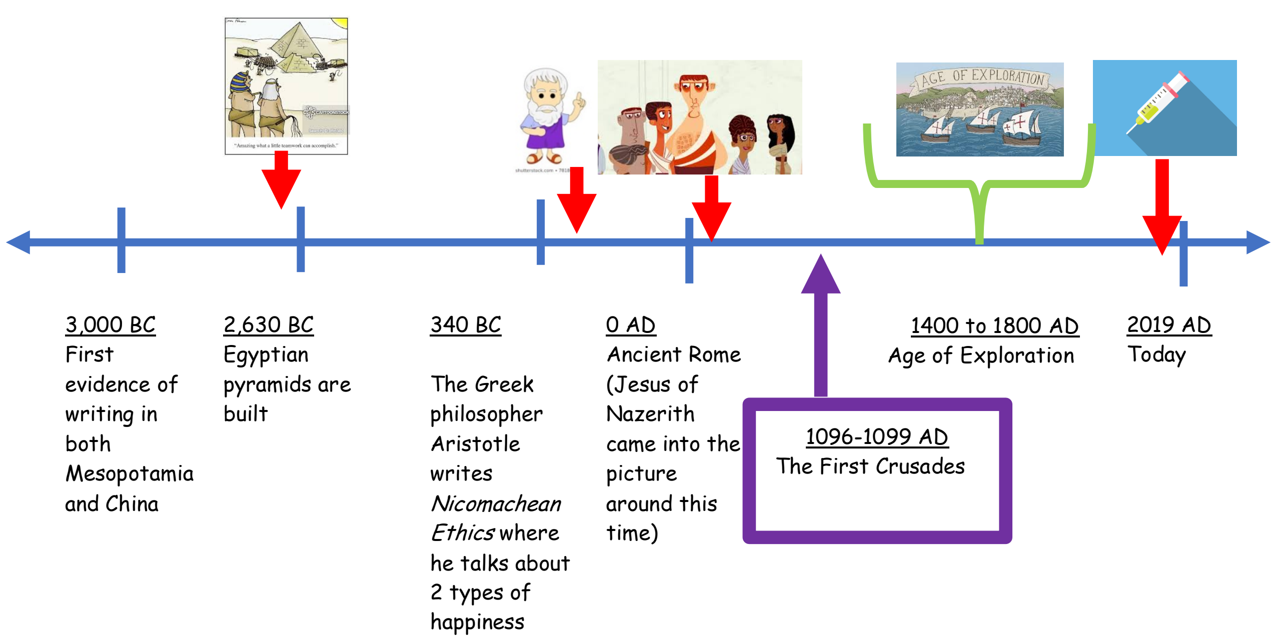




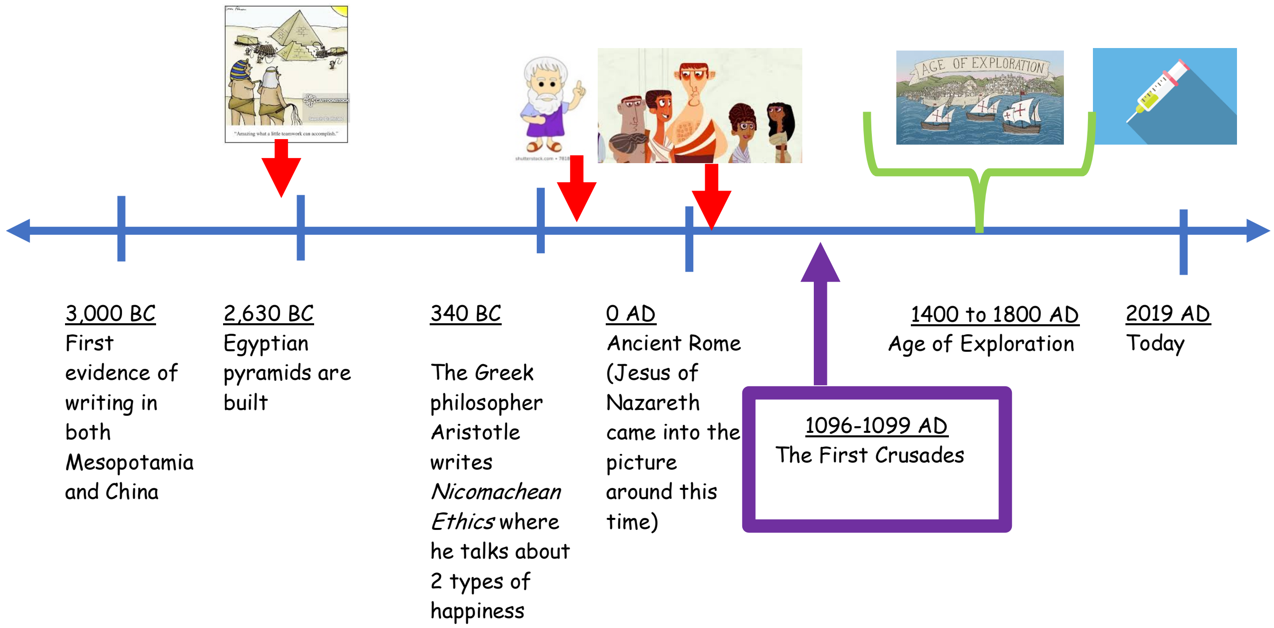
As Chapter 5 discussed, credit cards and the devil share many similarities:

Characteristics of the Devil	Characteristics of Credit Cards
Temptation	Credit cards can be used to fund Caribbean vacations, a car or going out to eat every day! Credit cards are tempting you.
Shape-shifter	Credit cards may offer you points that you can use on airlines, cash back, or offer you other rewards. The temptation of credit cards can come in many forms, but do not be tricked.
Super smart and logical	Credit cards SEEM to be wise. If you get points, rewards or other gifts the more you use them, then why not get a credit card? BAD IDEA. The interest is higher on a credit card than anything else.
The Devil tricks you into a bad deal	The temptation is so strong, but it's always a bad deal. Credit card interest is so high that it's higher than the amount of money you would gain using the stock market and other really profitable ways to generate wealth. It is always a bad deal

The timelines presented in this book can help illuminate how religious descriptions of a "devil" came to mirror credit cards. Below is the most recent version of the History of Human Civilization Timeline used in this book:

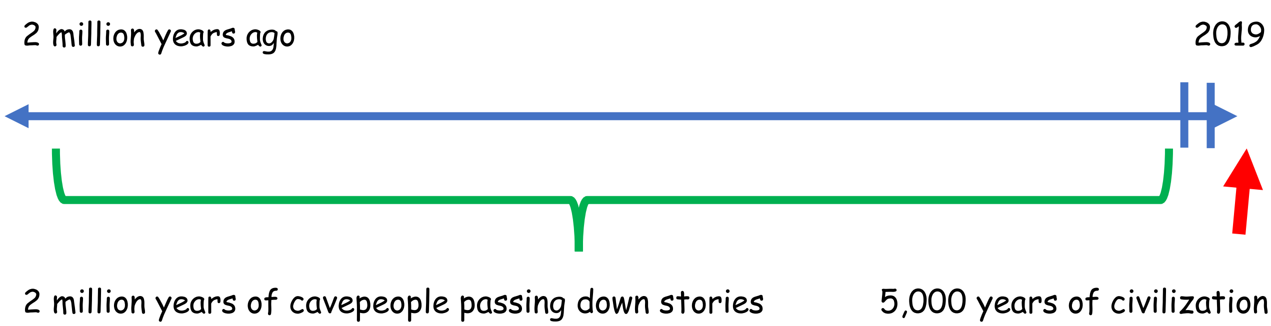


During these millennia, all of the civilizations of the world take their religions and write them down.



The Jewish Torah, the Christian Bible, The Muslim Quran, the Mahayana Sutras of Buddhism, the Bhagavad Gita of Hinduism, the Zend-avesta of Zoroastrianism, and all other religious texts are recorded.

Before humans figured out writing, they spent 2 million years as cavepeople. Their religious beliefs, stories, and ideas about gods and devils were passed down through stories during this time.

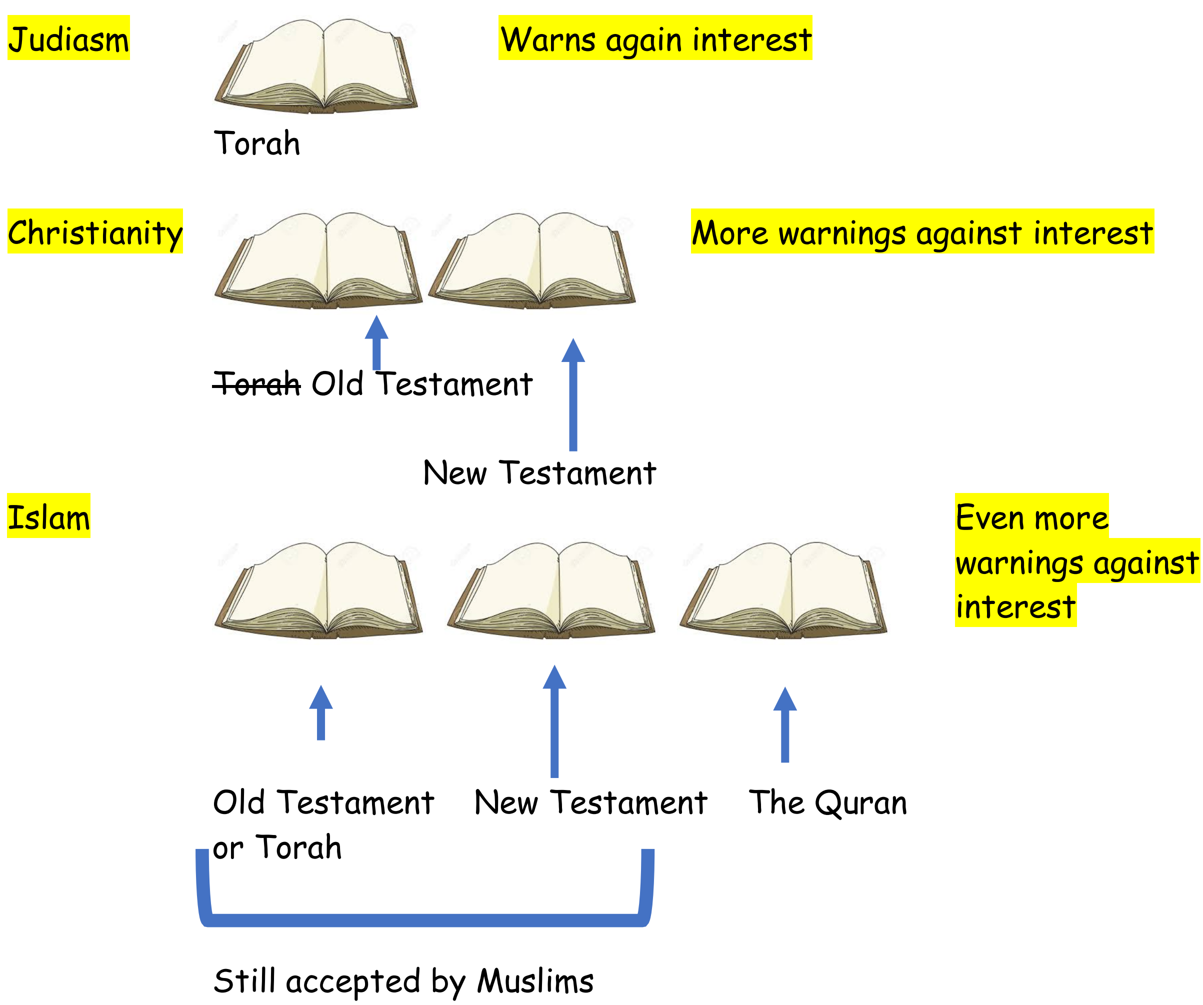


Religion served many functions in civilization, such as teaching. Religious temples and places of worship would instruct adults and children on how to behave.

Neighbors would murder one another, tribes would take slaves, and people would steal. The devil, in part, functioned as a tool for religions to help people explain and avoid the bad sides of human nature[31].

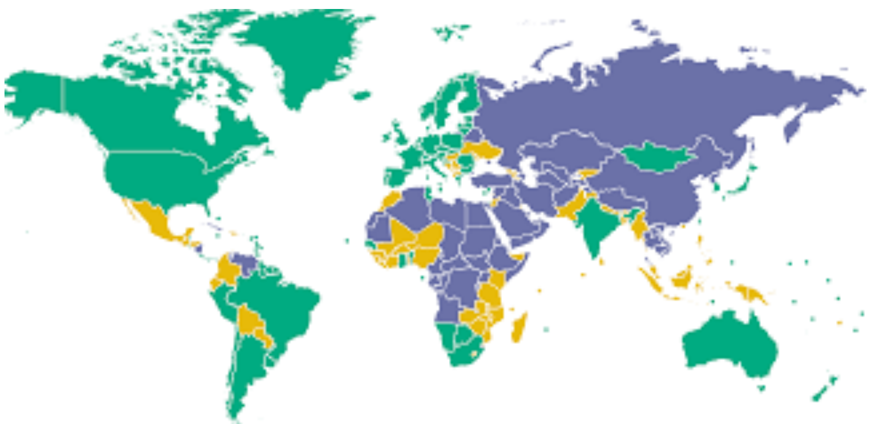
One of the many things that religious leaders, scholars and students learned and taught over this time is that money could enable violence, greed, and temptation. That's right—the sacred texts of religions often mentioned money.

As mentioned before, 60% of today's living humans practice Judaism, Christianity or Islam. The Torah, Bible and Quran all set limits and regulations around interest. Since public education only began a couple hundred years ago, these religions used the devil to explain interest. In fact, the world's religions invented a word for financial decisions that required outrageously high interest rates—usury. Usury was a sin.



The Ancient Greeks invented democracy. Nearly 1, 000 years later, England put limits on their king's power with the Magna Cara in 1215. America, however, represented the world's first nation to actually attempt a full-fledged democracy. America's successful democracy inspired the French Revolution, the growth of England's democracy, and all other democracies around the world.

World Map of Democracies



Green = free, democratic nations, yellow = partially democratic, purple = not democratic

Source: https://freedomhouse.org/report/freedom-world/freedom-world-2019

Curious or impressed by how democracy swept across the world so quickly in just a few hundred years after America signed the *Declaration of Independence* in 1776? The answer will surprise you because it is so simple. Every revolution in history can be summed up in one sentence: "Forgive the debt and redistribute the land[32]."

"Forgive the debt and redistribute the land."

The important takeaway is this: as long as humans have existed, we have been manipulated by and suffered from debt. The finance industry, banks, businesses and ordinary sales people have tricked people into taking on debt for thousands of years. The next section of this chapter will explore the different forms credit cards take. (The devil is a shape-shifter.) It's important to realize that the shape-shifting, debt-piling, and usurious strategies to trick people into spending more than they can afford is, literally, as old as history.

The Many Forms of the Devil

This section explores the many ways borrowers can be tricked into debt with options that mirror credit cards:

Personal Loans

Banks offer personal loans with very high interest rates, usually around 10%. **Personal loans** are almost identical to credit cards, except that instead of a plastic card, a sum of money is automatically deposited into a checking account. The borrower swipes his/her debit card, uses the money in the checking account, and then must pay back the loan with interest.

Store cards

Store cards are simply credit cards with specific perks when shopping at a specific store. An Old Navy Card may give you a 50% discount the day you sign up for the cards and a 20% discount every time you shop at the store. Again, the problem is the same. These perks, no matter how much you shop at the stores, cause customers to LOSE money due to the interest rate.

College loans

The government provides affordable loans for college, and these will be discussed in Chapter 25. College loans with reasonable interest rates include subsidized loans and Federal Stafford loans. Many banks, however, will offer you private student loans. ("Private" here means the bank gives it to you without the college's knowledge.) **Private student loans** can be as high as 10% and come with adjustable-interest rates, so the interest could increase suddenly.

Car loans, car leases, and lease-to-own arrangements

As discussed in Chapter 20, those who cannot afford a car may be tempted to take out a car loan from a bank, lease the car from the owner/dealership, or sign up for a lease that eventually transfers ownership after a number of years. All of these arrangements force the borrower to pay interest. Public transportation should be used instead except in two cases: (1) the car will be used to attend a higher-paying job that justifies the lost money to interest, or (2) the car will be used to attend a cheaper college that justifies the lost money to interest.

Title loans

A "title" refers to proof of ownership over an asset. Someone who purchases a car will get the "title" to the car, which proves to the insurance company and police that he/she actually owns the car. A **title loan** is a high-interest loan where the lender can seize possession of an asset (such as a car or house) if the lender does not pay back the loan on time.

Payday loans

Payday lenders (or loans) represent legal businesses that lend out money in agreement that the person's future paycheck automatically arrives to the payday lender. The lender keeps the amount of money owed plus interest. Those who rely on payday loans clearly do not live below their means or pay themselves first or they would not need money before their next paycheck.

Cash advances

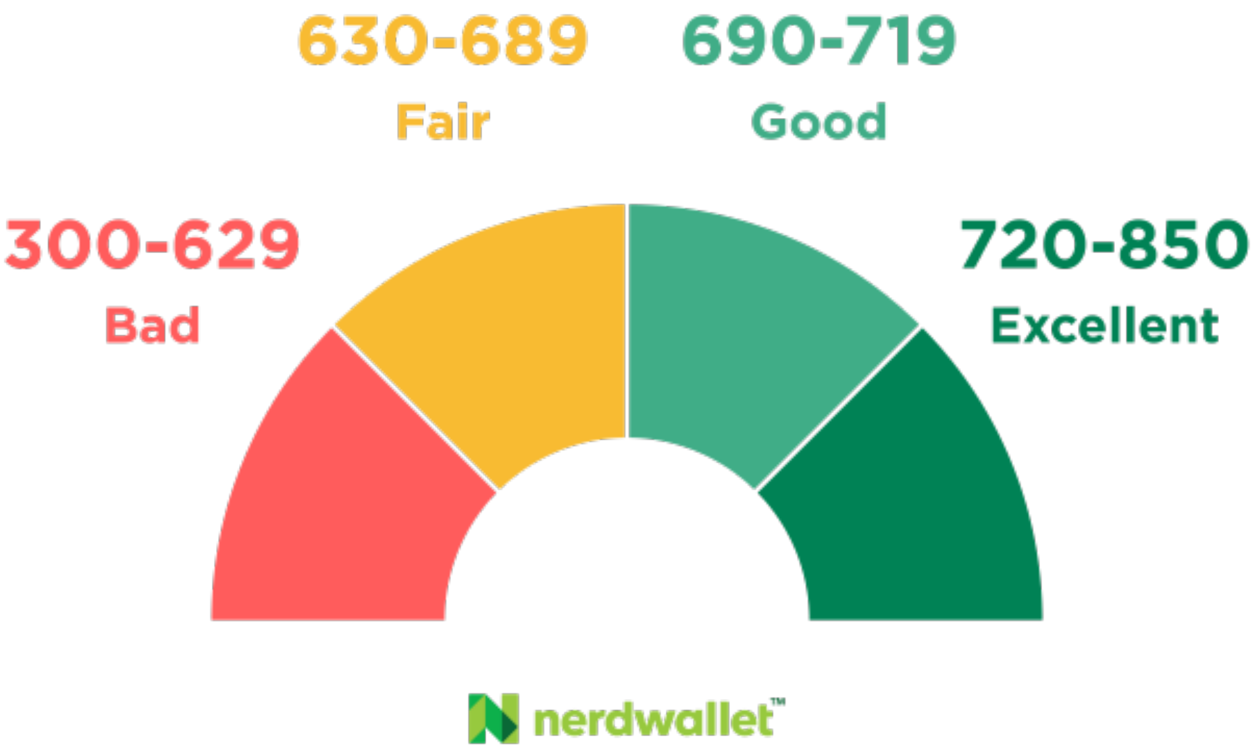
Cash advances occur when a company provides automatic cash into a bank account under the agreement that the money is paid back with interest. Not only do all major banks and credit cards offer cash advances but so too do PayPal, Venmo and the Cash App.

The truth about credit scores

Anytime and every time someone swipes a credit card, 3 major companies are keeping track. In fact, they are keeping score. These 3 companies are considered "bureaus" because while they do make profits, their principle job is record keeping. They are **Experian, Transunion, and Equifax**. All three issue a credit report and offer a credit score on every American that has a credit card.

Credit scores or FICO scores refer to a number between 300 and 850. Experian, Transunion and Equifax each offer their own number, and most banks or other loan-giving businesses just average the 3 scores.

A score between 300 and 629 is considered bad, 630-689 is considered fair, 690-719 is good and 720-850 is great.



Retrieved from: https://www.nerdwallet.com/blog/finance/credit-score-ranges-and-how-to-improve/

You earn points by taking out loans and paying them back on time. Equifax, Transunion and Experian keep data on your non-credit card purchases as well. These 3 bureaus know if you pay utilities, rent, or a phone bill late. They also know how much student debt you have and if those payments are made on time. The better the score, the lower your interest rates. Why? If a bank sees you have a high score, they will give you a lower interest rate on a house since you are likely to pay the mortgage bills on time.

To get the lowest interest rates, you often only need a score between 680 and 750. This can be achieved by owning just one credit card, paying the bill on time, and calling up the bank each year to ask for an increase in the **credit limit**, or the amount of money a credit card can be used to make purchases for.

To earn a score between 800 and 850 requires multiple credit cards or loans and on-time payments. Luckily, a score of 800-850 does not offer any additional benefits a 750 score already affords. Thus, the quest for the highest possible credit score represents just another trick by credit card companies and banks. You will do just fine with one credit card in life.

Minimum monthly payments and balances: The devil is in the details

Assume that Chump's Bank offers the *Fool's Gold Rewards Credit Card* with a $10,000 credit limit and 10% interest. Let's say someone receives this credit card and buys $4,000 worth of electronics at Best Buy. Chump's Bank will divide the $4,000 into **monthly minimum payments**, or how much to pay each month without incurring a late fee, and a **balance**, or the remaining amount. Credit card companies will not add on a late fee when a monthly payment is made on time, but the remaining balance will earn interest each month.

Take a look below. This is what most people THINK happens with credit card payments.

What people THINK happens with $4,000 of credit card debt		
10 monthly payments		Remaining balance
1st month	$400	$3,600
2nd month	$400	$3,200
3rd month	$400	$2,800
4th month	$400	$2,400
5th month	$400	$2,000
6th month	$400	$1,600
7th month	$400	$1,200
8th month	$400	$800
9th month	$400	$400
10th month	$400	0

Below is actually what happens given interest:

What actually happens with $4,00 of credit card debt		
10 monthly payments		Remaining balance
1st month	$400	$3,600 + 10% interest = $3,960
2nd month	$400	$3,560 + 10% interest = $3,916
3rd month	$400	$3,516 + 10% interest = $$3,867.60

4th month	$400	$3467.60 + 10% interest = $3,814.36
5th month	$400	$314.36 + 10% interest = $3755.80
6th month	$400	$355.80 + 10% interest = $3,691.38
7th month	$400	$3,291.38 + 10% interest = $3,620.52
8th month	$400	$3,220.52 + 10% interest = $3,542.57
9th month	$400	$3,142.57+ 10% interest = $3,456.83
10th month	$400	$3,056.83+ 10% interest = $3,362.51

In reality, after 10 months of $400 you will have given the credit card company $4,000. How much will you still owe in 10 months? The answer: $3,362.51. By swiping this credit card for $4,000, you will have paid $4,000 in 10 months and still owe $3,362.51.

The lesson: paying a minimum balance may boost your credit score and avoid late fees but the credit card balance still gathers interest.

When you swipe a credit card, do not just pay the minimum monthly amount. Pay off the balance in full to avoid any interest.

The main reason to avoid multiple credit cards even if you have a credit card that offers temporary 0% interest

Some credit cards offer 0% interest for multiple years before the interest rate increases. This means each purchase a shopper makes comes with a 2-year waiting period before the credit card balance increases. A temporary 0% interest credit card means the $4,000 home speaker system may not jump to $4,400 for two whole years.

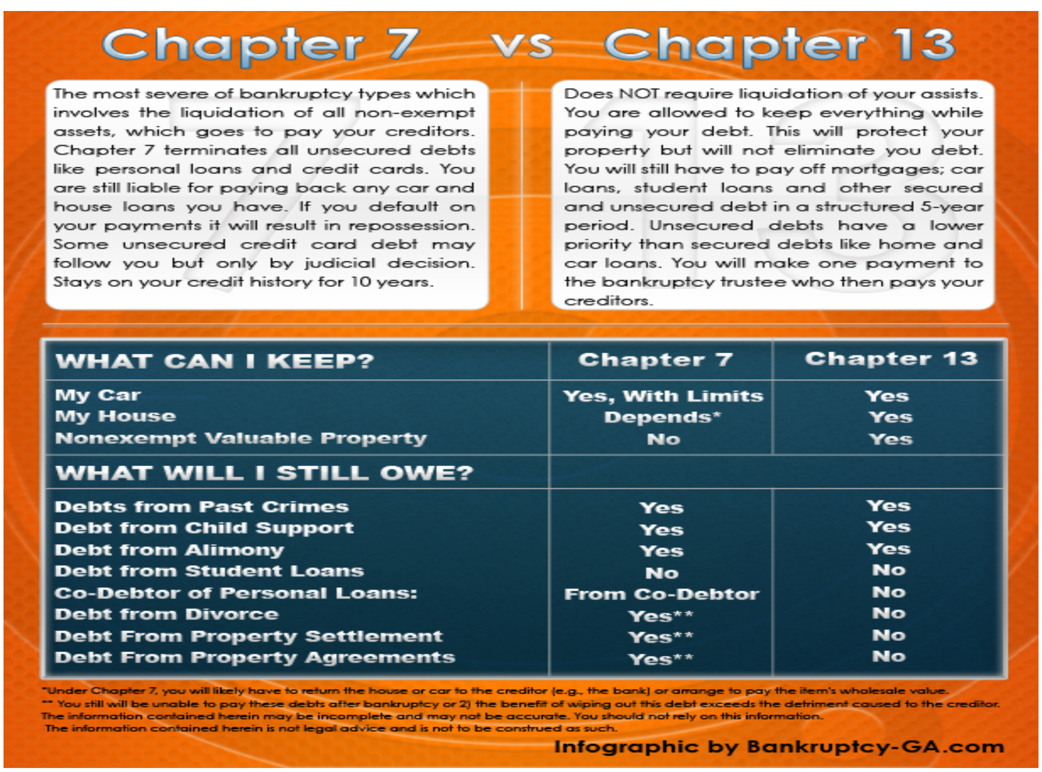
This is still a bad idea.

Sadly, many financial experts will advocate that a person take out lots of different 0% interest credit cards, pay it off before the interest rate increases and enjoy the credit card perks like free airplane miles, cash back, or store discounts. Some financial experts will even advocate a person take out high-interest credit cards, enjoy the credit card perks, and pay off the balance immediately **s long as you never make an interest payment**. They argue: “What’s the harm of using ten different credit cards if you never make a late payment or pay interest?! In fact, you save money with the store discounts and perks."

All of this is bad advice for one simple reason: if you live below your means, pay yourself first, and use a debit card, you will control your hedonistic, spending tendencies. If you use multiple credit cards, you are tempted to spend more than you planned, which prevents you from saving as much as you can.

Bankruptcy

When someone cannot pay their debt, they declare **bankruptcy**. This often involves liquidating and selling off assets (such as a car or house) in exchange for debt forgiveness. After someone declares bankruptcy, it will remain on their credit report for 10 years. Anytime such an individual applies for a loan again, it will come at an outrageously high interest rate. The two major types of bankruptcy are Chapter 7 and Chapter 13 bankruptcy described below:



Chapter 7 vs Chapter 13

The most severe of bankruptcy types which involves the liquidation of all non-exempt assets, which goes to pay your creditors. Chapter 7 terminates all unsecured debts like personal loans and credit cards. You are still liable for paying back any car and house loans you have. If you default on your payments it will result in repossession. Some unsecured credit card debt may follow you but only by judicial decision. Stays on your credit history for 10 years.

Does NOT require liquidation of your assists. You are allowed to keep everything while paying your debt. This will protect your property but will not eliminate you debt. You will still have to pay off mortgages; car loans, student loans and other secured and unsecured debt in a structured 5-year period. Unsecured debts have a lower priority than secured debts like home and car loans. You will make one payment to the bankruptcy trustee who then pays your creditors.

WHAT CAN I KEEP?	Chapter 7	Chapter 13
My Car	Yes, With Limits	Yes
My House	Depends*	Yes
Nonexempt Valuable Property	No	Yes
WHAT WILL I STILL OWE?		
Debts from Past Crimes	Yes	Yes
Debt from Child Support	Yes	Yes
Debt from Alimony	Yes	Yes
Debt from Student Loans	No	No
Co-Debtor of Personal Loans:	From Co-Debtor	No
Debt from Divorce	Yes**	No
Debt From Property Settlement	Yes**	No
Debt From Property Agreements	Yes**	No

*Under Chapter 7, you will likely have to return the house or car to the creditor (e.g., the bank) or arrange to pay the item's wholesale value.
** You still will be unable to pay these debts after bankruptcy or 2) the benefit of wiping out this debt exceeds the detriment caused to the creditor.
The information contained herein may be incomplete and may not be accurate. You should not rely on this information.
The information contained herein is not legal advice and is not to be construed as such.

Infographic by Bankruptcy-GA.com

Pictured retrieved from Next Gen Personal Finance

Chapter 22: Taxes

Taxes refer to a percentage of money a person pays the government for public, or free, services. Taxes go toward highways, parks, and the salaries of teachers, police officers, and government workers. If the government cannot raise enough money through taxes, they issue bonds. (Think of how Venice funded their military for the Crusades.) As discussed in Chapter 7, a well-funded government allows us to enjoy high-performing marketplaces:

A shopping mall is a market that is made up of lots of smaller markets

The Bureau of Consumer Protection makes sure that your toasters, cars, and washing machines do NOT start fires, produce hazardous materials or harm you in other ways.

The Food and Drug Administration (FDA) makes sure that edible goods from businesses are safe for consumption.

The Department of Energy makes sure that companies cannot create too much pollution as they create and transport their goods and services.

The Bureau of Consumer Protection, the Department of Energy, the Food and Drug Administration and all other government agencies are funded through ordinary people and businesses paying taxes.

There are many different taxes and the table below explains only a few of them:

Tax	Why we have it
Payroll tax	If you are paid through an employer, both you and the employer pay extra taxes to fund Medicare (free healthcare for the old) and Medicaid (free healthcare for the poor)
Estate taxes	When someone dies and leaves many assets behind, those assets are taxed
Inheritance tax	Not only are the assets of a deceased person taxed but they are taxed again before someone can inherit them.
Business taxes	If you run a business, your business must pay taxes.

This chapter will only provide details about 2 types of taxes: the income tax and the capital gains tax.

Income Tax

Income is any money a person owns, whether it is from a paying job or winning $25,000 in a game show. **Income tax** is a percentage of a person's owned money that must be paid to the local government, state, and federal government. For example, I pay Philadelphia income tax, Pennsylvania state income tax, and federal income tax.

Income tax is a **progressive tax**, which means the more money earned, the higher the tax rate. While tax rates change if you are married, below is the current (2019) tax brackets. As the diagram illustrates: the greater the income, the higher the tax rate.

Tax rate	Income (assuming not married)
10%	$0 - $9,700
12%	$9,7100 - $39,475
22%	$39,476 - $84,200
24%	$84,201 - $160,725
32%	$160,726 - $204,100
35%	$204,101 - $510,300
37%	$510,301+

Capital Gains Tax

Capital gains tax is exactly what it sounds like—tax that is paid when an investment makes money and is liquidated. If a humble construction worker bought $5,000 worth of the World Peace Fund and it grew to $10,000, the construction worker must pay a capital gains tax when the $10,000 is moved into his checking account. If an investment does NOT make money, then capital gains tax does NOT have to be paid.

The current capital gains tax is 0%, 15% or 20% depending on the worth of the investment.

Capital gains taxes can be avoided in two ways: (1) contributing to a roth IRA or (2) investing in index funds*. Roth IRAs and index funds represent excellent investment vehicles for their stable returns, and the avoidance of a capital gains tax only sweetens the pot.

Progressive versus Flat/Regressive Taxes

While both the income tax and the capital gains tax are progressive, there are taxes that are **flat**, meaning that every American pays the same percentage of taxes no matter their income or circumstance. Two examples of flat taxes are a sales tax and payroll taxes.

If a millionaire buys a $2 shirt with 10% sales tax, that millionaire must provide the cashier with $2.20 or else the police will arrive. This is the same for a homeless person. That homeless person must pay $2.20 as well.

Medicare is free healthcare for anyone 65 years of age or older. **Medicaid** (in Pennsylvania) is free healthcare for anyone who is an adult and makes less than $1,337 a month. Everyone pays 3.07% of their paycheck in payroll taxes to fund these programs, among other government programs. Since everyone pays the same rate of payroll taxes, it is considered a flat tax.

A **regressive tax** is a tax where you pay more the poorer you are. Some consider a flat tax to be a regressive tax. If a millionaire pays $2.20 for a shirt, the $0.20 in

* At least at Vanguard, an investment bank

sales tax comes out to 0.00002% of his net worth. If a homeless person only has $5, the $0.20 in sales tax came out to 4% of his net worth. The existence and reach of a regressive tax is a matter of opinion rather than a set fact.

How to calculate taxes

The process of calculating taxes is nearly identical to simple interest. The only difference is that the tax rate is subtracted from 1 and an interest rate is added to 1. Why? Interest adds to the starting amount while taxes subtract from the starting amount.

3 Steps to Calculating Income after Taxes

(1) Convert the tax percentage to a decimal by moving the decimal over two places to the left: 50% = .50, 25% = .25, 5% = .05, 54.8% = .548.

(2) Subtract one from the number. Why? 1.0 = 100%. When paying taxes, you keep (100% or 1.0) of the starting money minus the amount you owe in taxes.

(3) Multiply by the starting amount of money (only with lending do we call this "principal")

Look at the example question below:

Randall made $100,000 this year with his new business: *Pork Chops at the Penguin Petting Zoo*. Assume he must pay 24% in income tax. How much does he have left over? Try to calculate this answer below before turning to the next page for the answer.

Steps	Example
Convert the interest percentage to a decimal by moving the decimal over two places to the left	24% as a decimal is **0.24**
Subtract 1 from that number	**0.76**
Multiply income by this number.	Income X 0.76 $100,00 X 0.76
ANSWER	$76,000

Now, let's try a harder example where Randall must pay both income tax and a capital gains tax:

After Randall crushed it with his pork chop business, he sold his company and moved onto new things. This year, Randall purchased some solar energy ETFs and let them grow in value for a year. During this year, Randall started a new company called *Hot Sauce and Harpoons*. Randall is calculating his taxes. He liquidated his ETFs for $50,000 and earned $150,000 from his new company. How much does he have to pay in taxes? Assume a 20% capital gains tax and a 24% income tax.

Income Tax	
Steps	**Example**
Convert the interest percentage to a decimal by moving the decimal over two places to the left	24% as a decimal is **0.24**
Subtract 1 from that number	**0.76**
Multiply income by this number.	Income X 0.76 $150,00 X 0.76
ANSWER	$114,000

Capital Gains Tax	
Steps	**Example**
Convert the interest percentage to a decimal by moving the decimal over two places to the left	20% as a decimal is **.20**
Subtract 1 from that number	**0.80**
Multiply income by this number.	Investment's value X .80 $50,000 X .80
Answer	40,000

$114,000 + $40,000 = $154,000. The final answer is $154,000

Chapter 23: Identity theft

On occasion, ordinary American citizens provide sensitive information to businesses, banks and the government. College and banks need social security numbers, and the government needs addresses for home residences and places of employment. Banks, colleges, and the government do this to ensure that no one else pretends to be someone else.

But, when hackers and thieves attempt to get this very same data, bad things can happen.

Any person's cell phone number, driver's license, or password can open up a Pandora's Box into that same person' tax returns, demographic data, and bank accounts.

Protecting against identity theft only began 20 years ago with the advent of the internet. Now, it is something all people need to concern themselves with.

The internet and technology will continue to change rapidly. Consequently, the ways hackers attempt to steal personal data will continuously evolve. By the time you read this book, websites will have improved their security and hackers will have found new ways to access passwords.

The best way to avoid identity theft is to continuously research and stay updated with what the news publishes about avoiding identity theft. This chapter will outline 6 ways to avoid identity theft and 4 methods of making payments.

6 Ways to Avoid Identity Theft

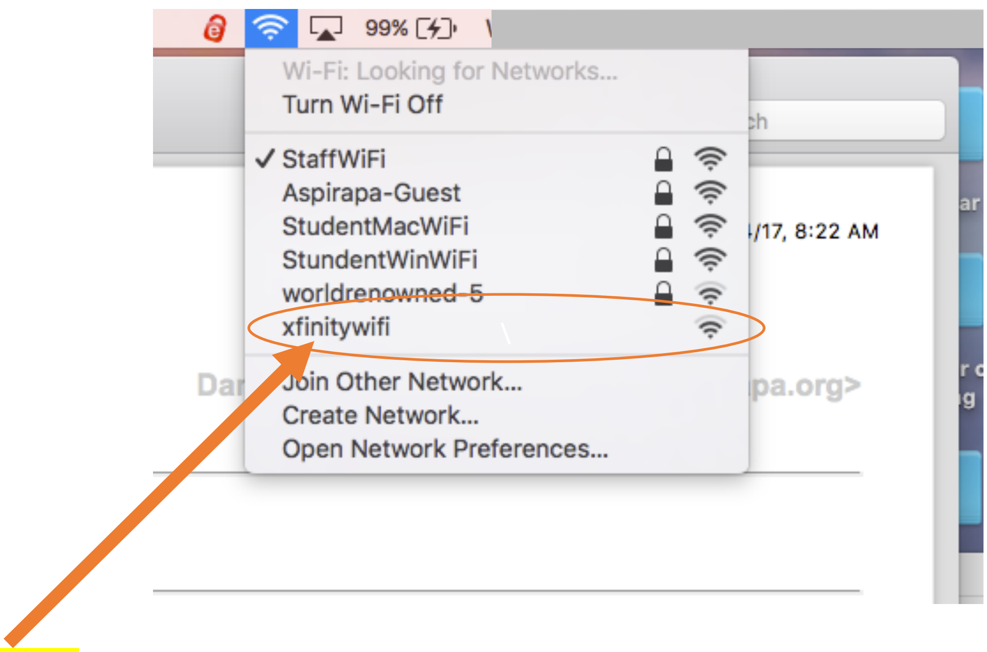
1) Monitor bank account balances

Every person should know every deduction from a checking account. If a $50 purchase from a company in Shanghai appears in a bank statement surprisingly, this person's identity was stolen.

In America, as opposed to Europe[13], banks will reimburse victims of identity theft. All the account holder needs to do is monitor the account and inform a bank when money goes missing in a timely matter.

2) *Avoid free, public internet*

The picture below illustrates better and worse Wi-Fi options. Avoid Wi-Fi without the lock:



Bad idea!

Hackers can steal data when sharing the same Wi-Fi connection as their victim. Unsecure connections, noted by a missing lock sign, makes such theft easy. Below are 3 categories of Wi-Fi in decreasing order of security.

A. A locked Wi-Fi that requires a password AND is hooked up to your home or place of work. Why is this the most secure? Not only does it require a password BUT, theoretically, family members and coworkers will not steal your data.

B. A locked Wi-Fi at a public or private location, such as a Starbucks or a library. Talented hackers can access a person's data if they and their victim are on the Wi-Fi at the same time.

C. A Wi-Fi that does not require a password

3) Ignore unknown numbers that say your social security number (or other data) has been compromised. Similarly, ignore any computer pop-ups that say a virus has infected your device and you must provide sensitive information to recover it.

No government agency exists that notifies people, free of charge, that their identity has been stolen or their accounts tampered with. Why? No one knows identity theft occurred except for the thief and the victim unless you pay for such a service. Therefore, a phone call, email or pop-up that exclaims to have noticed identity theft is actually attempting to get you to give up more personal data.

4) Log out of your email on shared computers.

5) Avoid free charging stations.

This is a relatively new one. In recent years, airports and other public places have provided free charging stations. Consequently, hackers often replace charging cords at these stations with cords that steal personal information. Just avoid these charging stations altogether.

6) Create complex passwords with capital letters, lower-case letters, numbers and symbols. Do not repeat passwords.

If a hacker compromises a bank account, website profile, or anything else, only those services that share that same password are endangered. This can be avoided by using different, complex passwords. Just be sure to store all your passwords in an online password-saver or a small notebook in your home.

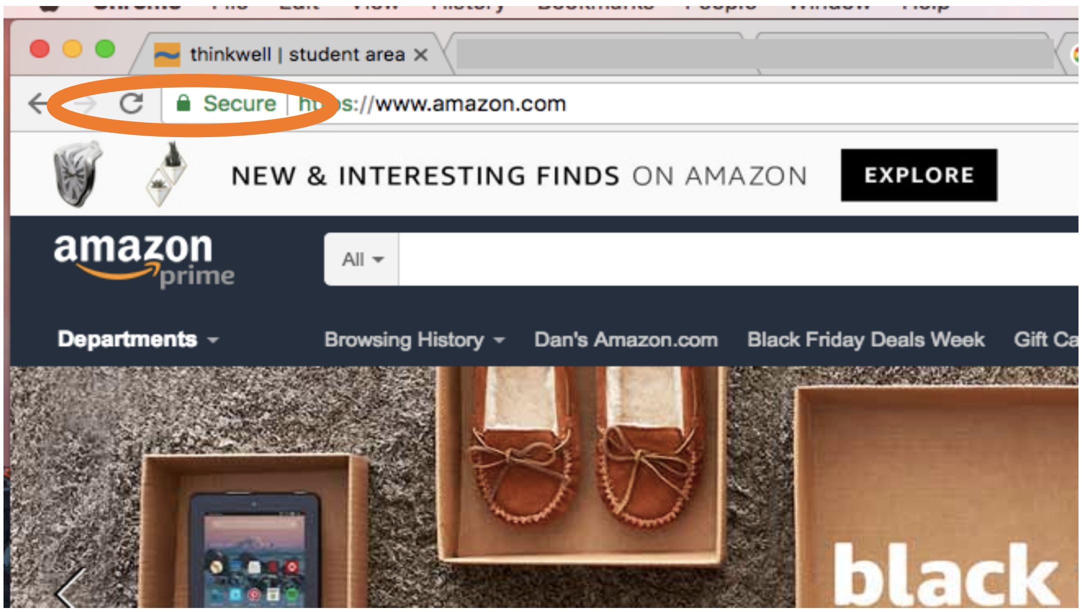
Making Purchases without Fear of Identity Theft

Listed below are 4 main ways a person can make a purchase. The list moves from the safest way to make a purchase to least-safe.

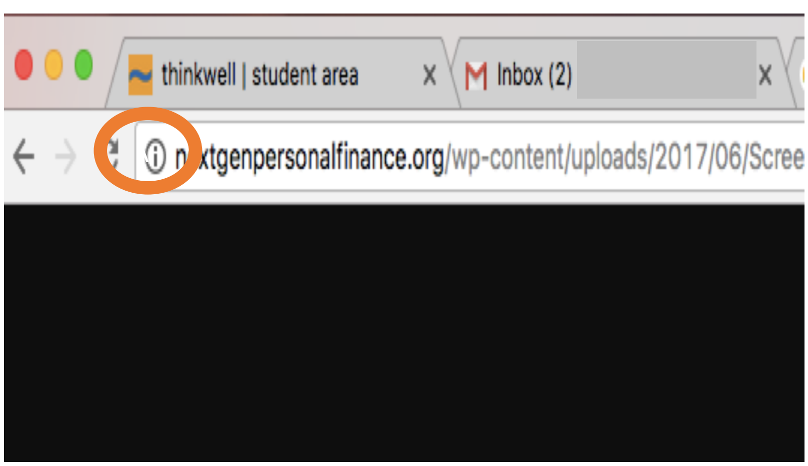
(1) *Paying with cash.* Anyone can pay with cash and it does not require personally identifiable information to complete the transaction. Therefore, cash provides zero risk of identity theft.

(2) *Paying with a check.* Even though checks contain account numbers, the check is destroyed once it is deposited.

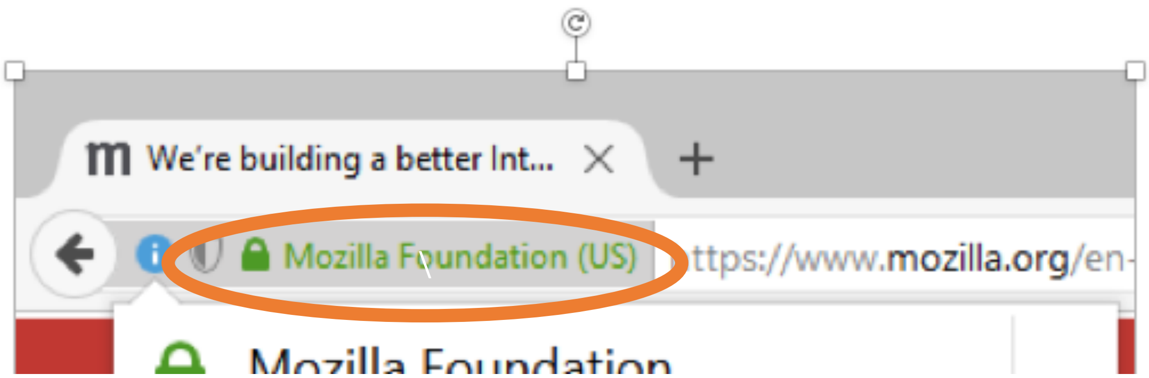
(3) *Paying with a debit or credit card on a secure website.* The picture below lists the words "secure" on the web browser. This indicates data provided on the website cannot be viewed by anyone else. Errors and hacking still occur, but they are rarer on secure websites.



(4) *Paying with a debit or credit card on an <u>unsecure</u> website*. Notice the little 'i.' This indicates the website is NOT secure, and no one should provide any personal identifiable information.



Symbols that indicate secure and non secure websites vary by the web browser, such as Safari, Firefox, or Chrome. The pictures on the previous page come from Google Chrome. Firefox uses an 'i' but it means something completely different! Firefox indicates a secure website with a green lock. The 'i' on Firefox indicates that the user has not saved any data on this website. Given that different web browsers indicate secure and unsecure websites in different ways, internet users should simply look up how the different browsers communicate this information.



For Firefox users, the green lock indicates a secure website.

Chapter 24: The Truth about Government Benefits

As of December 2019, Democratic candidates compete for their party's nomination to go against Donald J. Trump for the presidency.

The issues that separate Democrats from Republicans do not follow a clear line. Republicans, for example, support reduced immigration and charter schools. Democrats, often, support gun regulation and higher taxes on wealthy individuals. What links immigration to charter schools for Republicans? What links strict gun laws and taxes for Democrats? The answer: no one knows.

America follows a representative democracy, whereby citizens elect Congress and the President to make decisions for them. While other democracies follow a parliamentary system, like Europe, America's system forces us into having two main parties. Since George Washington became our first president, America has always had just two main political parties.

Some will argue that Republicans fulfill our desire for strict-parent structure and Democrats recognize our need for nurturing-parent leadership[33]. Others will argue that Republicans exemplify values over intellect and Democrats respect intellect over values[34]. The most logical explanation for the difference between Democrats and Republicans may be that in a 2-party system, when one party passes a law or creates a policy, the other party automatically takes the opposite stance to win over disenfranchised voters.

The tendency for Republicans and Democrats to take opposite sides has a rich history. In 2003, George W. Bush (a Republican) invaded Iraq under the mistaken belief that the dictator of Iraq, Saddam Hussein, held weapons of mass destruction. Less than 20 years before that, the French had sold designs to Saddam Hussein to build a nuclear weapon. In the 1990s, Saddam Hussein threatened to use nuclear weapons on America and Israel. In 2003, when intelligence suggested Hussein had succeeded in building such weapons, we launched an invasion. Once no weapons were found, the Democrats called the war a mistake. The Republicans, mostly, stood by their Republican president.

In 2009, President Barack Obama spent his first days in office trying to solve a recession that began with the Housing Crisis in 2007. He passed sweeping legislation that printed trillions of dollars to create jobs for millions of Americans, even though the jobs would not begin until years later. Unsurprisingly, the Democrats applauded this idea and the Republicans hated it.

It is quite possible that if a Democrat, instead of George W. Bush, won in 2000 and a Republican, instead of Barack Obama, won in 2007 the presidents would have been forced to still invade Iraq and still pass economic recovery legislation. Thus, the Democratic Party and the Republican Party would have made opposite decisions than what actually happened in history. It is likely, in this hypothetical case, the president's political party would support their president's decision and the opposition party would oppose it. The point: whatever causes Republicans and Democrats to think differently, no one has figured it out fully.

While even the nation's best political scientists cannot clearly define what holds the Republican Party or the Democratic Party together, this chapter will introduce one rule-of-thumb that effectively separates Republicans from Democrats.

First, some terminology. Those who support Democratic policies often go by the following labels: "Progressive," "leftwing," or "liberal." Those who support Republican policies often go by "Conservative," "rightwing," or "traditionalist."

Why these names? It started with the French Revolution where those seeking revolution sat on the left side of parliament and those who did not, the more traditionalists, sat on the right side.

Why have these names stuck around when American politics began BEFORE the French revolution?

Once again no one really knows.

A Rule-of-thumb

It's important to first recognize the missing clarity on how political beliefs and parties align because most voters do NOT fit neatly into Democrat or Republican labels. Most Americans support policies on both sides but vote Democrat or Republican one or two key issues. It is no surprise that most teachers vote for the political party that best represents the education policy they support. It is also no surprise that veterans vote for the political party that best represents their ideal foreign policy.

Here is a helpful, albeit oversimplified, way of making sense of Republicans and Democrats.

Republicans tend to support lower business taxes and income taxes so that businesses can more easily innovate and hire workers, and so ordinary Americans have more money to meet their needs. **Democrats** tend to support higher taxes so that government agencies can work more efficiently and hire workers, and so ordinary Americans can rely on more government services to meet their needs.

For example, minimum wage and employment levels tend to go in opposite directions. When America increases the minimum wage, employment decreases. Why? Imagine Uncle Perry's Pizza has 3 workers he pays $10 each. If a minimum wage law required each employee to be paid $15 an hour, Uncle Perry would have to lay-off one worker to keep his businesses expenses the same. State governments cannot file for bankruptcy, so minimum wage increases provide less stress for government workers.

Even though this issue does not deal with taxes, can you guess how Republicans and Democrats feel about minimum wage? Republicans tend to be against raising the minimum wage because it forces regulation and hardship onto businesses. Democrats tend to support for minimum wage because higher taxes for government employees can pay for the increased cost of hiring the workers.

What Do We Mean by Government Benefits?

For the purposes of this chapter, **government benefits** refer to tax-payer funded services that help individuals in time of need, such as financial hardship or old age. This is often called the **social safety net** because the government attempts to provide programs that catch someone before falling into severe hardship. Below are 6 common examples:

1. **Unemployment insurance** – Part of each person's paycheck goes toward taxes that fund unemployment insurance. If these taxpayers ever lose a job, they can collect 60% of their salary for 6 months from taxpayer funds.

2. **Social security** – Part of each person's paycheck goes into the Social Security Trust Fund. When workers reach the age of 69, whether they retire or not, they receive small (emphasis on SMALL) monthly checks from the government just like a pension.

3. **Medicare** – free healthcare for those 65 years of age and older

4. **Medicaid** – free healthcare for the poor

5. **Food stamps, welfare, or cash assistance** – vouchers for free food or cash for the poor

6. **Disability insurance** – partial salary for life if injured on the job.

The Truth about Government Benefits

Democrats often advocate for greater access to government benefits, such as offering free Medicare for Americans of all ages with increased taxes Republicans often advocate for decreased access to government benefits, such as fewer food stamps for the poor, to decrease taxes.

The truth is that government benefits provide needed resources for desperate people, but the quality of government benefits is very poor. No Americans want any government benefit if they can afford their own healthcare, food, or retirement income without the need of government benefits. Food stamps, welfare and cash-assistance often involves a negative stigma and degrading interviews by government employees. Affordable housing provided to low-income residents are often in high-crime areas near poor-performing schools.

Look at some comparison pictures below:

Government provided nursing home through Medicare or Medicaid	Luxury nursing home if you can afford it
	
Hospital room provided by Medicare or Medicaid	Luxury hospital bed if you can afford it
	

Do NOT Let Politics Trick You

The government will always need to provide benefits to those who struggle. Opioid addicts, immigrants fleeing dictatorial governments, and the severely mentally ill will need government benefits to survive.

When Republicans and Democrats fight about government benefits, their policies will affect many Americans. But, if you are lucky, their decisions won't affect you. If you are good with your money, your life will never be affected by whatever policies they enact with government benefits.

The only retirement plan for 1/3 of Americans are social security checks[35]. Whether a politician increases or decreases this amount should not matter too much to you if you have contributed to multiple retirement accounts.

As of December 2019, President Trump wants to end the Affordable Care Ac ("Obamacare") and two Democratic candidates, Bernie Sanders and Elizabeth Warren, want to offer Medicare for All. The honest truth about this political debate is that both Republicans and Democrats have terrible ideas.

The problems with the Republican position	The problems with the Democratic position
	
The Affordable Care Act (Obamacare) helped provide health insurance for thousands of Americans. Medical bills are the #1 cause of bankruptcy and repealing the Affordable Care Act could put many into dire financial situations.	Medicare for All is based on European models of government provided healthcare for all citizens. The Medicare for All healthcare plans in Europe offer such poor coverage that Europeans spend their own money on private healthcare plans while still paying the taxes for the government provided healthcare plans.

The healthcare policies by Democrats and Republicans come with serious problems. Imagine you are low-income relying on government-provided healthcare and you are diagnosed with cancer. Cancer treatment can cost $250,000 - $500,000. If President Trump repeals the Affordable Care Act, you may have to pay the cost out of pocket. Without this amount of money saved, expect to declare bankruptcy. Now, instead, imagine Elizabeth Warren or Bernie Sanders passes Medicare for All. You, and all Americans, have free healthcare. After the doctor diagnoses you with cancer, you learn that your Medicare for All plan ALSO DOES NOT cover cancer treatment. You must pay for this out of pocket and then declare bankruptcy.

The only way to avoid these problems is to have enough of your own money saved and invested. Be sure to vote for the political party that best reflects your values, but also be sure to have enough money ready when your political party comes up with a terrible idea. Put simply, do not plan to rely on government benefits. If so, you are bound to be disappointed.

Chapter 25: Financial Aid and Colleges

A Brief History of Work

If you cannot find a job you love, then take a job that leads you to the job you love. Life as a guidance counselor may be dull, but stay the course if it will help you become a FBI hostage negotiator. (Yes, some people have made that exact transition). If life as a lawyer brings misery, keep it until you sell your first homemade, self-programmed video game.

Some will find their dream job the first day on the workforce. Others will find it 30 years later after attempting a dozen other jobs.

Let the pursuit of your niche, no matter how clear or cloudy that goal is, drive your post-high school decisions.

When America earned its independent in 1776, the view of "work" did not change much for the next 200 years. Colonists and World War 2 veterans viewed a job the same way—get one job and keep it. College or not, the advice was stick with one job until retirement.

This type of lifestyle worked for a variety of reasons. Pensions were commonplace. 25 years of work at the same job meant the government or a company would send you a monthly paycheck until the day you died. Life expectancy from 1776 to 1950 ranged between 50 and 65 years of age. Employers could easily provide an average of 15 years of pension benefits.

Between 1950 and 2000, life expectancy moved consistently upward to the age of 76. Cars became more common and cheaper. The nation stopped building train tracks and started building airports. The number of American universities increased by 100-fold. This enabled travel to better colleges, better jobs, and more affordable cities and states. With the internet, people could complete college-degrees, earn certifications or even apply for jobs without leaving the couch. With the increase in life expectancy, pensions became unsustainable. Businesses and government agencies simply could not afford to pay retired workers more than current workers.

Since 1950, life became less traditional. Women earned more college degrees and started to bring home paychecks. With more family income, remaining miserable at one job or purchasing a single house for life seemed antiquated and foolish. For these 50 years, people not only switched jobs but changed entire careers and moved to different cities. Mechanics became financial planners, engineers attended business schools, doctors started companies, and chefs produced TV shows.

Niches can change. Today, it is expected that the average person today will change careers and go back to college for additional training or degrees 5 times in their life! That's hard to believe but true. Financial planners now recommend you have a separate bank account just for future educational expenses[13]. In previous decades, someone might change careers 5 times. Now, people will return to school for additional certifications and knowledge 5 times. Americans are working longer and taking jobs they never thought they would ever be interested in, and it has sometimes required them to go back to school. Just look at the diagram below which lists available night-time or on-line, part-time classes you can take while you keep your day job:

Part-time programs
Paralegal
Law school
Financial Planning
Statistics
Computer programming
Biochemical engineering
Computer graphics
Paralegal

Remember that when you cannot find your niche, create it. The jobs that will become available to you in 10 years are different than the ones that exist now.

Options

The world of work grew increasingly complex over the last 200 years, yet high school graduates still face the same 4 main options for their future:

The 4 Options for High School Graduates	
Option #1	The workforce
Option #2	College
Option #3	Trade school
Option #4	The military

Most people, even the most successful, will spend years doing many of these things in different periods of their life. The stories of Lily and Hardeep (names changed) represent just two possible life paths.

Lily never really liked school. She spent 3 years working at a gym full-time and lived at home. She spent her weekends going out and spent most of her money. Because she lived at home and did not have to pay rent, she avoided debt for these 3 years. She then went to college for an undergraduate degree in business and then earned a higher salary at her hometown gym. After only a year, she realized that neither business nor gyms represented what she really enjoyed doing. She enrolled in a one-year, full-time coding boot camp, which is considered a trade school. She has spent nearly 10 years working for a healthcare tech company in Boston.

Hardeep went to college right after high school and really enjoyed it. He majored in agricultural sciences. After graduating college, he worked for a chemical engineering plant in Texas that specialized in pesticides. He worked for 15 years, and during this time he married, divorced, re-married, and had 3 kids. (He is currently happily married to his second wife.) Hardeep worked toward a master's degree in education and taught high school biology in Texas for another 10 years. When his children all went to college, he went back to college for law school. He is now a practicing lawyer where he sues companies alleged of creating chemical substances that cause cancer.

Do not expect to come up with a master plan for your life after high school, or at any time in your life. If you take care of your physical health, mental health, and follow the financial guidelines of this book, you will be able to make major, unexpected life decisions. In fact, this is what makes life fun.

Many college students have graduated within 4 years, earned straight As, and been fired from job after job. (Ask any employer, and they will tell you college GPA does not readily predict job performance.) Other college students went part-time, completed their degree in 8 years and then received promotion-after-promotion at one place of employment. Do not compare yourself to others.

The remainder of this chapter is dedicated to college.

College is a Match to be Made, Not a Prize to be Won

A college degree can be completed within 4 years, but it takes the average student 6 years to complete it. Why? College is hard. In high school, in-school behavior determines 90% of grades. (Ever earn a B in a class simply by staying awake and paying attention during the review day before a test?) In college, out-of-school behavior determines 90% a course grade. Essay-writing, studying and things done outside the class most dramatically affect college grades. High schools often do not prepare students for college.

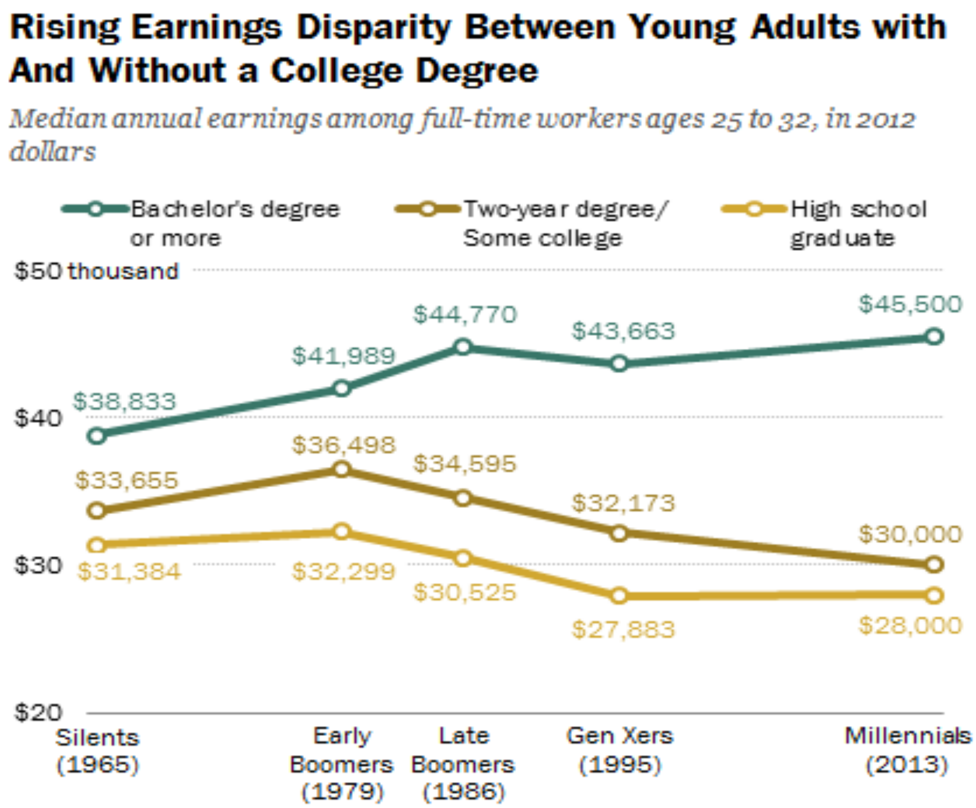
Colleges vary in rigor. Some colleges pride themselves on how difficult, stressful, and time-intensive their classes are. Other colleges are far easier. Some colleges specialize in internships and job-placements. Other colleges specialize in small classes, expert professors, and providing research experience for students.

When considering college, do your research.

College is Usually, but not always, the Best Bang for your Buck

After two years of trade-school, a diesel engine mechanic can make $90,000 a year. This is above the average starting salary for school assistant-principals, and nearly double the starting salary of social workers, nurses, teachers, and business managers[13]. Kansas will pay for trade-school tuition and housing for anyone committed to becoming an aviation mechanic and moving to Kansas[13,36].

College is not necessary, but it generally does pay higher than all other options.



Retrieved from Next Gen Personal Finance

As the diagram above illustrates, college graduates 25 to 32 years of age tend to make $10,000 - $15,000 move than those who graduate with two-year degrees (associate's degree) or just a high school degree. Human capital, or a person's ability to produce better services and products with age, leads to higher salaries with age. This $10,000 - $15,000 gap will only increase in time.

<u>Mr. LaSalle's 2 rules for financial aid</u>

The job of college financial offices is to provide financial aid in accordance with their college or university's policy. In no way is a college financial aid office required to provide quality, reasonable or sensible financial aid. It would be a terrible idea for an English major, with a C- GPA, to take out $150,000 of student debt, but it happens and financial aid offices never say no.

Here is my advice*: Strive for $0 student debt. If you must take out debt, your total college debt by the time you graduate should not exceed your expected first year's salary. For example, the starting teaching salary is around $45,000. If you plan to be a teacher, strive first for $0 of student debt. If that's not possible, strive for no more than $45,000 of total debt across all 4 years of college.

College acceptance letters typically come between March and April. Only in May or June do financial aid offer letters arrive. In nearly every case, college acceptance letters arrive BEFORE financial aid offers.

No student or family, unless they are extremely wealthy, should make a college decision without first seeing the financial aid offer. While the green mountains outside Reed College in the northwest may have greater appeal than the city-feel of Vassar College, both institutions offer small classes, high-quality professors, and individualized study. A student accepted into both should go to the cheaper one.

Decades of psychological science reveal that humans are absolutely terrible at predicting what makes them happy. Both winning the lottery and experiencing many hardships lead to temporary spikes and dips in happiness, but after a few years the person ends up just as happy as they were before the event.

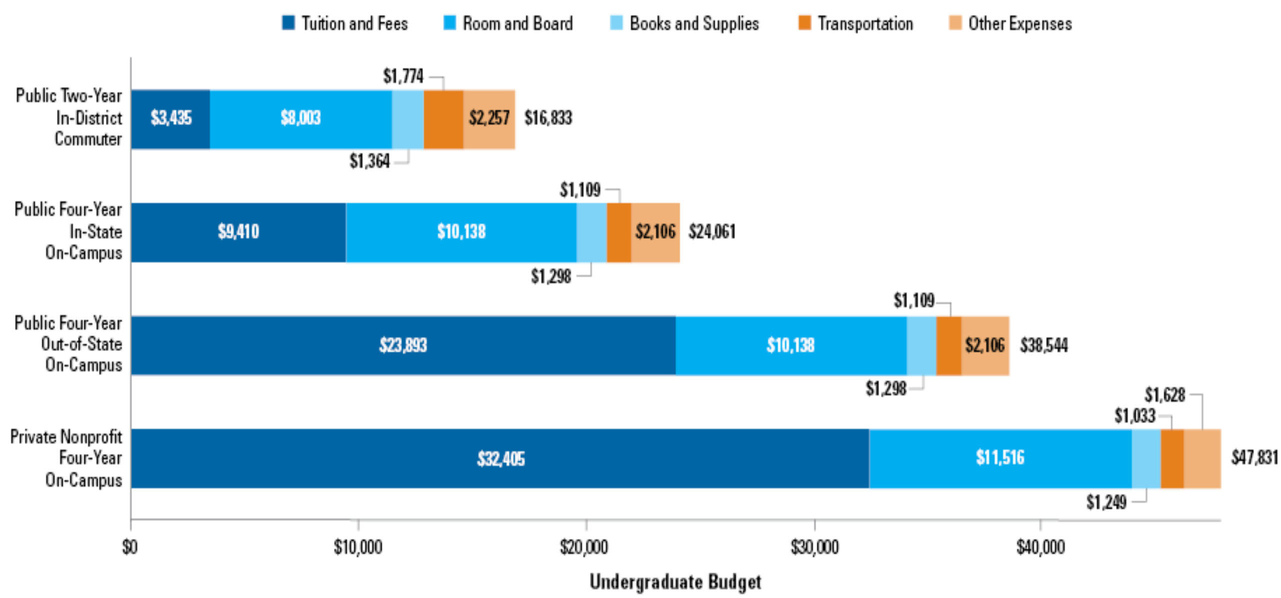
When interviewed before job interviews, award ceremonies and parties, people will overestimate how happy reaching their goal or earning recognition will make them. (Remember, the hedonic treadmill?)

* This does not reflect the advice of the Niche Clinic, Olney Charter High School, or anyone else other than myself. I am not a certified financial planner, yet, nor do I hold any licenses. I am, however, legally allowed to say these things as both a nonprofit executive and educator.

The point: students accepted into a variety of colleges should attend the cheapest one because no single college will likely make them happier or more miserable than any other one. (This assumes these future college attendees completed applications for colleges they had at least some interest in attending.)

Financial Aid differs by College

The diagram below indicates the average cost of college, without taking financial aid into account. Please note that by living at home, room and board costs can be eliminated. This would provide a substantial reduction in costs.



Retrieved from Next Gen Personal Finance

When someone applies for college, they must complete **a Federal Application for Federal Student Aid (FAFSA).** The FAFSA asks questions about the family's assets, income and tax returns. The FAFSA then generates an **expected family contribution**, or the amount of money a family is could reasonably be asked to pay for college. Ideally, a college or the government pays the rest.

The expected family contribution is just a recommendation that the government makes to colleges. Colleges are not required to honor the recommendation. Some colleges provide more aid than recommended, and some provide less.

6 Best and Worst Colleges and Universities for Financial Aid[37]	
BEST	WORST
Columbia University	University of Pittsburgh
Yale University	State University of New York – Purchase College
Williams College	New York University
Amherst College	College of New Jersey
Harvard University	Emerson College
Vassar College	Penn State University Park

Earn Scholarships!

A FAFSA determines a family's ability to pay for college. What is the best way to cover the rest of the bill? Earn scholarships.

Merit scholarships or just "**scholarships**" refer to money given to college students for achievements in high school. Scholarships are sometimes simply called **grants** because the school is simply giving or "granting" money. Sometimes scholarships are for athletics and extra-curriculars, but mostly they are for grades. Grants can be for academic achievement, sports, student leadership or any reason the college decides.

Why do colleges offer free money to promising students about to enter higher-education for the first time? Colleges are scored by the grades, academic achievement, and success of their graduates. High school students who earned straight A's will likely do well in college and get a good job no matter what college they attend. A college or university would rather give them money to reduce their bill to make their own school look good, earn higher ranks and attract more tuition-paying students.

Everyone has heard a parent or high school teacher say, "Your job is to do well in school." They are correct. Since college degrees lead to higher salaries, and avoiding college debt is ideal, doing well in high school to earn college scholarships functions as a job, and a great one.

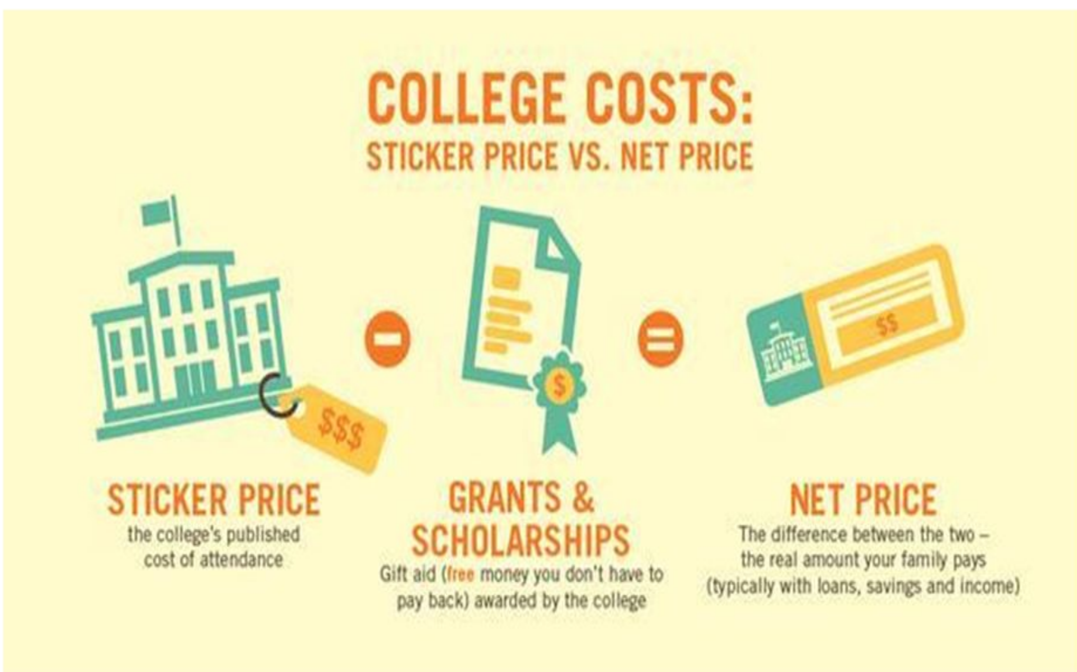
Where do Scholarships Come From?

Anyone who googles "scholarship applications" will find thousands of nonprofits, foundations, and organizations that give out scholarships. But, most scholarships do not come from there. Most scholarships come from the college or university a student is admitted to. After a student is accepted, the college then evaluates their high school record to determine if any scholarships should be awarded.

Googling scholarship applications is not a bad idea, but using that time to earn the highest high school grades and participate in extra-curricular programming will lead to more scholarships without having to fill out applications.

How to Think about Financial Aid

The **sticker price** refers to the advertised cost of a college. This can be found simply by going to any college's website. After grants and scholarships, the **net price** refers to how much money the student and family must actually pay to attend.



Retrieved from Next Gen Personal Finance

College Loans

College loans do not reduce the sticker price of a college because loans still must be paid back. A college charging $50,000 a year with a financial aid offer of a $50,000 student loan is not a good deal at all. Below is a list of common types of college loans. They are ranked from best to worst.

BEST

Subsidized loans – loans the government gives you and the government agrees to pay the interest. To "subsidize" means to pay for. For example, your parents subsidize your rent.

Perkins loans – low interest loans for students from low-income families.

Unsubsidized loans - loans the government give you when the government does NOT pay the interest. So, it's pretty much a regular loan but it has low interest.

PLUS loans - high interest loans for college that your parent signs for and your parent has to pay back.

WORST

Remember, sometimes admitted students will not receive enough grants or loans to pay the bill. They can get **private loans** from banks, but they charge high interest. Why? Banks know you would not be coming to them if you were not desperate, so they know you will pay the interest.

Work Study

Work study is an agreement whereby a student will be paid a certain amount of money for a campus job during the college year. Usually these jobs provide frequent breaks and downtime so students can study while on the clock. A common example of work study is a job at the school library.

Understanding Financial Aid Letters

When a financial aid letter arrives in the mail, the best strategy is to calculate the net cost. Ignore the loans when calculating net cost because you have to pay those back. Instead, subtract the scholarships and grants from the total price. Do NOT deduct work study from the sticker price. Even though work study will provide paychecks that could be used for college tuition and costs, the paychecks come after the tuition bill has already been paid. Furthermore, work study is a great way to earn money for food, gas, and going out rather than paying college bills.

Net Price = Sticker Price – (Grants + Scholarships)

Take a look at a financial aid offer letter below:

Dear

Congratulations on your admission to College! On behalf of the University, I am pleased to offer you financial assistance for the 2012-2013 academic year.

Your award is as follows:

Source:	Total
College Grant	23,500
College Scholarship	7,000
Federal Perkins Loan	1,000
Federal Direct Subsidized Stafford Loan	3,500
Fed. Direct Unsubsidized Stafford Loan	2,000
Fed. Work Study Opportunity	2,000
Total Awards:	39,000

Please note that you will need to provide the following documents to our office as soon as possible in order to finalize your award:

Award Acceptance Agreement (enclosed) Student
Statement of Non-filing
Parent IRS transcript

Your financial aid offer is based on your reporting that other members of your family will be attending undergraduate or graduate school at least half time during 2012-2013. You may be required to provide document his/her enrollment. Please notify our office of any changes in enrollment plans.

All award offers are subject to change based upon the review of the documentation requested above and any other information we receive that changes your overall financial aid eligibility. When submitting requested documentation, please be sure all forms are signed and completed properly.

Please review the enclosed "Award Guide" for specific information on your offer of aid and the terms and conditions of your award. Please be sure you have a clear understanding of the assistance you are being offered. Feel free to contact our office if you have any questions about your award. You may reach the Office of Financial Assistance at (123) 456-7890, by fax at (123) 456-7890 or by email at finaid@college.edu.

The total cost of tuition, room and board is $50,000 a year.

To help determine the net price from the financial aid letter, the letter is reprinted on the next page. Orange circles indicate the relevant pieces of data.

Dear

Congratulations on your admission to College! On behalf of the University, I am pleased to offer you financial assistance for the 2012-2013 academic year.

Your award is as follows:

Source:	Fall	Spring	Total
College Grant	11,750	11,750	23,500
College Scholarship	3,500	3,500	7,000
Federal Perkins Loan	500	500	1,000
Federal Direct Subsidized Stafford Loan	1,750	1,750	3,500
Fed. Direct Unsubsidized Stafford Loan	1,000	1,000	2,000
Fed. Work Study Opportunity	1,000	1,000	2,000
Total Awards:	19,500	19,500	39,000

Please note that you will need to provide the following documents to our office as soon as possible in order to finalize your award:

Award Acceptance Agreement (enclosed) Student
Statement of Non-filing
Parent IRS transcript

Your financial aid offer is based on your reporting that other members of your family will be attending undergraduate or graduate school at least half time during 2012-2013. You may be required to provide document his/her enrollment. Please notify our office of any changes in enrollment plans.

All award offers are subject to change based upon the review of the documentation requested above and any other information we receive that changes your overall financial aid eligibility. When submitting requested documentation, please be sure all forms are signed and completed properly.

Please review the enclosed "Award Guide" for specific information on your offer of aid and the terms and conditions of your award. Please be sure you have a clear understanding of the assistance you are being offered. Feel free to contact our office if you have any questions about your award. You may reach the Office of Financial Assistance at (123) 456-7890, by fax at (123) 456-7890 or by email at finaid@college.edu.

The total cost of tuition, room and board is $50,000 a year.

<u>Net Price = Sticker Price – (Grants + Scholarships)</u>

Net Price = $50,000 – ($23,500 + $7,000)

Net Price = $50,000 - $30,500.

Net Price = $19,500

$19,500 is how much this student and family should consider the cost of this particular college to be.

Full-time or Part-Time

The biggest priority for college students should be graduating with the highest possible GPA they are personally capable of. College grades not only follow students into the workforce, but college provides a wonderful opportunity to study unique disciplines: archaeology, nutrition, gender studies, psychology and more. Take the college years to focus on academics and enjoy what is learned.

When entering college, a student must decide to study full-time or part-time. Both have advantages and disadvantages, and students should choose the option best for them and their future GPA.

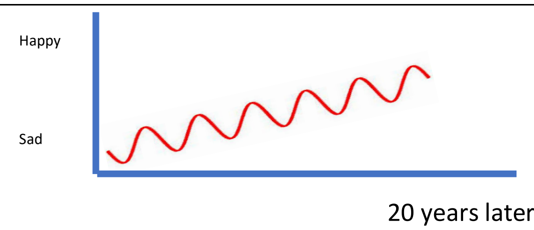
Full-time is 15 credits, usually 5 classes, a semester. Students who study full-time may or may not have time for a part-time job but the majority of their time will and should go toward coursework. **Part-time** is anything less than 15 credits an hour, which permits part-time or full-time work. Only students who attend college full-time are eligible for financial aid.

This does NOT mean full-time is better. Many students who attend dysfunctional high-schools that have not prepared them for the rigor of college may be better off starting college with just one or two classes, earning A's, and working full-time. Only when such students feel confident they can succeed with additional courses should they increase their course load. Part-time status may also be best for students who did not take high school serious but still want a college degree.

Chapter 26: Prices

Economics

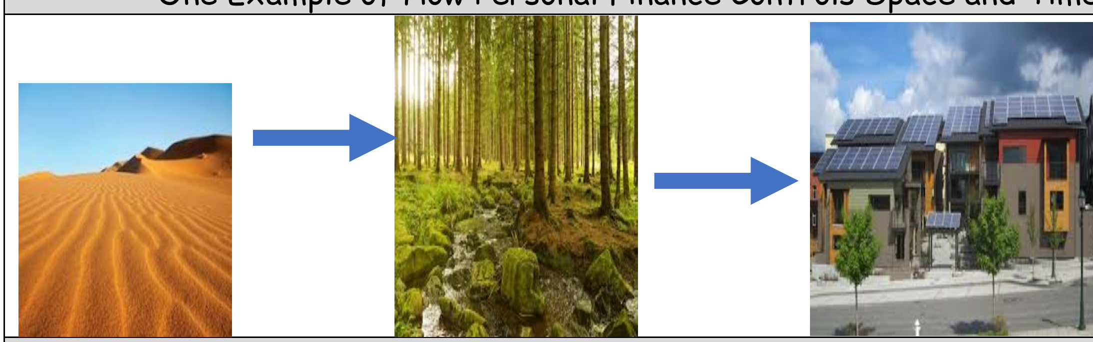
In this book, you have learned that personal finance explains how money controls space and time—monetary knowledge blazes a trail toward greater amounts of wealth and well-being. It allows each and every one of us to live our best life today and in future days. Today may be great and next year may be a struggle, but those who are financially-savvy can make sure that life is generally getting better and better, even with the occasional stumble. If the daily dynamic curve of happiness means that both happiness and sadness are inevitable, personal finance allows us to push that yo-yo up a hill. To do this, live below your means, avoid debt and the devil, pay yourself first, find your niche, and invest in low-cost ETFS, among other things.



Wealth helps us do this

Remember the diagram below from Chapter 4? The creation of money allows us to gather a group of people to do the following, all while providing jobs and bettering the community:

One Example of How Personal Finance Controls Space and Time



A lifeless climate can become a wild life preservation or a bustling community

The ability to control space-and-time represents a real-life super power! As also presented in Chapter 4, look what you could actually create with money:

Largest water park. Poor families go for free, but every ticket sold to a wealthy family goes to support a housing shelter for the homeless

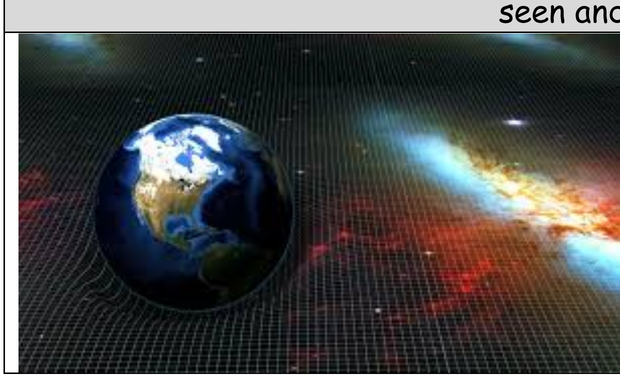
The world's leading psychiatry hospital. All of the world's most dangerous psychopaths, killers, and criminals can be treated for their psychological disorders humanely and effectively.

The world's leading disease research center.

The factory that makes candy that actually has the same nutritional value as vegetables!

As you will see in this chapter, if personal finance is the super power to control space-and-time, then **prices** represent the grid of the Optimistic Universe for which all creations can be measured.

Think of "prices" as the grid on which the effects of your super power can be seen and studied.



Economics is the study of how governments and businesses can control prices and other important financial measurements. When a government creates a new policy, the impact can be felt within other countries and among ordinary businesses. This can, in turn, affect the prices of goods and services, which affect your personal finances. Let's look at an example:

If the government requires every kitchen appliance to have an automatic-off feature to prevent fires, then our homes will have a lot less fires. However, this will almost inevitably increase prices:

1. People will need to be hired to design this "automatic-off" ability, test it, and make it better than the automatic off buttons of the company's competitors.

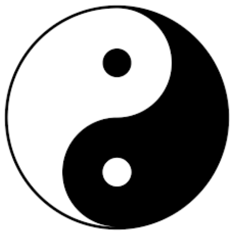
2. Companies will have to hire lawyers to represent them in court to make sure that they do meet the government's new regulation, even if the government says they do not.

What if the government passes a law that says, "install an automatic-off feature on all kitchen appliance and do NOT increase prices on customers?" Expect some workers from those companies to lose their jobs.

The moral of the story: Decisions have costs, and those costs can be reflected in prices.

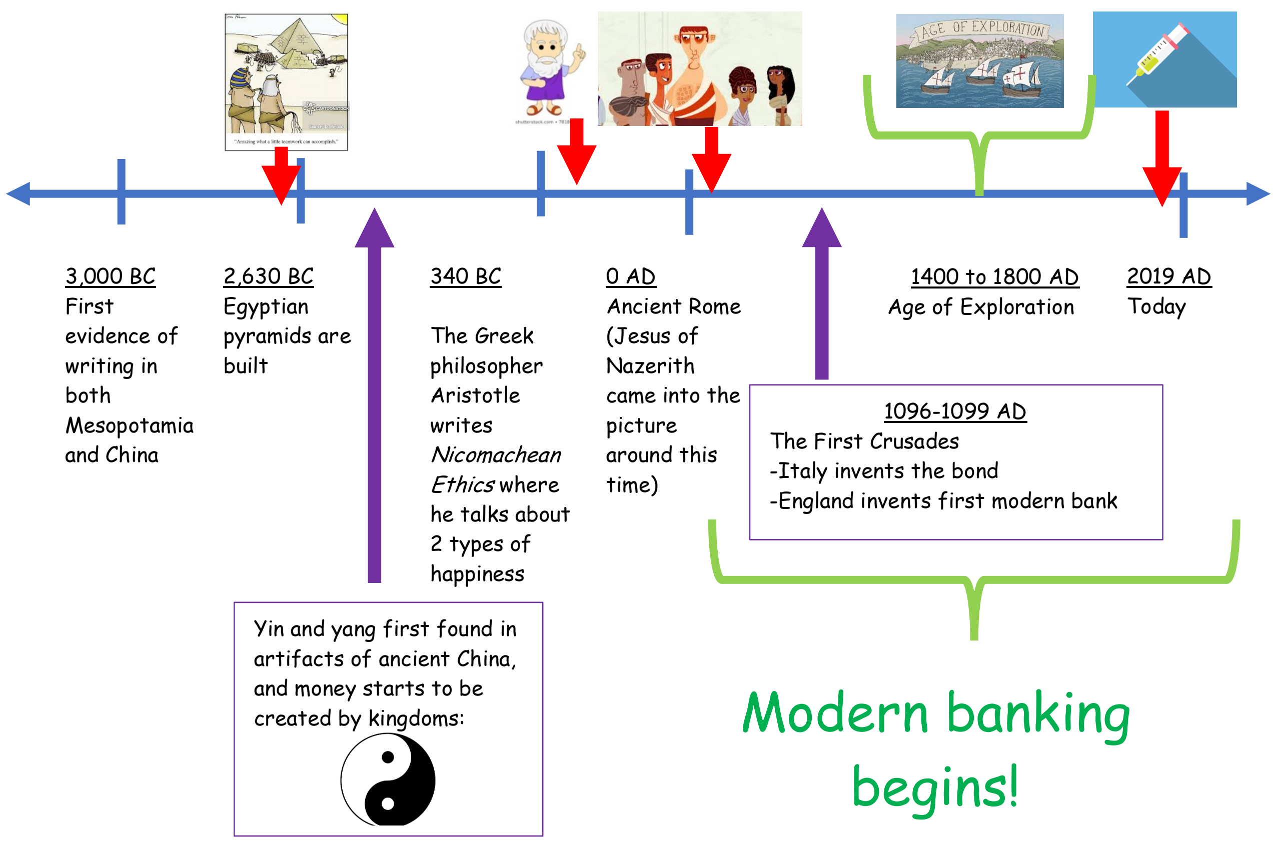
Prices

Every single action taken by a living organism creates a benefit and a disadvantage. A dog chasing a ball provides excitement and then exhaustion. Bears that seek out honey may get some needed calories but at the risk of attack from a swarm of bees. Every hour of watching Netflix allows the mind to unwind at the expense of physical activity. Every football play keeps the heart healthy at the risk for injury. This duality of life has been figured out nearly 4,000 years ago, right around the time writing and civilization began, and it is represented by the yin and yang:



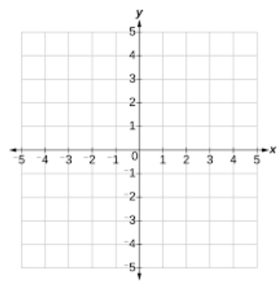
In Chapter 3, the yin and yang served to represent opposing forces for well-being (pleasure versus purpose), but this ancient symbol contains even more wisdom than that! It represents the positive and negative elements to all decisions of all living organisms.

Perhaps, as no surprise, when the yin and yang enter society 4,000 years ago, mankind also invents **currency** or money. Different kingdoms and empires print their faces on metal coins. Even if the royal family of some dynasty will be overthrown in 10 years, the metal in those coins could be melted down and traded for something else. Many scholars believe both money and the discovery of pros and cons in everyday decisions needed each other to develop—currency simply reflects duality in the material world[32]. Getting an A+ on the essay may have come at the cost of going out over the weekend, and earning an extra $100 from the weekend job came at the same price.

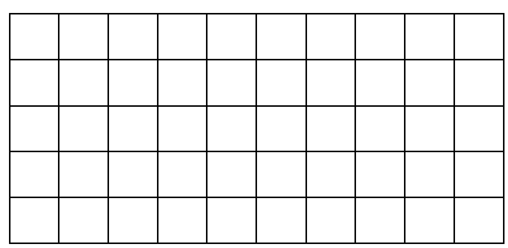


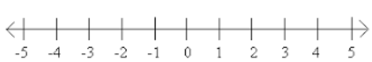
While ancient societies first discovered the positive and negative dimensions to life, it was the advent on modern banking that allowed us to quantify it. **Prices** refer to the costs of ordinary decisions. "Prices" may not only be reflected with dollars. A "price" is any good or bad cost or effect. The price of a bus ride in Philadelphia is technically $2.50, but it is equally valid to say "Good mental and physical heath is the price of a stressful job" even if we cannot put a dollar sign around that amount.

If you think about it, this is really cool! Price is just a name for "value" or "importance." Since 8th grade math class, you have seen this grid, but it's so much cooler than you ever realized!



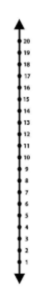
Let's call this whole grid the "impact grid," and it measures the impact of every decision, good and bad, on ourselves and the world. Every decision has a lot of good and bad impacts.

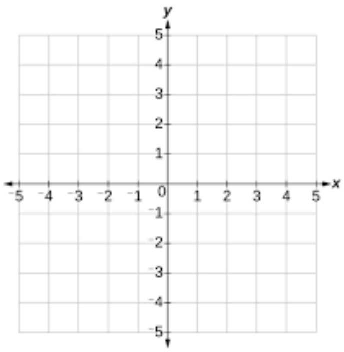




Let us assume that the x-axis represents the impact of a decision on YOU.

Let us assume that the y-axis represents the impact of a decision on the world.

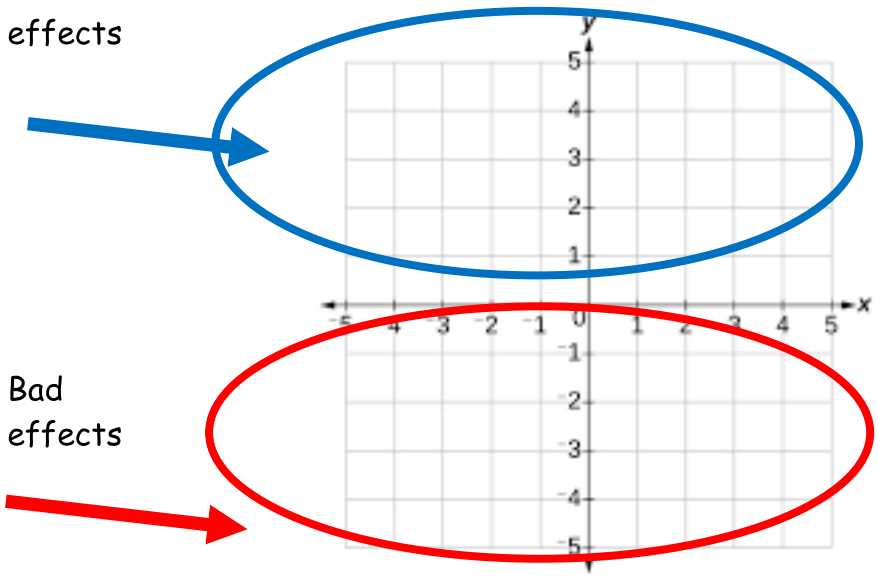




Together, we get our Impact Grid, where positive numbers represent good effects and negative numbers represent bad effects.

Good effects

Bad effects

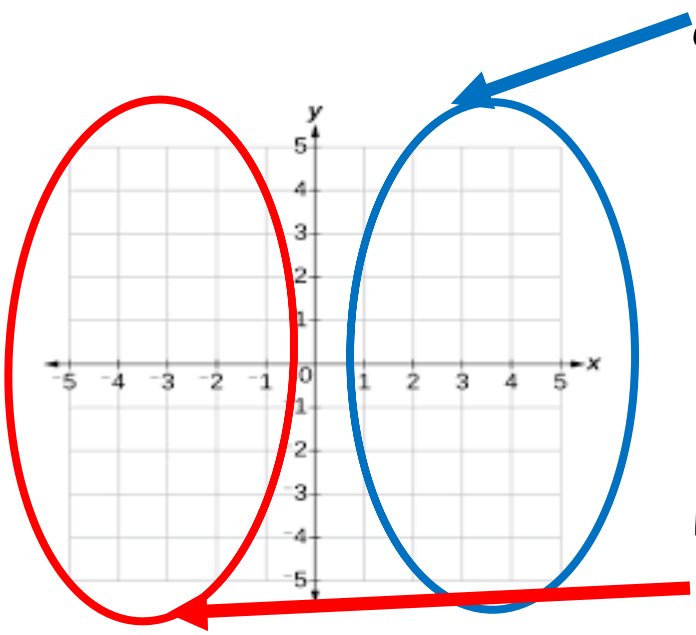


Since the x-axis represents effects on YOU, the positive numbers above the line are good effects on you and the negative numbers are bad effects on you

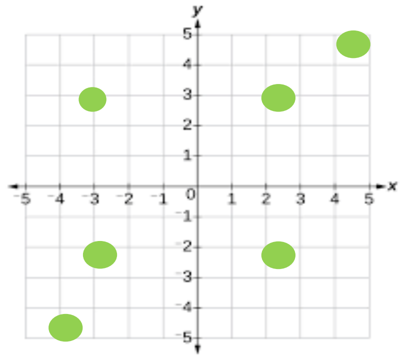
Since the y-axis represents effects on the world, the positive numbers above the line are good effects on others and the negative numbers are bad effects on others

Good effects

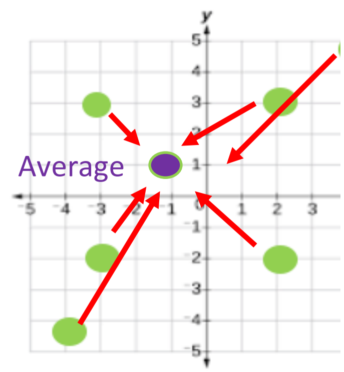
Bad effects



Every decision you make has multiple good and bad effects on you and the world. Buying gas for your car gets you to school and gives money to a local business. It also pollutes and supports dictators of other countries. So, the Impact Grid would look like this with every decision:



We will call each of those dots, the "price" or "cost" of every decision. The problem is, how do we pick just one number to represent all the other numbers? We cannot advertise the price of a car as $-10,000, $25,000, $45, -$100,000 all at the same time. We are forced to pick *one* price!



To do this, we pick a central, average number but this is imperfect. The average number may be the most "middle" number but this still can create problems. How can we truly measure the price, say, of car pollution on society? 50 years from now, maybe we will learn burning fossil fuels increases cases of asthma. If that turns out to be the case, maybe we should be paying $30 a gallon for car gas, not $3. If we charged $30, the extra money could pay for the hospital bills of those with asthma. <u>Agreeing on prices is not easy even if we calculate the average because of incomplete information!</u>

Assume that an issue of the *New York Times* costs $3 at a gas station. The gas station sets $3 as the price so they can make a profit. (Mabe the *New York Times* charges the gas sation $2, so the gas station then makes $1 for every copy they sell to you.) This makes sense, and it may explain why the *New York Times* is one of the most widely dispered news sources on the entire planet.

Some companies can get it wrong. Majorly wrong. Forever 21 filed for bankruptcy in the summer of 2019. This former fashion-setting, industry-disrupting, clothing line could not charge enough to stay afloat. Their prices were too expensive for some items and too cheap for others. Whatever they may say on social media, Forever 21 certainly was not able to set the right price to keep their business growing and profits flowing. Simple as that.

It is hard to guess the right number for prices. If this were easy, then businesses would never go bankrupt, stock markets would never crash, and no one would ever complain about money. Humans have gotten prices WAY wrong in the past. On time, in the mid 17th century (the 1650s AD), halfway between the end of the Middle Ages and our modern age, people in the Netherlands in Europe thought that a tulip was worth the cost of a house! Yes, the same people who gave us the world's first stock market were also so bad at money that this common backyard flower would pay today's equivalent of $50,000. Wow.

This actually happened in the Netherlands!		
	=	

Humans can get it wrong. Way wrong. Whatever company sold those tulips made a killing. Right now, somehow the world has these tragic prices:

Life-saving insulin shot for diabetics, who may need it multiple times a day		$15
A trip to the emergency room from an ambulance (without insurance)		$500
College education		$200,000

But, we also get it way right!

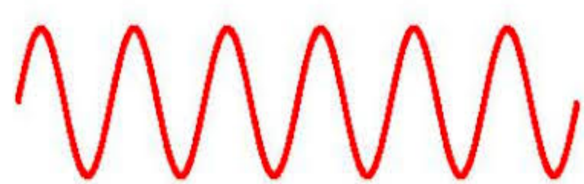
Emergency food in times of earthquakes		$0, thank you United Nations!
Emergency rebuilding of your house in times of hurricanes		$0, thank you FEMA!
Free college to the needy and the deserving		$0, thank you Rice alumni who donate their money for this cause!

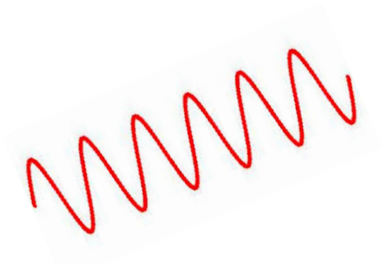
What economics really is

Personal finance is about doing the RIGHT thing with YOUR MONEY. Economics is the government and business' attempts to SET THE RIGHT PRICES. We are dependent on each other. How can you and I be good with our money if the cost of milk is $200? How can the government pay teachers $45,000 a year if people are so lazy that they only work enough to pay $5 in taxes a year?

The reason we have crashes is the same reason the stock market, bond market, housing market, commodity market, and all other market lines are dynamic and not straight. The challenge of setting prices makes this a non-linear function. When we set prices too high, it crashes. When prices are too low, the markets go way up.

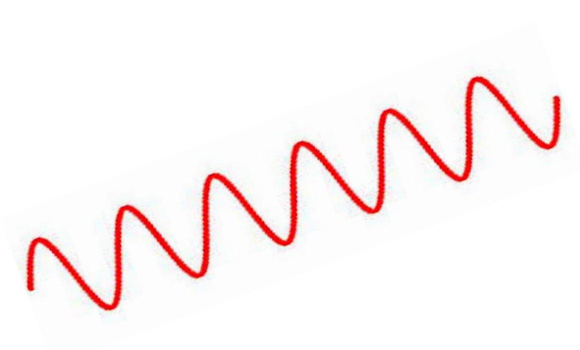
One year a house is $50,000, the next year it is $48,000 and the year after that it is $60,000. Sometimes the highs are really high, and the lows are really low. Those very low, lows are called crashes, but it always recovers.



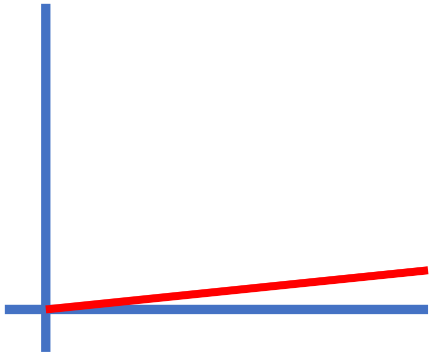


Over the long run, prices are going up. A stock is worth more and so are tacos, garbage bags and toothpaste. We call this **inflation** and it is mostly a good thing!

Inflation is the gradual rise in prices, and it is a good way to measure the well-being of the economy. The government attempts to keep inflation 2% a year.



The stock market dynamically goes up 6% a year. The bond market and housing market both dynamically go up 3% a year. Think of a yo-yo going up a hill.



If inflation is good, it's a standard 2% every year. Just a little bit of predictable growth.

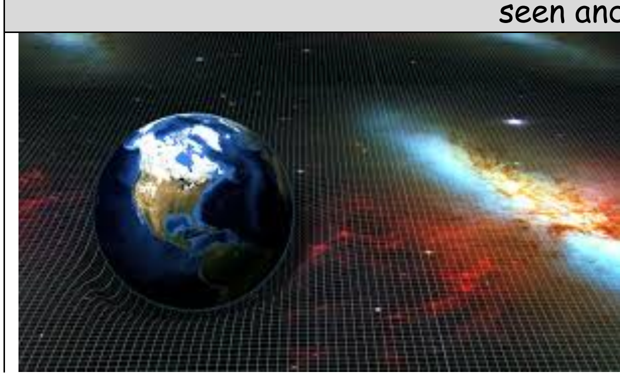
If the government were perfect inflation would be a straight line going up 2% a year. We want to know exactly how much prices go up year by year so we can plan!

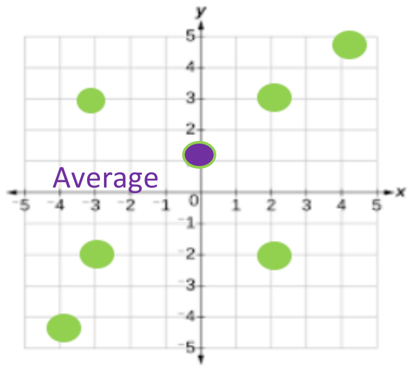
What do we do if inflation goes up too much? This happened in the 1970s when inflation went up to 15% in the 1970s. That was a scary time! What if it goes too low? That means $1 actually buys you 10 pizza slices rather than half of one. That sounds great unless you start trying to save and all you can do is save $1 a month.

The economy controls **prices**, that magical, mathematical process that may just be an invisible grid around us!

Let's review.

Think of "prices" as the grid on which the effects of your super power can be seen and studied.





Every single decision has good and bad effects. Cars allow people to travel to jobs, but this creates air pollution possibly leading to asthma. We try to set one price for each good and service, but there are literally dozens of possible prices we could have set.

We do NOT set prices perfectly. While we have figured out how to get free food to anyone suffering from a famine in their country, we can also get it way wrong and charge $15 for life-saving medicine.

Imagine this grid in 3D space. Every building, invention, and service does not just have length, width, and height. But, it has a "price." Maybe price is 4th dimension or something like that?

Seeing the world of prices is important to both personal finance and espeically economics. This could make your super power even stronger. Imagine if you could see the price of everything at once, and you knew when it was right and when it was wrong.

The **Federal Reserve Bank** (often called The Federal Reserve or "Fed") tries to control prices by controlling inflation. If the Avengers were the American government, the Fed would be Iron Man.

The Federal Reserve Bank		
	=	

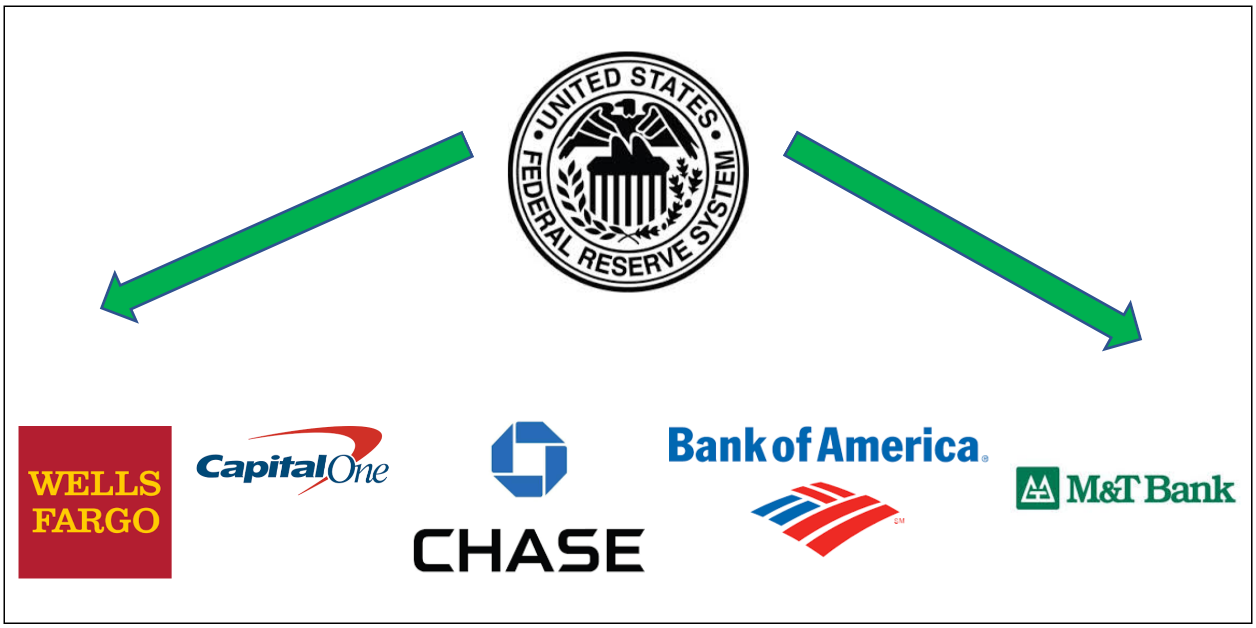
Every super hero needs a villain. Out-of-control prices represents the villain for the Fed. If prices are too low, businesses won't make any money and people will lose jobs. If prices are too high, businesses ALSO won't make any money because no one would buy their products, which would lead to job loss. How can the government collect enough in taxes to pay teachers, soldiers and other government workers if prices are too low? How can teachers, soldiers and other government workers afford to live well if prices are too high?

 The Fed	=	
Out of control prices	=	

Villains are just versions of the devil. Lucifer in the Old Testament was the original bad guy. This is not surprising when we realize that religions have thought about the devil for so long! Chapter 5 taught us that devils represent a common character in our stories and myths. Villains, as well, represent common characters in our stories and myths. The devil may be debt, but all villains are out of control prices which can lead you toward debt!




To control prices, The Federal Reserve controls interest rates that go to banks. Only the United States Federal Reserve Bank prints money, and the Fed gives this money to all other American banks. The Fed has two powers: print money and set interest rates to banks.



If the Federal Reserve increases interest rates on banks, then banks will charge higher interest rates to companies. Companies now have less motivation to take out loans simply because they are more expensive. If the Fed Reserve decreases interest rates on banks, then banks will charge lower interest rates to companies. Now, companies have motivation to get a loan before the rate goes up. They can use this money to hire more staff to offer new products and services to put their competitors out of business

The Fed wants to control inflation

The Fed controls interest rates to banks to influence business competition

Banks will pass on higher or lower interest rates to the businesses

Those businesses will decide to take out more or fewer loans based on the interest rate

If McDonalds and Burger King need to each pay $1 billion more in interest rates next year, they may not hire any more workers or change up their menu. Instead, they will wait until interest rates are lower. In fact, with low interest rates, McDonalds and Burger King may start to pay $100,000 salaries to the best and recent college graduates to innovate for them. You may even make $250,000 (a quarter of a million) by doing any of these things:

Food scientist		Invent a healthier but equally tastier Big Mac or Whopper.
Chief Marketer and Brand Designer		Make the McDonalds or Burger King YouTube commercials the funniest, most viral advertisements on social media.
Business Outreach Liaison		Find a way to offer food to war zones in Afghanistan. This looks good for business too!

<u>Interest rates control competition</u>

Competition in the world of finance refers to all organizations that fight for your money. Netflix, Hulu, and even the government-funded, taxpayer-subsidized CSPAN all want you to give them money! To get your money, each competitor is offering up more and more! When McDonalds came out with their veggie burger, Burger King found the highest-quality, organic plant-based protein that resembles meat! (That brand of veggie meat is called Beyond Meat.) Both Burger King and

McDonalds stocks have gone up in value as they raced to make better and better veggie burgers alongside their regular burgers. This causes both companies to hire more workers.

This is the stuff of the Optimistic Universe! As companies compete with one another, they fight for control of the market. Sometimes they raise prices when they offer a better product, but having competition keeps prices lower than they would have been otherwise.

The job of the Federal Reserve is to control competition enough through interest rates to keep inflation at 2% a year, every year.

The diagram on the next page summarizes all this information:

McDonalds and KFC each want your money.

COMPETITION

People love McDonalds!! In fact, they could probably get away with charging $15 for a meal if it weren't for all the other fast food businesses. There's probably a KFC not too far away and if McDonalds charges too much, no matter how much you crave a burger, you will end up pulling into the KFC drive-through.

People also love KFC! KFC would love to double up their prices but they cannot. No matter how much someone may crave fried chicken, they may be willing to get a Taco Bell taco, a McDonalds Big Mac, or a Chik-fil-a sandwich for a cheaper price.

PRICES:

KFC and McDonalds offer similar prices for similar meals. $6 at McDonalds for a meal versus $5 at KFC. Over time, this goes up 2% a year

McDonalds takes out some loans, hires some food scientists, and is able to create a meal involving a burger, fries, apple pie, and a drink that tastes good, won't get you sick, and yields a profit all for **$6**

KFC takes out some loans, hires some food scientists, and is able to create a meal that involves two pieces of chicken, a cookie, a drink, and mashed potatoes that tastes good, won't get you sick, and yields a profit for **$5**.

INTERST RATES ON BUSINESS LOANS

In a good economy, companies are hiring workers, trying to innovate, taking out loans, paying their loans, and putting lots of their earned money back into the economy to compete against others. This means they need to borrow money. If a business borrows money, they must pay back the principal plus interest. This motivates companies to charge more money for their serivces.

Chapter 27: Capitalism versus Communism/Socialism

Introduction

Communism represents a political and economic philosophy with immense influence on the world over the last 100 years. The diagram below illusrates the reach of communism both today and in recent history:

North Korea is considered one of the worst places to live, under the dictatorial control of Kim Jong Un. North Korea is considered a communist country.

We have been in 3 wars against communist nations: The Cold War (roughly 1950 – 1988), the Vietnam War (1955-1975) and the Korean War (1950 to 1953).

Today, communist China is arguably the biggest threat to America. Their economy, military, and technology rivals ours. If you read their propaganda and news, you can quickly see that China views America as a frenemy (friend-enemy). They sort of like us but also say they would happily go to war and beat us.

While America often views communist nations as enemies, many Americans love the communist philosophy.

Bernie Sanders is a senator from Vermont and is running for the Democratic Party nomination for president in 2020. He is a self-described "socialist" (which is very, very close to a "communist"). He advocates free college and free healthcare for all Americans.

Communism is a catch-all term that has many different meanings to different people. For the purposes of this book: "communism" and "socialism" refer to identical ideas. (Sometimes I will say "socialism" and sometimes I will say "communism," and this is only to get you used to treating these terms as the same thing for now). While nuances exist between these two terms, for now, treat them as identical.

Often interchangeable terms with "Capitalism"	Often interchangeable terms with "Communism"
-The "free market" - The private sector - Privatization	- Socialism -Marxism -The welfare state

Capitalism versus Socialism: an overview

As discussed before, **capital** is money that you use to create something of more value. Wood is "capital" for a house. Oil is "capital" for car gasoline. Soil is "capital" for fruits, vegetables and crops. In fact, capital is what turns something into something else of more value (aka "an investment")

Capital → Investment

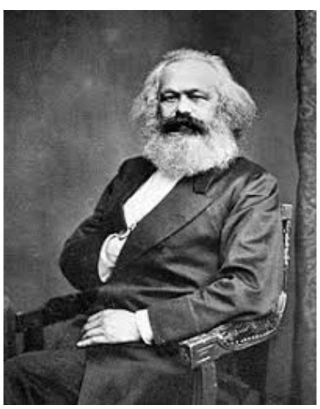
"Capitalism"

Capitalism is system of government that allows complete freedom over a person's own finances. This allows people to invest in securities, commodities, insurance or put money into starting their own business. **Communism** is when everyone owns everything together, so there is very little individual freedom to do what you want with your money.

When you hear the word "communism," think community, communal, or commitment. The prefix com- means "together." When you hear the word "socialism" think "social" or "society," which also means "together" or "group."

Communism and socialism have been interpreted differently in different countries. In communist Russia (called the Soviet Union), everyone received the exact same paycheck. The Soviet government, not individual businesses, set the price for bread, water, and all other products. In communist North Korea, all businesses are owned by the government and not individual citizens.

Karl Marx, one of the earliest philosophers and economists of communism, created the central ideas of communism that other governments adapted for their own countries. Karl Marx's most succinct summary of communism comes from the following line:



"From each according to his ability, to each according to his needs"
-Karl Marx, 1875

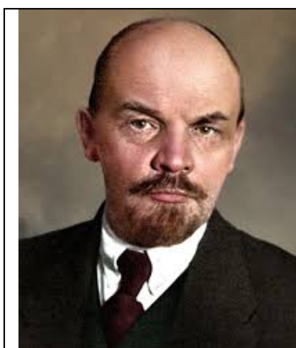
(Yes, he looks like Hagrad from Harry Potter)

According to Marx, socialism was a government system to prevent the disparities between rich people and poor people. In capitalism, since everyone had freedom over their own money, some were born rich and stayed rich while others were born poor and stayed poor. This did not sit well with Marx.

Even though you are about to see how I, the author, am very critical of socialism, it is impossible not to respect the intellectual history of this movement*. A map below indicates all the communist countries only 50 years ago:

Picture retrieved from Google image via Andrey Kaspersky's YouTube channel

When communism spread to different countries, each leader interpreted Marx differently and enacted communist policies differently.

	Leninism	Vladimir Lenin's idea of communism took over Russia making it the Soviet Union. People received equal paychecks (sometimes). Farmers, shoemakers and local store owners were allowed to take top government positions.
	Maoism	Mao Zedong's idea of communism took over China whereby jobs were assigned, not chosen, by the communist government.

* This reflects my own understanding of finance and not that of Olney Charter High School or the Niche Clinic. I have portrayed these economic and political philosophies for educational purposes to promote an interconnected understanding of the content of this book.

Not only have Karl Marx's ideas motivated revolutions in countries, but Marx is one of the top 10 most cited people in the history of civilization! That's right, that strange-looking version of a hippie professional wrestler is on the list of the most referenced writers ever, alongside Aristotle, Plato, and the Bible.

Capitalism is the freedom to use your own money to generate your own wealth and **communism** is where everyone shares the same wealth. The way capitalistic and socialist countries achieve this freedom or shared wealth comes down to prices.

Capitalism versus Socialism: A battle over prices

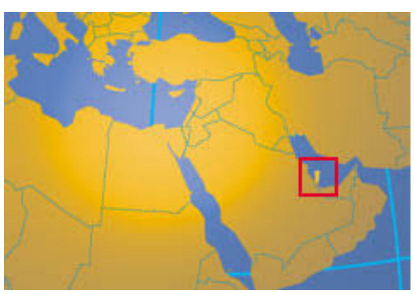
No country in the world is purely capitalistic or purely socialistic. In America, the poor can get free healthcare and coupons for free food, called food stamps. In communist China, billionaires and millionaires are allowed to exist. Capitalistic and socialistic countries share so many similarities that some call themselves one but actually resemble more of the other. In the most pure, unadulterated forms of capitalism, anyone and everyone sets whatever prices they want for whatever services and products they create. Pure socialism, in turn, determines non-negotiable prices for services and products until, ideally, they find out how to make everything free.

Why do capitalistic countries allow anyone to set their own prices? Because competition permits only reasonable prices, or else the company goes out of business.

If someone charges too high for a service or product, another company will take all the customers. If the price is too low, that company will be forced to set a higher price to make a profit or go out of business. Nothing is legally stopping Dunkin Donuts from charging $50 per donut, but they will never do this because other fast-food breakfast chains will get all the customers. Chipotle could start to sell burritos for a penny, but they soon won't earn enough in profits to pay for the ingredients, staff, and monthly rent payment for the building. Capitalists refer to the free-for-all of prices or the "free market," and it works very well for many things:

When the free market sets appropriate prices	
Food 	Dozens of brands for the same groceries fill supermarket aisles. Even if Fruity Pebbles is your favorite cereal, you may be equally happy with Lucky Charms. A peanut butter and jelly sandwich costs less than $1 to make. As mentioned earlier, a Burger King Whopper, McDonald's Big Mac, and KFC chicken sandwich all revolve around $4. Almost all Americans can afford the occasional meal out, and any one of us can make a $2 turkey sandwich at home during tough times.
Cars 	A Porsche may cost $80,000 but a brand-new Toyota Corolla costs $25,000. That same Corolla, 6 years later, may cost just $12,000 and last another 10 years. Someone desperate to take a new job outside of the city can get a 20-year-old Corolla for just $300 that will last about 1 more year.
Vacations 	A cruise may cost $5,000 but a trip to an upstate New York mountain town can come out to $500 including gas, Airbnb, and meals. Whatever a person's financial situation is, a vacation is not an impossibility.

While capitalism employs the free market to determine prices, socialism directly sets the price. In fact, it's called "price setting." Sometimes a single government official will set the price for bread, Tylenol and everything else. Price-setting sounds like a perfect idea, but this chapter explains why it almost inevitably goes horribly wrong. First, we must give credit where credit is due. Here are some examples where socialistic countries have set prices most of us agree are a good thing:

When price-setting does some good in socialistic countries	
Medicine in Canada and the UK 	Canada and the United Kingdom have elements of both capitalism and socialism. In both countries, the cost of basic medicine is $0
Electricity in Argentina 	Argentina's socialistic policies make electricity extremely cheap. Electricity is cheaper in Argentina than any European or North American country. It is nearly 7% the cost of electricity in America. Many families in the United States sleep in the cold because they cannot afford heat during winter. This is not a problem in Argentina.
Property in Qatar 	Qatar does not identify as socialist, but it has socialistic elements nonetheless. Qatar sometimes gives out free land and mortgages with 0% interest. To them, no one owns land—it's a public right.

Capitalism versus purely socialistic countries: violence

North Korea, China, North Vietnam, and the Soviet Union (Russia) all attempted entirely communistic or socialistic policies, and, in doing so, created the biggest violations in humans rights in the history of the modern world. All of these communist government experiments occurred right around World War 2 or soon after.

During World War 2, Adolf Hitler rose to power with the Nazi party. They declared the communists of Russia as one of their enemies, but the Nazis simultaneously identified as socialists. (The official name of the Nazis were the "National Socialist German Workers Party.) Even though the Nazis were not fully communist, almost the entire world recognizes Nazis as one of the most cruel, misguided and violent political groups in modern history—and the fully communist countries of the time were even more violent!

Under Nazi control, Germany exterminated 6 million Jews. Those millions of innocent people were shot, forced in gas chambers and human-sized ovens, and used for painful science experiments. The communists were even worse.

When Russia became the communistic Soviet Union, they exterminated 10 million of its own people. During World War 2, America and the Soviet Union were allies so American and European troops often fought side-by-side with the socialist Russians. After the war, the Soviet Union took soldiers who fearlessly fought for their country and sent them to Russian concentration camps called "gulags." What?! That's right: while American and European soldiers received a hero's welcome after the war, Soviet soldiers were "rewarded" with homemade concentration camps. Why?! The communist government worried that Soviet soldiers not only found time to talk about economics alongside their American and European allies but they may have grown fond of capitalistic ideas. For fear that Soviet soldiers may have become capitalists, their reward for fighting for their country was often life imprisonment.

While the Soviet Union exterminated 10 million Russians, communist China murdered 100 million of their own people! 10 times the amount of Chinese people died from their own government compared to the Soviet Union, which was already bigger than the death caused by the socialist Nazi party. During this time, China wanted to build a country for the poor and the forgotten, so the Chinese ordered their citizens to kill anyone who even looked like they had an education. That's right, if it looked like you went to school and got an education, the Chinese government wanted you dead!

Even today, countries that identify as communist tend to have higher poverty, violence, and forced imprisonment compared to capitalistic countries. One main reason is that communist governments require autocratic or dictatorial rule to set prices and control the market place. American government can split power between a president, Congress, the Supreme Court, and 50 states each with dozens of local governments because people are free to set prices without a central authority. In communist Russia, China or North Korea, a single-leader maintains power for decades because price-controls require, well, someone setting prices. To avoid people protesting the new prices, each of these countries have controlled the television, radio, internet and all media. Even today, communist countries imprison journalists and reporters who speak ill of the government. Why? Even if a more competent communist politician would do a better job, the government believes that any change in their economic policy would prevent their grand economic plan from being realized. Sadly, we have not had a country that calls itself communist also protect freedom of speech for its citizens. This is no coincidence.

Capitalism versus purely socialistic countries: the inevitable failure of price-controls.

In America, all 300 million citizens work together, without realizing it, to set the prices for goods and services. This means that no one is actually "setting" a price, but our collective, unconscious decisions of what to buy and not buy on any given moment reflects the "free market," and it beats communistic price-controls every time. The diagram on the next page is similar to the diagram in the last chapter about how the Fed tries to manage inflation. This diagram can simply be called "America's version of the free market."

America's Version of the Free Market

COMPETITION

- Farmers are competing against other farmers to offer cheap and fast crops to businesses
- Marketers are proving to businesses they can help them sell more goods and services with their advertising

- Chefs are competing against other chefs to make cheaper crops turn out to be tastier food products
- Construction companies are competing against each other to be hired to build cheaper but still high-quality buildings

McDonald's™

PRICES

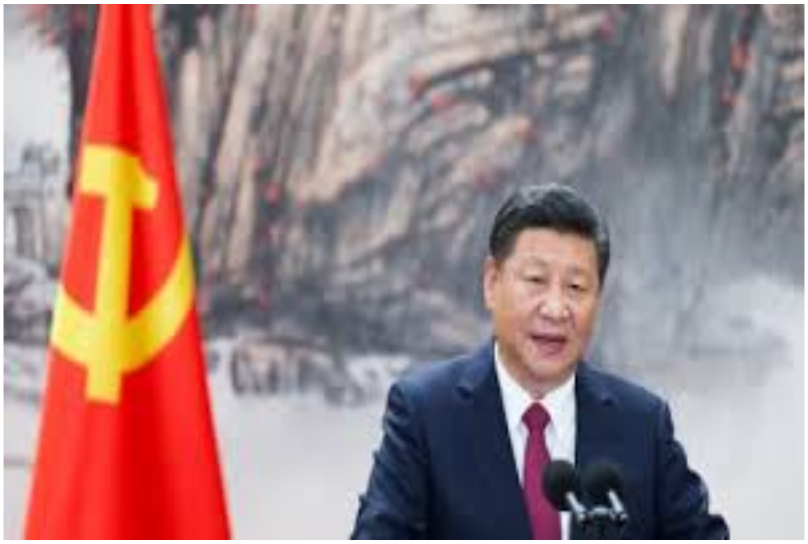
This keeps a Big Mac and 5-piece chicken meal around $4

- Farmers are taking out loans to get better equipment to produce better crops
- Marketers are hiring researchers to test different advertising methods

- Chefs are paying for more expensive culinary schools to learn how to make the best tasting foods
- Construction companies are taking out loans to get the best equipment to build cheaper stores

Business innovation

Any change in any element of this process gradually changes prices. Die-hard pizza lovers may recognize if a slice goes up $0.10 at their favorite spot, but the gradual change in prices is something no one often notices. This works very different in Communist China. There, a single person or entity that sets the price.



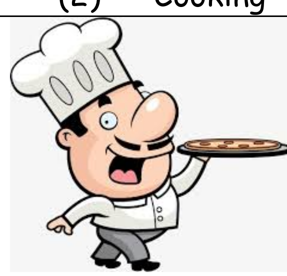
"Today, I think the economy would be great if bread were $2!"

Hypothetical and hyperbolic example from dictatorial "President" Xi Jinping

Communism fails because it is a mathematical impossibility to calculate any price correctly.

The Impossibility of Price Controls[29]

Let's assume there are only 3 steps to getting pizza delivered to your door: (1) the farmers make the bread, cheese, and sauce, (2) chef makes the pizza, (3) the pizza delivery guy drives the pizza to your house:

3 steps of ordering pizza		
(1) Farming	(2) Cooking	(3) Delivery
		

If something effects one part of this process, it effects the entire process.

Hurricane Strikes a Farm

Let’s say a hurricane destroys nearby roads in South Carolina where the farm is. Getting gasoline into South Carolina will require more police, trucks and effort. Thus, the price of gas will increase.

Farming machines that require gasoline will become more expensive. The only way for the farm to stay open is to charge more for their tomatoes, cheese and bread.

The pizza chef has to pay for these higher priced goods but now he is worried about making a profit. He has kids to feed, and his pizza costs more money to produce. His only option is to charge more for his pizza and pay his drivers less. The delivery person now has fewer customers because less people are buying the more expensive pizza, and he is making less money because his boss cut his wages. (

That single hurricane increased the costs of each step in the pizza delivery process to affect one another.

Hurricane Strikes the Pizza Store

Now, imagine the hurricane passed by the farm and instead landed in the town of the pizza store. This too affects farming and delivery.

	Farming 	Delivery 
Cooking 	Chefs are charging more for pizza because the gas to get to work and pay for the store’s electricity costs more. More expensive pizza means fewer customers. and the demand for farm goods decreases.	It costs more to make pizza, people will buy less, and then delivery costs will change with fewer customers.

Hurricane Strikes Delivery Routes

Now, imagine the hurricane passes by both the farm and the pizza shop but it lands in the towns that the pizza delivery person serves. This may mean that delivery costs go up, and people will order less pizza until the hurricane ends. With fewer customers, the farm will sell less to the pizza shop.

	Cooking 	Farming 
Delivery 	If people are ordering less pizza, the pizza store may cut down on the number of pizza delivery people.	If people are ordering less pizza, the farmers may need to fire some of the help because they do not need to produce as much greed, tomato sauce and cheese.

The Hurricane Strikes all 3

Now, here comes the big one: imagine the hurricane is so huge that it lands in the cities with the farm, pizza shop, and delivery location. Not only does it make business hard for each of them individually, but this leads each link in the chain to affect all the others.

When one thing effects all other things, and all those other things then affect everything else, we call the process "interdependent".

Imagine your mom is in a bad mood, which makes your sister cry. Your sister's tears make you mad, which then leads you to snap on your mom. Now, your mom gets even more angry at your sister and you. Soon, your Uncle Larry gets involved and it becomes one giant mess.

Interdependencies when an increase in prices for one service affects all the others			
	Farming	Cooking	Delivery
Farming	X	If farming costs go up, then ingredients become more expensive. The only way to make a profit is charge more.	If farming costs go up, then fewer people will be ordering pizza delivery.
Cooking	Chefs are charging more for pizza because the gas to get to work and pay for the store's electricity costs more.	X	It costs more to make pizza, people will buy less, and then delivery costs will increase with fewer customers.
Delivery	If it costs more to deliver, then chefs are going to have less money to buy the farmer's crops	If it costs more to deliver, the chef is going to charge more for their pizza or fire some delivery people	X

We represent the inter-dependency of prices with the "factorial" sign in math. It's represented by the exclamation point "!"So, if the creation of pizza has 3 steps, and changing one step affects all the others, we represent the process by writing 3!

With a factorial ("!"), you multiply every consecutive number by the next consecutive number. See below:

1! = 1
2! = 2 X 1 = 2
3! = 3 X 2 X 1 = 6
4! = 4 X 3 X 2 X 1 = 24
5! = 5 X 4 X 3 X 2 X 1 = 120
6! = 6 X 5 X 4 X 3 X 2 X 1 = 720

Price of pizza = 3!. So, a change in gasoline prices affects prices in 6 different ways. If you look from the previous page (re-printed below) there are 6 changes.

Interdependencies when an increase in prices for one service affects all the others			
	Farming	Cooking	Delivery
Farming	X	If farming costs go up, then ingredients become more expensive. The only way to make a profit is charge more.	If farming costs go up, then fewer people will be ordering pizza on delivery.
Cooking	Chefs are charging more for pizza because the gas to get to work and pay for the store's electricity costs mo	X	If costs more to make pizza, people will buy less, and then delivery costs will change with fewer customers
Delivery	If it costs more to deliver, then chefs are going to have less money to buy the farmer's crops	If it costs more to deliver, the chef is going to charge more for their pizza or fire some delivery people	X

6 circles!

But, really, pizza has many more than 3 steps. Here are just some of the steps that go into making pizza:

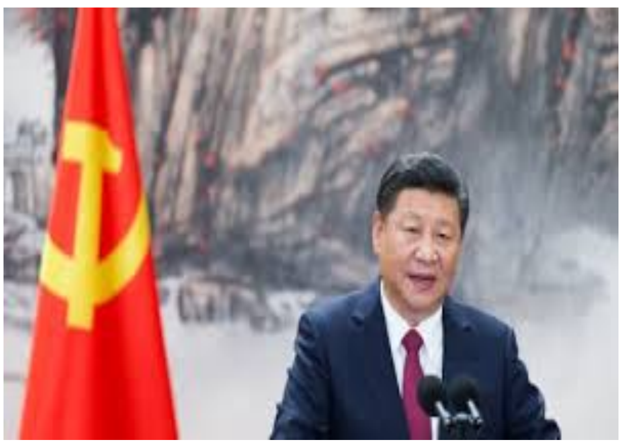
- Farmer grows wheat
- A dairy farmer buys a cow and sells the milk to a company that makes cheese
-A third farmer across the country grows tomatoes and sells the tomatoes to a different company to make tomato sauce
- Many different delivery services take crops and foods to super market
- Super market sells crops and food stuffs to pizza store owner

Let's say there are 50 steps to going from farm to pizza delivered at your door. That's 50!

50 X 49 X 48 X 47 X 46 X 45…..X 1 = 3.041 duovigintillion.

Written out, that's roughly 3,041,000,000, 000,000, 000,000, 000,000, 000,000, 000,000, 000,000, 000,000, 000,000, 000,000, 000,000.

There is no way a government can do this! There is no way the government can set the price for pizza if there are 3,041,000,000, 000,000, 000,000, 000,000, 000,000, 000,000, 000,000, 000,000, 000,000, 000,000, 000,000 things affecting it in a given moment. By tomorrow, this may change.



"Hey everybody. Me again. Looks like there was a hurricane near Taiwan.

This is going to be a little awkward here…

There are about 100 different things influencing your television costs, like electricity and glass. If I calculate 100!, that's 9.33 with 157 zeros after that. Lucky, for you, I'm smart. TVs should be sold for $120 now".

Yeah right, there is just no way this can happen.

Chapter 28: Finding a Financial Planner

This book has attempted to provide foundational knowledge about personal finance. If you follow the advice of this book throughout your life, you will become a multi-millionaire.

Do NOT do this journey alone! Find a financial planner.

Financial planners go by many titles: financial advisor, investment planner, wealth manager, and more.

In the United States, a police officer must be sworn in by a government official. If not, the person is considered "impersonating a police officer" and will be sentenced to prison. If a doctor practices medicine without a medical license, that person will also go to jail.

This is NOT the case with financial planners.

Anyone and everyone can call themselves a financial planner even if they have not done more than watch a YouTube video about budgeting.

Why is this? While the medical field is regulated, the finance industry is not. Banks, investment firms, and hedge funds can hire whomever they want to carry out their business. While specific licenses are needed to sell insurance or trade stocks, "financial planners" can simply don the title whenever they please.

This means you must do your research on financial advisors before they help you with your financial goals. Financial advisors who work with investments must be registered with the Financial Industry Regulatory Authority or FINRA. (Yes, they just threw in an "N" to sound good.) Look up your advisor on FINRA to make sure he/she does not have any ethical breaches.

Most importantly, interview multiple possible financial planners and ask if they are a **fiduciary.** A fiduciary is someone who must act in the best financial interest of their clients. If the financial advisor is not a fiduciary, go somewhere else!

A life insurance salesman may sell you life insurance for $100,000 and get to keep $20,000 of it. The life insurance plan will be a legitimate plan, but that may not be the best use of $100,000 of your money. A fiduciary must provide financial advice in a client's best interest. (That $100,000 may be best put into a brokerage account.)

A fiduciary earns compensation by assets under management, usually through a yearly fee around 2%. If you take your $800,000 retirement plans to your financial planner and they grow it to $1 million, your financial planner will collect $20,000. A $20,000 fee is pretty good for turning your $800,000 into $1 million.

<u>Chapter 29</u>: Two Myths of Money Mr. LaSalle Keeps Hearing

<u>(1) "I'm working minimum wage (or close to it) so I can save up money to go to college."</u>

Foolish. Foolish. Foolish. If you know you are eventually going to college, go right after high school. Why? You can never, ever save up enough for college through minimum wage.

You will have more money 10 years from now if you went to college and took out loans (assuming you have the average salary for a college graduate) than if you spent 5 of those years working first.

Assume Person A and Person B both attend the same college with the same, average financial aid package. Person A worked first and Person B went to college first and entered the workforce with a college degree sooner.

Person A's net worth 10 years later	**Person B 's net worth 10 years later**
NEGATIVE $10,000	POSITIVE $50,000

<u>(2) I'm not going to college (or I'm taking a break) because I don't know what I want my career to be.</u>

If you are not the college type, then do not go. But if you know you should go to college, go right away.

The average person will change careers 7 times in their life. The average person will go back to college for an additional degree or certification in their life 5 times.

You will NOT find your niche by bagging groceries during the day and journaling at night. You WILL find your niche by taking really fascinating college classes, changing your major a bunch of times, volunteering and interning as a college student, trying out your first career when you gradate, journaling at night, and then (perhaps at the age of 23 or 57) realize what you really want to do. You do not find your niche by thinking really hard. You find it by experimenting. Do not delay college because you do not know what you want to study. You'll figure that out as you reflect on your successes, failures, interests, and thoughts after each college semester

Chapter 30: Conclusion

The common definitions of "personal finance" will list any or all of the following:

-Managing money and financial decisions to reach short-term and long-term goals
-Learning how to budget, invest, and plan for retirement
-The best ways to use money to provide for the expenses of living

These definitions are fine, but they are not truly excellent definitions. This book has described personal finance as the ability to control space and time. Another way to define it is the power to self-actualize.

To understand what this means, we are going to review what we know already about money:

The Minister and the Monk represent people with two forms of motivation: intrinsic and extrinsic. When you work with **intrinsic motivation**, you do so simply because it brings you joy! The fulfillment, excitement and peaceful state of mind motivates families to adopt children, teenagers to play basketball, and citizens to volunteer. As Confucius says, "Find a job you love, and you'll never work a day in your life."

To find a job you love takes time. Every ordinary person will try out multiple jobs and actually find most jobs unpleasant and unfulfilling, but a wise person will continuously seek out a job that provides personal fulfillment and joy. Until you find that perfect job, you need to find a job that gives you **extrinsic motivation**. "Extrinsic" means "comes from outside." Examples of extrinsic motivation are pay, rewards, praise, vacation days, and other benefits. Until you find a job you love, settle for one that provides a decent salary, quality office space, and a positive work atmosphere. The minister represents extrinsic motivation.

Look at the diagram on the next page:

EXTRINSIC motivation (motivation comes from outside, think exit/extrinsic)

INTRINSIC MOTIVATION (motivation comes from inside, think inside/intrinsic)

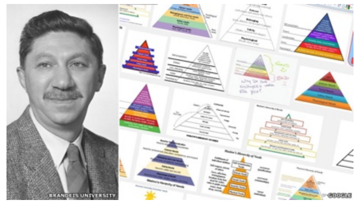
Money, praise, recognition, awards, approval from your boss

Happiness, joy, self-satisfaction

Your day-to-day experiences, not just your job, should involve as much intrinsic motivation as possible. There will be times in your life where 90% of your day relies on such motivation: you spend your morning with your family, go to a job you love, and spend your evening doing your favorite hobbies. There will also be times in your life where 90% of your day relies on extrinsic motivation: you will go to a job you hate but need the paycheck, and then you will take college courses at night for another degree/certification to get your next promotion.

Now, let's connect extrinsic motivation and intrinsic motivation to <u>self-actualization</u>.

The dude on the next page is actually not a vacuum cleaner salesman, but one of America's most famous psychologists, Abraham Maslow. Very poignantly, he claimed that humans dedicate their life to self-actualization.



Self-actualization is the ability to become all you can be; to live your life the way that fulfills you. A seed is "actualized" into an apple. A pile of wood is "actualized" into a house. To self-actualize is to become all you were supposed to be.

For one person, to self-actualize means to become a Navy Seal, later use that knowledge to invent a silent, underwater breathing apparatus undetected by radar, and then to retire early and pay for college for all his grandchildren.

For another person, to self-actualize means to marry young, have children, go back to college for a degree in philosophy and spend evenings publishing writing on how the brain perceives morality.

The question then becomes, how can we self-actualize? Imagine self-actualization as the final, boss level stage of a video game. There are other levels the gamer must complete all illustrated by the diagram below.

Picture retrieved from: BBC.com

(1) Level #1: Physiological ("body") needs

First, we start at the bottom of the pyramid. As a human, you have the basic needs for bodily functioning - fulfilled by eating, drinking and rest. Once your body can survive, you are ready to ascend to the higher level. Think of it this way, when you are hungry that is ALL you can think about. When you are cold, sick, or you have other bodily problems, it consumes your attention. Unless your body is taken care of, your mind cannot focus on any other needs.

Once you have all your bodily needs fulfilled (your stomach is full, bladder is empty, and your clothes provide you the right amount of warmth), you move to the next level.

(2) Safety needs

Safety needs represent the desire to be safe and secure. You feel safe and secure fulfilling your bodily needs are no longer in jeopardy. This can be the knowledge your house is safe, belongings safely stored in a school locker, and that your friends will walk home with you from school. Once you have your bodily needs met, or physiological needs, you want to make sure you are safe so that those physiological needs remain intact.

Think of it this way. You wake up and your first priority is going to the bathroom and eating breakfast (physiological needs). Then, you want to make sure you have your cell phone and keys to your house (safety needs).

(3) Social needs

After you have food and shelter, your next need it for love, friendship and company. Once a human being has met all his/her physiological and safety needs, then he/she feels a desire for company and interaction with other humans. At this stage, Maslow writes, the individual "may even forget that once, when he was hungry, he sneered at love".

Think of it this way: It's a Saturday. You have pizza in your belly and your family has paid the rent on time. You know your home is safe and that there is no need to go out and work to help put food on the table. What do you think of next? That's easy, you think about texting your friends and meeting up for fun on a Saturday night.

Once you feel loved and supported by your family and friends, the next part of the ladder are your esteem needs.

(4) Esteem needs

The next stage is all about social recognition, status and respect. Let's review where we are at here: Such a human at this stage feels that his most basic functioning needs are met (food and water). This person also feels safe. This person also has friends, family, a community, and maybe even a romantic partner. But now, this person probably feels a desire to feel competent, capable, smart, and that he/she has virtues. You've probably heard the word self-esteem before. Well, this is what it is about. Esteem needs are motivations to feel worthy or valuable.

This makes sense right? Imagine it's the first day of school. You have food (physiological needs), so you don't need to think about that. Check. You have your house keys and your parents have paid the rent, so you don't need to stress about that. You can concentrate on school because home is not stressful (safety needs). Check. You walk into school and you see all your friends (love needs). Check. So, you are ready to start concentrating on school and getting a passing grade (esteem needs). Check.

You can now move to the final stage…self-actualization

(5) Self-Actualization needs

As alluded to earlier in this chapter, to "actualize" means to become something. So, self-actualization means, in the words of the marines: "To be all you can be!"

Self-actualization equals fulfillment - doing the thing that you were put on the planet to do. "A musician must make music, an artist must paint, a poet must write, if he is to be ultimately happy," wrote Maslow. "What a [wo]man can be, [s]he must be."

You are in school. You've got food so you can think about safety. The school is safe, so you can think about peers. You feel you have a couple good friends, so you can think about your self-esteem. You are really good at history, so school makes you a little happier when you get good grades. Now you can start thinking about self-actualization…you can start to think, “I want to be a therapist/farmer/engineer when I grow up.”

Maslow believed the purpose of humans was to self-actualize. He felt we were put on this planet to be what we wanted to become. But, this is only possible if all our basic needs are met. If any of these needs are missing, then we can never self-actualize.

Let’s put it all together: personal finance, the minister, the monk, extrinsic motivation, intrinsic motivation, and self-actualization.

If you are doing something for the reward (whether it be praise or a prize), you are extrinsically motivated, like the minister. If you are doing something you love, simply out of the pure enjoyment and bliss you feel, you are intrinsically motivated—think, the monk.

However, intrinsic motivation is not enough for us humans. Playing your favorite sports and video games all day can leave you feeling unfulfilled, shallow and yearning for purpose. (If anyone has a lazy older cousin or sibling who simply refuses to move off your parent’s coach, you know that intrinsic motivation is not the best measure of a life well-lived).

Luckily, intrinsic motivation comes when we have hit a greater, more transcendental stage of our life: self-actualization.

To be able to be all you can be, you need money and you need to know how to use money. Money lets you put food on the table (physiological needs), live in a nice apartment without fear of eviction (safety needs), spend weekends with friends doing your favorite activities (social needs), and afford college or a job training program to earn an impressive job title (esteem needs) ALL SO YOU CAN live your life in a way to help you be all you can be (self-actualization) and look out your porch on a Saturday morning and say you are intrinsically motivated, living life exactly as you always wanted to.

The diagram on the next page hopefully sums this up nicely:

	Applying Maslow to personal finance	
Type of motivation	**Maslow's hierarchy**	**What personal finance can do**
Intrinsic	Step 5 - Self-actualization	To pay a coach to be a semi-professional football player, to afford law school to become a corporate merger expert, and to travel to a conference for small-business entrepreneurs where Jeff Bezos, the founder of Amazon, speaks
Extrinsic	Step 4 - Esteem needs	The ability to go to college or trade school to earn a fancy job title, recognition of achievements
	Step 3 - Social needs	The ability to spend time with friends and families in ways you want: traveling to family reunions, going to the movies, flying to California for spring break.
	Step 2 - Safety needs	Live somewhere free of violence, hatred and danger
	Step 1 - Physiological needs	Afford food, water and a home for you and your loved ones

You need money for all of this:

	Applying Maslow to personal finance	
Type of motivation	**Maslow's hierarchy**	**What personal finance can do**
Intrinsic	Step 5 - Self-actualization	To pay a coach to be a semi-professional football player, to afford law school to become a corporate merger expert, and to travel to a conference for small-business entrepreneurs where Jeff Bezos, the founder of Amazon, speaks
Extrinsic	Step 4 - Esteem needs	The ability to go to college or trade school to earn a fancy job title, recognition of achievements
	Step 3 - Social needs	The ability to spend time with friends and families in ways you want: traveling to family reunions, going to the movies, flying to California for spring break.
	Step 2 - Safety needs	Live somewhere free of violence, hatred and danger
	Step 1 - Physiological needs	Afford food, water and a home for you and your loved ones

Only money lets you do all this

In biology, you learned about homeostasis—the general range of well-being your body tries to maintain. Your body is always fighting off disease, recovering from injuries, and navigating a long week where some days you sleep well and other nights not so much. Homeostasis is a range; it's not the peak of a mountain you try to always stay at but a general level you move up and down, but hopefully never too high and never to low. Your body temperature averages 98.6 degrees Fahrenheit, even though when you check your temperature it could be a degree higher or lower.

Life will hit you with obstacles. You will feel self-actualized when you land the perfect job after college only to realize that you have grown bored of it in a few years. You may sadly realize that the wonderful romantic relationship you started 5 years ago has grown virulent and acrimonious.

Knowledge of personal finance, how to manage your money, helps you return to self-actualization when it slips away.

Imagine you have been married for 5 years to the wrong person, and you need a divorce. Money can get you that divorce. Imagine you have been working for a company for 15 years and you aren't happy. Another job offer comes your way for your dream career, but it pays you $10,000 less than your current job. If you have enough money saved, you can take that lower paying job. Imagine your mother is sick and cannot work any longer, so you decide to buy her a house so she can retire.

Personal finance is knowing how money can make you self-actualize even when the way to self-actualize has changed. If you have enough money saved and invested), you have the freedom to do whatever you want with your life. If you want to travel to Miami every month, buy the complete *Rick and Morty* DVD collection, or cook the healthiest foods, money gives you the freedom to do these things. The things that help you self-actualize change. Knowing how to manage your money lets you also pursue self-actualization no matter what self-actualization means to you at different times in your life.

You may have heard money cannot buy happiness, and that's true. You cannot buy a quality marriage, good relationships with your parents, and the admiration and respect of your children. You cannot use your credit card to get your dream career or to have the respect of your community. It will not be your salary that determines what wonderful things are said about you during your funeral or the comments of your obituary.

But, money does give you something important. It gives you the ability to strive for the things that give you happiness and self-actualization. Money cannot buy happiness, but it helps you live life so you can find the things and take care of the people that do bring you happiness.

To self-actualize, one must be wealthy.

Glossary

Adjustable-rate mortgage – a loan to pay for the remaining costs of a house after a down payment, but the bank can increase the interest rate whenever they want. This type of mortgage should almost always be avoided.

Asset - anything that can be exchanged for cash.

Actively-managed fund – mutual fund assembled by a human

Bankruptcy – the forced liquidation and selling off assets (such as a car or house) in exchange for debt forgiveness. After someone declares bankruptcy, it will remain on their credit report for 10 years. Anytime such an individual applies for a loan again, it will come at an outrageously high interest rate. The two major types of bankruptcy are Chapter 7 and Chapter 13 bankruptcy

Bond – a contract you have with a bank, a company or the United States Department of Treasury (the part of our government that controls all things money) where you give any one of those 3 organizations some money. In return, if you wait a certain period of time, you get an agreed upon amount of money in return. For example, if you give $10 to Facebook for a bond you may agree to get $20 back in 10 years.

Bond Market – all the bonds given out in the entire country. When you have a contract to get a higher amount of money back, after giving it to a bank or company, and you count up all those millions of contracts in the country you have the bond market.

Brokerage account – a bank account that holds onto stocks, bonds and other securities. These investments can be liquidated and turned into cash at any time.

Buy low and sell high – this is a saying that represents the logic of making money off of assets. An investor purchases an asset (house, mutual fund, barrels of oil) and then sells them at a higher price to make a profit in the future. The only way to do this effectively and reliably.

Capital gains tax – a tax that is paid when an investment makes money and is liquidated. If an investment does NOT make money, then capital gains tax does NOT have to be paid.

Capitalism - system of government that allows complete freedom over a person's own finances. This allows people to invest in securities, commodities, insurance or put money into starting their own business.

Cash advances - when a company provides automatic cash into a bank account under the agreement that the money is paid back with interest

Crash – when an index measuring a market takes a big dip

Create your niche – Creating a unique and wonderful space in reality. Your multiple responsibilities and identities as a parent, son/daughter, lover, worker, student, friend, home-owner (or whatever) are in perfect balance. There is no need to compare yourself to others because you have contentment knowing you have created your life as best you can.

Credit limit - the amount of money a credit card can be used to make purchases for.

Capital – something that can be turned into something of greater value. Lithium, a rare earth metal, is capital for smart phone. Seeds are capital for crops. Capital does not just have to be physical. Ideas can be capital—the hot air balloon was capital for the future airplane. Humans have capital too—you may have been a very sick child, which inspired you to become a doctor. If you have successful turned something into something else of higher value, then you made an investment. (See investment).

Certificate of deposits (or CDs) function almost identically to bonds, except that CDs are given only by banks while the government, businesses and banks can offer bonds. You give a bank a lump of money, and then they return that money (the principal) plus interest

Checking account – a bank account that allows a customer to deposit and later withdraw their paychecks and other sources of money

Credit card – a plastic card issued by a bank that allows you to borrow money from the bank. The original amount of money you borrow (**principal**) must be returned with extra money, which is the fee for borrowing the original amount or principal. This extra money you pay for using a credit card is called **interest.**

Credit scores or FICO scores - a number between 300 and 850. Experian, Transunion and Equifax each offer their own number, and most banks or other loan-giving businesses just average the 3 scores. A score between 300 and 629 is considered bad, 630-689 is considered fair, 690-719 is good and 720-850 is great.

Commodities – a major asset class that refers to any physical thing that can be bought and sold between parties, such as oil, wheat, and diary.

Competition - all organizations that fight for your money. This drives down prices.

Compound interest - compound interest is just simple interest but you use your final amount you get at the end of the year as the principal for next year. This occurs as long as the money is invested.

Communism – system of government when everyone owns everything together, so there is very little individual freedom to do what you want with your money.

Copay - how much someone has to pay when receiving services

Debit card – a plastic card issued by a bank that allows you access to the money you have in your checking account. (You cannot receive a debit card without first having a checking account.)

Deductible - how much someone pays to activate their insurance

Delay of gratification - when someone puts off or "delays" doing something satisfying and this often means the person feels satisfied in the moment too.

Democrats – one of the two American political parties that tend to support higher taxes so that government agencies can work more efficiently and hire workers, and so ordinary Americans can rely on more government services to meet their needs.

Disability insurance – partial salary for life if injured on the job.

Diversification – the most important principal of portfolio management. An investor should have many, many different types of assets, stocks, mutual funds and other securities to ensure stable growth without damage from a financial crisis.

Dollar-cost averaging - invest the same amount of money into the same investments at the same time every year NO MATTER WHAT.

Dopamine - one of two main neurotransmitters, along with serotonin, that create a feeling of happiness.

Dow Jones Industrial Average (or "Dow Jones") – an index that tracks the top 30 companies in America

Down payment - portion of the entire cost of the house that you, the future owner, must pay upfront. (20% is the recommend amount.)

Economics - the study of how governments and businesses can control prices and other important financial measurements.

Employer-sponsored retirement accounts – a retirement account an employer sets up for an employee. Part of the employee's salary automatically goes into this account with an "employer match" (see below.)

Employer match – Extra money that an employer puts into an employer-sponsored retirement plan. Employers do this to recruit and keep talented employees.

Exchange-traded funds (ETFs) - Passively managed mutual funds. (Consider this term identical to "passively managed mutual funds" for the purposes of this textbook and class.)

Expected family contribution - the amount of money a family is could reasonably be asked to pay for college as determined by the Federal Application for Federal Student Aid (FAFSA).

Eudaimonia is joy in discovering your purpose in life.

Experian, Transunion, and Equifax – the names of 3 separate for-profit "credit bureaus" that are legally allowed to keep track of every American's debt. They each provide a credit score between 300 and 850 based on your ability to pay back student loan debt, credit card debt, other loans, and pay rent, phone bills, and energy bills.

Extrinsic motivation – you do something for the reward, even if it is praise or recognition

Federal Application for Federal Student Aid (FAFSA) – a document that asks questions about a family's assets, income and tax returns. The FAFSA then generates an expected family contribution, or the amount of money a family is could reasonably be asked to pay for college.

Federal Reserve Bank (often called The Federal Reserve or "Fed") – government agency that tries to control prices by controlling inflation.

Fiduciary – A financial planner who must act in the best financial interest of their clients.

Find your niche – This term is used interchangeably with "create your niche." See "create your niche" above.

Fixed-rate mortgage - loan to pay for the remaining costs of a house after a down payment with an interest rate that will NOT change. This is almost always the best type of mortgage.

Flat tax - every American pays the same percentage of taxes no matter their income or circumstance. Two examples of flat taxes are a sales tax and payroll taxes.

Food stamps, welfare, or cash assistance – vouchers for free food or cash for the poor. These government benefits have been lumped together because receipt of these services are based on just income level.

Foreign currencies (or the Forex Market) - currencies or money printed by other countries. This also makes up an asset class because each country's currency changes in value compared to another country's currency. Venezuela's current economy is in ruin, making its currency worth very little right now. America is having the opposite experience at the time of this textbook.

Function is a way to represent a process that turns one number into another.

Full-time (referring to college) - 15 credits, usually 5 classes, a semester. Students who study full-time may or may not have time for a part-time job but the majority of their time goes to coursework. Only full-time students are eligible for financial aid.

Futures or **future contracts** - ownership over the future profits and decisions of a product or service.

Genocide - when a country tries to entirely destroy a specific group of people.

Government benefits (or the social safety net) - tax-payer funded services that help individuals in time of need, such as financial hardship or old age

Grants – money that colleges and universities give to students, without needing to be paid back, to help with the costs of attending the school.

Hedonic treadmill – Our never-ending quest to find happiness. Often times we want something so deeply only to find ourselves bored, unsatisfied and waiting for the next thing.

Hormone – a chemical produced in the body to control the body, such as emotions and when the body should put on fat, digest fat, or run away fast.

Human capital - Over time, humans become smarter, more creative, have more perspective, and have more money. Just as capital allows certain physical materials and mental ideas to produce something of greater value, humans not only have this same ability but this ability gets better over time

Illiquid or non-liquid – an asset that can NOT quickly be exchanged for cash.

Income - any money a person owns, whether it is from a paying job or winning $25,000 in a game show

Income tax - a percentage of a person's owned money that must be paid to the local government, state, and federal government

Index fund – a passively managed mutual fund that picks companies that can be found on a list (list of top television businesses, list of all businesses on a stock exchange and so forth)

Inflation is the gradual rise in prices, and it is a good way to measure the well-being of the economy. The government attempts to keep inflation 2% a year.

Intrinsic motivation – do something because it brings you joy

Investments – Something that will increase in value over time. A college degree will likely give you a higher salary. Shares of Apple stock may be worth 10 times as much in 20 years. You may sell your house for a higher amount than you bought it. Anything that goes up in value over time is an investment. However, the United States government only lets you sell certain types of "investments," because the United States wants to protect the ordinary American from fraud. So you can sell stocks on the stock market and your house on the real estate market, but you cannot sell your college degree to someone else. Legal investments that can be bought and sold are called securities and they are controlled by a United States agency called the Securities and Exchange Commission (SEC). (See security).

Insurance – to protect, to protect against lost, to invest in a little bit, to trust, your ace in the whole, when you are up against the wall you call on your insurance plan. You've got health insurance for when you need your health to get better. You've got longevity insurance where you can actually pay a little bit of money NOW and make sure you could live to be 1,000 and you'll always be able to do everything you want.

Interest – the extra money a person pays when borrowing or the extra money a person receives after lending.

Investment - any asset expected to increase in value over time

Lease - when someone borrows something and pays a monthly bill

Legacy - all the good and bad effects left to the world after death.

Liquid - an asset that can quickly be exchanged for cash.

Live below your means - a phrase that means to choose cheaper and more affordable items on most things you buy so that you have money left over after a paycheck.

Market or Marketplace – when multiple businesses, with the help of the government, compete for your money. Markets are grouped by businesses that sell similar things or provide similar services: clothing industry, jeans industry, video game industry, and so forth.

Medicaid – free healthcare for the poor

Medicare – free healthcare for those 65 years of age and older

Merit scholarships or **scholarships** - money given to college students for achievements in high school. Scholarships are sometimes simply called grants because the school is simply giving or "granting" money. Sometimes scholarships are for athletics and extra-curriculars, but mostly they are for grades.

Mortgage – a bank loan for the cost of a house after the down payment

Mutual fund – group of stocks

Nasdaq – a large American stock exchange where business is conducted online. About $6 trillion of activity occurs.

Net worth – the value of a person's assets after accounting for debt

Net price - how much money the student and family must actually pay to attend after accounting for grants and scholarships

New York Stock Exchange – America's largest stock exchange where $22 trillion of activity occurs.

Neurotransmitters – chemicals produced in the brain that "transmit" or communicate information for the brain to feel certain emotions.

Non-linear or **dynamic function** – A line that may eventually go up or down in the long run but follows a very bumpy, unpredictable volatile or "dynamic" curve.

Optimism – the belief things get better. We are not always optimistic about all parts of our life. We can be optimistic about a test or just optimistic about fitting in at a party. If you are dreading that party though, if you think something is going to give you more grief than happiness, then that's pessimism.

Passively-managed fund – mutual fund assembled by a computer

Part-time (referring to college) - anything less than 15 credits an hour, which permits part-time or full-time work. Students who attend college part-time are NOT eligible for financial aid.

"Pay yourself first" - as soon as money enters your hands, save a generous portion of it even before you start thinking how you will spend the rest.

Payday lenders (or loans) represent legal businesses that lend out money in agreement that the person's future paycheck automatically arrives to the payday lender. The lender keeps the amount of money owed plus interest.

Pension - paycheck from the time you stop working until your death

Personal loans – debt almost identical to credit cards, except that instead of a plastic card, a sum of money is automatically deposited into a checking account. The borrower swipes his/her debit card, uses the money in the checking account, and then must pay back the loan with interest.

Personal retirement accounts – a retirement account that a person can set up on his/her own at most commercial and investment banks.

Playing the market – When an investor attempts to buy low and sell high by purchasing assets at perceived "undervalued" levels. This strategy intuitively makes sense but has never successfully been done for extended periods of time.

Perkins loan - low interest loan for college students from low-income families.

PLUS loan - high interest loans for college that your parent signs for and your parent has to pay back

Portfolio – the total value of a person's assets, including property and the money in all checking, savings, retirement, and brokerage accounts for this person.

Premise – an important piece of background information. A premise often leads you to a conclusion. A premise could be "when it rains, I take my umbrella with me." Therefore, when you see a cloudy sky in the morning you grab your umbrella.

Premium - monthly amount of money a person pays to keep an insurance plan.

Price - cost of ordinary decisions

Principal – money you start out with when making an investment

Private student loans – college loans with high, often adjustable-interest rates. Banks, not the government or college, provide these.

Progressive tax –the more money earned, the higher the tax rate.

Rare-earth metals – an asset class a person can invest in. These include metal such as gold, silver, cobalt and lithium. Metals are used in jet engines, computers and medicines.

Regressive tax - a tax where you pay more the poorer you are.

Republicans – one of the two major political parties in the United States. Republicans tend to support lower business taxes and income taxes so that businesses can more easily innovate and hire workers, and so ordinary Americans have more money to meet their needs

Retirement account - purchase investments that cannot be touched until retirement.

Roth IRA (individual retirement account) – The most common and most effective personal retirement account. Any person can call up a bank to set this up on his/her own. You take money from your bank account, that you already would have paid taxes on, and put it into this retirement account.

Savings account - bank account specifically for building up a reserve of money to be used for planned, down-the-road purchases

Security - legal name for something expected to increase in value that can be bought and sold in the United States

Self-actualization is the ability to become all you can be; to live your life the way that fulfills you. A seed is "actualized" into an apple. A pile of wood is "actualized" into a house. To self-actualize is to become all you were supposed to be.

Serotonin – one of two main neurotransmitters, along with dopamine, that create a feeling of happiness.

Social security - Part of each person's paycheck goes into the Social Security Trust Fund. When workers reach the age of 69, whether they retire or not, they receive small (emphasis on SMALL) monthly checks from the government just like a pension

Sticker price - advertised cost of a college

Stock – part ownership of a company

Stock exchange - a place where stocks can be bought, sold and traded.

Stock Market – all the stocks given out in the entire country. When you have ownership over part of a company, and you count up all those piece of ownership across the entire country, you have the stock market.

Store card - simply credit cards with specific perks when shopping at a specific store. An Old Navy Card may give you a 50% discount the day you sign up for the cards and a 20% discount every time you shop at the store

Subsidized loan – a type of college loan where the government gives you and the government agrees to pay the interest. To "subsidize" means to pay for. For example, your parents subsidize your rent.

S&P 500 – a list of America's top 500 companies.

Taxes - a percentage of money a person pays the government for public, or free, services. Taxes go toward highways, parks, and the salaries of teachers, police officers, and government workers.

Title loan - high-interest loan where the lender can seize possession of an asset (such as a car or house) if the lender does not pay back the loan on time.

Total American Stock Market ETF – a very diverse passively-managed mutual fund that best captures the entire American stock market. According to Mr. LaSalle, this is ½ of the World Peace Fund.

Total International Stock Market ETF – a very diverse passively-managed mutual fund that best captures the entire global stock market. According to Mr. LaSalle, this is the other ½ of the World Peace Fund.

Transfer – move; such as money moved from a savings account to a checking account.

Unemployment insurance – Part of each person's paycheck goes toward taxes that fund unemployment insurance. If these taxpayers ever lose a job, they can collect 60% of their salary for 6 months from taxpayer funds.

Unsubsidized loans - college loans the government provides where the student does NOT pay the interest. So, it's pretty much a regular loan but it has low interest.

Work study - an agreement whereby a student will be paid a certain amount of money for a campus job during the college year. Usually these jobs provide frequent breaks and downtime so students can study while on the clock. A common example of work study is a job at the school library.

Volatility – unpredictable change of value of something; something that changes a lot and can change quickly

401(k) Plan or a **403(b) Plans** – two of the most common employer-provided retirement plans that often come with an employer-match. The names come from the tax code that establish these plans. 401(k) plans tend to be for employees in for-profit businesses. 403(b) plans tend to be for employees in nonprofits or government jobs. Both types of accounts function almost identically for our purposes.

[1] *Sapiens: A Brief History of Humankind* (2015) by Yuval Noah Harari. I refer to humans and our ancestors in different ways than Harari. I also group them together differently for brevity. The dates and information is mostly derived from this book.

[2] *Enlightenment Now: The Case for Reason, Science, Humanism and Progress* (2018) and *The Better Angels of our Nature: Why Violence has Declined* (2012), both by Steven Pinker. Ben Shapiro, Sam Harris, Jordan Peterson, and many other contemporary public intellectuals share and contribute to this view on history.

[3] Information quoted from his TED Talk available at: https://www.ted.com/talks/steven_pinker_is_the_world_getting_better_or_worse_a_look_at_the_numbers

[4] The hedonic treadmill often refers to different things related to the pursuit of happiness. Philp Brickman and Donald T. Campbell were the first to use coin this term, but a rich amount of literature exists (and remains to be discovered) on this topic.

[5] My concept of the Hedonist's Helmet is a combination of three different ideas. The first is a thought experiment called the "experience machine" or "pleasure machine" by philosopher Robert Nozick in *Anarchy, State and Utopia* (1974). The second is Hilary Putnam's "brain in a vat" in Reason, Truth and History (1981). The third is a fictitious machine that produces total euphoria in Kurt Vonnegut Jr.'s short story, "The Euphio Question" published in *Welcome to the Monkey House* (1968.)

[6] Many have studied Aristotle's conception of hedonism and eudaimonia. My understanding comes from the works of the psychologist Alan T. Waterman.

[7] *Prager U* video on "Why Private Investment Works & Government Investment Doesn't." I do NOT agree with all parts of this video and think government investment plays a critical role in America's successes. (That should be apparent from anyone who has read any number of chapters in this book.) Both private and government investment serve different purposes.

[8] the Joe Rogan podcast with comedian Russel Brand (podcast #1283) and scientific, genetic journalist Jamie Metzl (podcast #1293)

[9] I pulled this information from many sources and much of what I learned from personal conversations with Sudanese refugees about 10 years ago. This narrative summary of the conflict is my own and is certainly an over-simplification of very complex political, economic and cultural forces.

[10]The universality and ubiquity of devil-like gods comes from the academic research, and public talks, by Jordan Peterson. While comparing debt to the devil is done to some extent by Dave Ramsey across his radio program and numerous books, the mythology of the devil belongs

more to Jordan Peterson. Much of this chapter is due to the insights of both Peterson and Ramsey.

[11] While all of the mythology used in this chapter comes from Jordan Peterson, it's especially important to note that the use of Egypt's mythology is uniquely due to his research.

[12] Violence, terrorism and anarchy (generally speaking) do seem to result from deprivation of money or the inability to access or act with money fairly. Cass Sunstein argues that lack of civil liberties, rather than lack of money, leads to violence.

[13] Ric Edelman, founder of Edelman Financial Engines.

[14] Different financial planners use different percentages for the historic returns of the stock market. Usually they are between 6% and 10%. I use the conservative 6% estimate, not accounting for inflation, that Ric Edelman uses in some of his earlier books.

[15] *The Fifth Risk* by David Lewis

[16] I adapted this story from JL Collin's blog as heard on Tim Ranzetta's podcast*, Next Gen Personal Finance*. I also adapted the text, and the original text can be found here: https://jlcollinsnh.com/2011/06/02/the-monk-and-the-minister/

[17] https://www.thestreet.com/personal-finance/average-income-in-us-14852178

[18] "Why High Earners Still Live Paycheck to Paycheck from Rebecca on Investopedia. https://www.investopedia.com/articles/personal-finance/091015/why-high-earners-still-live-paychecktopaycheck.asp

[19] *The Index Card* by Helaine Olen and Harold Pollack

[20] The name and concept of human capital comes from the writings of John Clements.

[21] Vox's *Today, Explained* podcast, episode 372: Amazon Crime.

[22]*The Truth about Your Future* by Ric Edelman

[23] https://www.forbes.com/sites/johnmauldin/2019/03/15/the-average-american-cant-save-enough-to-retire/#38c1f06363de

[24] https://www.cbsnews.com/news/nearly-one-quarter-of-americans-say-theyll-never-retire-according-to-new-poll/

[25] *The Social Animal* by David Brooks

[26] https://www.fastcompany.com/3058870/these-are-the-ages-when-we-do-our-best-work

[27]Forbes magazine retrieved from: https://www.forbes.com/sites/rickferri/2012/12/20/any-monkey-can-beat-the-market/. The idea of monkeys beating financial experts on financial predictions began as a thought experiment in *A Random Walk Down Wallstreet* by Burton Malkiel. While this was a hypothetical example, it was essentially true because the prospect of monkeys throwing darts to select stocks is random. Research had shown for a while that random predictors outperform financial experts.

[28] *Money Changes Everything: How Finance Made Civilization Possible* by William Goetsmann. This information was first heard on NPR's *Planet Money* sibling podcast, *The Indicator.*

[29] *Basic Economics* by Thomas Sowell

[30] This is certainly an oversimplification of the Great Depression and its causes. Much smarter people than me have differing opinions on this matter.

[31] The evolution of religious thought, their similarities, and the ubiquity of the devil come from the lectures and writings of Jordan Peterson.

[32] *Debt: a 5,000 year history* by David Graeber

[33] *Moral Politics* by George Lakoff

[34] *The Righteous Mind* by Jonathan Haidt

[35] https://www.usatoday.com/story/money/2019/05/08/social-security-many-rely-too-much-program-income/1134451001/

[36] https://www.insidehighered.com/news/2019/05/10/technical-college-kansas-pays-students-relocate-and-study-aviation-manufacturing

[37] https://studentloanhero.com/featured/us-colleges-generous-financial-aid-packages/